Household Food Security in the UK: A Review of Food Aid

Final Report: Appendices

February 2014

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This research was commissioned and funded by Defra. The views expressed reflect the research findings and the authors' interpretation; they do not necessarily reflect Defra policy or opinions.

Appendix 1: Detailed Methodology

There were five key elements to the research methodology: a systematic search for relevant literature; a Rapid Evidence Assessment; an expert workshop and small number of follow up interviews; a rapid internet-based search for information of food aid projects; and six light touch empirical case studies of food aid projects.

A1.1 Literature search and selection

The initial phase of the research involved a scoping of available evidence on food aid provision, both in the UK and other nations in the Global North. The search results were obtained from three key sources: a systematic search of academic databases undertaken by information specialists at the University of Warwick; a targeted search by the research team for grey literature through the search engine Google, Food Ethics Council sources and key Government websites; and a call for evidence sent out to researchers, practitioners and policy makers.

In preparation for the systematic Rapid Evidence Assessment (REA), structured assessment of the peer-reviewed literature identified was carried out, to assess the relevance and scope of each study. The review consisted of five stages: database cleansing, relevance assessment, reliability assessment, empirical assessment and methodological assessment. Data for each piece of literature was imported into a spreadsheet and cleansed, ensuring each item used consistent terms and formatting. Relevance assessment was carried out in a two-stage process involving two reviewers. Individual assessments were first conducted independently – judging the relevance of each article (whether it specifically related to food aid) – on the basis of the title, abstract and keywords. The reviewers then met to compare their assessments, and to discuss and resolve any discrepancies in their decisions. A total of 593 pieces of literature were systematically reviewed for their relevance, 77 pieces met the inclusion criteria and were agreed upon by each of the assessors.

From the targeted internet-based search, along with the outcomes of the call for evidence and the receipt of other materials from the steering group or research contacts, 35 supplementary pieces of relevant evidence relating to food aid were obtained.

The overwhelming majority of the literature identified (two thirds of the academic search and almost half of the total) was from the USA. Twelve peer-reviewed publications of relevance were identified from the UK, complemented by eleven further items of grey literature. In total five pieces of academic peer-reviewed literature came from France, one from Germany, one from Finland and two which looked Europe-wide. Nineteen academic publications and two grey literature publications were from Canada.

The final stage of the first phase of the research involved a scoping of this evidence base in terms of relevance to the research questions and it was found that a good proportion of the research identified spoke, in some way, to research questions 1 and 2 – looking at food aid recipient 'journeys' or trends in food aid provision. Only a few pieces of research were relevant to question 3, being more evaluative in nature, providing some insight into benefits and drawbacks of different models of food aid. This initial scoping of the literature also identified evidence relating to school-based interventions (free school meals and breakfast clubs) as well as experiences of household food insecurity in the recent economic downturn.

Given that such a large number of peer-reviewed articles were deemed relevant in the initial review phase, which posed a challenge for work to be completed in a few weeks, a second round of relevance assessment was undertaken, after discussion with Defra. A significant proportion of published peer-reviewed research (21 articles) primarily looked into nutritional and health outcomes of food aid, and given the primary focus for the present research on socio-economic drivers, and the real constraints of time and resources, it was agreed that this body of work would not be included in the full REA for Defra. However, the nutrition and health outcomes of food aid receipt are clearly important areas of work and could form the basis of further empirical research, since very little has been done in the UK. A further group of papers (5) were also deemed to be out of scope of the primary interest of the research because they dealt exclusively with management or claimant experiences of the federal food assistance programmes in the US, which are rather different from the UK's. Given the larger number of papers in the published literature about the US experiences and the differences in welfare provision between the US and the UK, it was decided to exclude papers which dealt with these federal programmes unless

they discussed ways in which households were also using other food aid initiatives (for example food banks).

A1.2 Rapid Evidence Assessment (REA)

The relevant publications were downloaded in full paper form and assessed to determine which of the papers involved empirical research. Empirical papers were defined as those which reported studies that included accurate analysis of data, using standardized statistical methods. After a systematic analysis of the relevant papers, nine were identified as utilising appropriate empirical methods and these nine were then analysed for the sufficiency for their methodological detail.[1] All of the nine papers were considered to meet the methodological criteria and each then underwent a thorough critical review, the results of which can be found in Appendix 2. Only robust findings are presented below.[2]

This process of critical review and the extraction of robust findings make up the formal systematic Rapid Evidence Assessment (REA). Given how recent the widespread setting up and usage of food banks in the UK is, and how long their usage has been mainstreamed in the US and Canada, it was not surprising – and indeed was largely anticipated by the research team from their experience – that the evidence was sourced mainly from North American contexts, with none from the UK. It was recognised that relying on this evidence alone might impose limitations on the conclusions of this research, and the formal REA was therefore supplemented by a wider literature review of relevant non-empirical and non-peer reviewed research in relation to the UK and Europe, to provide further (albeit more tentative) insights.

International evidence was drawn on with care and, where relevant findings are identified and applied to this research, the origins are explicitly referenced. It was recognised that different countries have different histories and national social policy regimes, which have led to distinct welfare systems which are different in significant ways, as well as differing approaches to 'food aid' given to, or available at,

[1] Criteria for methodological detail can also be found in Appendix 1.
[2] The nine papers were: Berner and O'Brien (2004); Bhattarai et al (2005); Daponte et al (2004); Duffy et al (2002); Kirkpatrick and Tarasuk (2009); Purtell et al (2012); Rodgers and Milewska (2007); Tinnemann et al (2012); Yu et al (2012).

household levels. Nevertheless, where there were pertinent findings from other countries' experiences in the international literature which could help inform our understanding for the UK context, these were used. This relevance to the UK situation was not just based on the team's thinking, since an explicit aim of the expert workshop was to examine the applicability of evidence, experience and themes arising from the international evidence. Workshop participants engaged actively with these issues, reflecting on them, enhancing and complementing them with their own knowledge of and insight into, the UK context, practice and experience.

A1.3 Workshop and Follow-up interviews

An expert workshop was held on the 8th March 2013 to inform the REA process and the second research phase. The workshop was able to provide a forum for reviewing the key findings from the first stage of the review and to discuss the applicability, usefulness and key lessons raised by the evidence. It sought to draw out key learning from current and on-going experiences of experts. It had three key aims:

- Review the emergent evidence base and use expert input to help strengthen that evidence.
- Get expert thinking into the possible future trends of 'food aid' in the UK.
- Help feed into future research which will inform household food security policy across Government, business and civil society in the UK.

These aims were achieved through a series of structured discussions. In the first part of the session participants discussed key themes emerging from the evidence under review. This included themes from both the international literature (household coping strategies; uptake of food aid; adequacy and capacity of food aid; growth and entrenchment of food aid; symptoms and root causes of individual and household food security) and domestic literature (reasons for visiting food parcel/ food banking schemes; gaps in food aid provision; increasing demand). The second part of the session involved a discussion around future directions of UK food aid provision, particularly around questions of the adequacy of the knowledge base, benefits and drawbacks of different models of food aid provision and future directions for policy.

Seventy potential invitees were identified, from the research team and steering group's contacts. From these, 47 were invited on the basis of the most representative spread of key stakeholders, and the desire to focus on national rather than local initiatives experience. Nineteen invitees were able to participate in the workshop; and this was considered a reasonable number given the short notice because of the tight timescale of the project. These nineteen participants included representatives from food aid organisations, six individuals involved with food redistribution to food aid, members of the civil service, representatives from charities involved with anti-poverty work, and other food interest groups. The views of experts and stakeholders who had been invited but were unable to attend the workshop were captured through brief follow-up telephone interviews; interviewees included individuals involved in food aid or redistribution as well as stakeholders and researchers.

A1.4 Identifying food aid provision in the UK: 'Mapping'

Given the lack of appropriate comprehensive published evidence on the UK food aid landscape the research also involved a rapid search for information on the presence of small scale food aid projects. The aim of this phase was to 'enlighten understanding of the different types of food aid in the UK', recognising the aim was necessarily tentative given the key caveat that there were likely to be many local food aid initiatives which could not be found in the time available and by the methods necessarily used.

Given time and resources, this piece of work relied on data publically available on the internet. A search was undertaken beginning with more established sources such as the Breadline Britain website and the Trussell Trust Foodbank Network. Bespoke searches were then carried out to identify other types of initiatives such as soup kitchens, independent food banks and meal programmes. The information found was entered into a spreadsheet, including: location, over-arching body (e.g. Trussell Trust), numbers of people served, objectives, funding bodies, partner organisations, and contact information. As anticipated, apart from formalised networks (e.g. Trussell Trust) there is little consistency in reporting of these data by the organisations.

This aspect of the work was exploratory and highly limited by the necessary reliance on internet-based searches only. It does however provide us with some useful insights, as presented below.

A1.5 Food Aid Project Case Studies

In the second phase of the project a limited amount of empirical research was undertaken in the form of six case studies of food aid projects. Five of these were from the UK (including four in England and one in Scotland) and a further one was international (from the US). Given constraints of time and resources these studies were necessarily 'light touch' but designed to provide the research with insights into the workings of the different types of initiatives in existence in the UK and abroad. The focus of these studies was particularly on: the operational workings of different food aid types; food aid user journeys through these projects; how they may be working with other organisations/activities locally; and a sense of the impact of these initiatives.

The research team undertook one day field visits to each project with the aim of interviewing the project manager (or equivalent) and up to two food aid recipients. In selecting the exact projects, given the constraints on the project, location was the primary consideration and accessibility for the research team. On this basis the most appropriate cases were selected, based on publically available information. Food aid projects and research participants were anonymised in the process of the research. The table below outlines each of the cases and the data that was collected at the visits.[3]

Food aid type	Project	Location	Data collected
Community care	County-wide 'Meals on Wheels' programme.	County in the East Midlands, UK	Project manager interview; 2 recipient interviews.
Building-based	Large faith-based centre providing: free breakfasts; food	City in the West Midlands, UK	Project manager interview; 1 recipient interview.

[3] Details of each of the projects visited can be found in Appendix 3.

	parcels; a luncheon club for the over 50s; and other social programmes.		
Non-building based	A soup run.	City in Yorkshire and Humber region of England	Project manager interview.
Food bank	An independent food bank initiative.	City in Yorkshire and Humber region of England	Project manager interview.
International	Food Kitchen project	California, United States of America	Project manager interview.
Other dimensions of food aid	Project involved in the provision of emergency food boxes, surplus food redistribution and cookery courses.	City in Scotland	Project manager and Operations director joint interview; project manager of partner organisation

Given the sensitive nature of the research and the food aid experience, it proved challenging to obtain interviews with as many recipients as hoped. However, the interviews with the project managers were highly insightful and provided valuable and interesting information. The evidence on which these were based was not always clear and there was not necessarily an indication of evaluative research forming the premise of the insights offered; providers more often spoke on the basis of their experience running the project. In addition to exploring the particularities of each food aid 'type', there was also an interest in gaining some place-based insights. For this reason the food bank and non-building based cases were conducted in the same city. Given the practical constraints on the project it was not possible to do a comprehensive city-study but it was hoped that this emphasis would enable the research to glean some place-specific insights.[4]

[4] An outline of these findings is also provided in Appendix 3.

Appendix 2: Methodological Review of REA Papers

Methodological detail was assessed using the following criterion:

- The details of how the research sample was obtained
- Details of the sample (sample size and demographic characteristics)
- Where did the research take place? (geographically at minimum, but ideally the kinds of location, e.g. street corner vs. inside an institution)
- How exactly data were collected? (e.g. qualitative interview versus survey)
- What kinds of questions were asked? (at minimum example questions were provided; but ideally the full list of questions used was provided)

The papers which were included in the REA were:

1. Berner M., O'Brien, K. (2004) "The Shifting Pattern of Food Security Support: Food Stamp and Food Bank Usage in North Carolina." *Nonprofit and Voluntary Sector Quarterly,* 33, 4, 655-672. [United States]
2. Bhattarai G. R., Duffy P. A., Raymond J. (2005) "Use of Food Pantries and Food Stamps in Low-Income Households in the United States." *Journal of Consumer Affairs*, 39, 2, 276-98. [United States]
3. Daponte B., Haviland A., Kadane, J. B. (2004) "To What Degree Does Food Assistance Help Poor Households Acquire Enough Food?: A Joint Examination of Public and Private Sources of Food Assistance." Journal of Poverty, 2, 8, 63-87. [United States]
4. Duffy P. A. H., Grayson G., Molnar, J., Claxton, L., Bailey, C., Mikloucich, S. (2002) 'Food Security of Low-Income Single Parents in East Alabama: Use of Private and Public Programs in the Age of Welfare Reform', *Southern Rural Sociology*, 18, 1, 48-81 [United States]
5. Kirkpatrick, S. I. and Tarasuk, V.(2009) 'Food insecurity and participation in Community Food Programmes among low-income Toronto families', *Canadian Journal of Public Health*, 100, 2, 135-139. [Canada]
6. Purtell K. M., Gershoff E. T., Aber, J. L. (2012) 'Low income families' utilization of the Federal "Safety Net": Individual and state-level predictors of TANF and Food

Stamp receipt', Children and Youth Services Review, 34, 4, 713-724. [United States]
7. Rodgers, Y. V. and Milewska, M. (2007) 'Food assistance through the school system: evaluation of the food for kids programme', *Journal of Children and Poverty*, 13, 1, 75-95. [United States]
8. Tinnemann, P., Pastatter, R., Willich, S. N., Stroebele, N. (2012) 'Healthy action against poverty: a descriptive analysis of food redistribution charity clients in Berlin', *European Journal of Public Health*, 22, 5, 721-726. [Germany]
9. Yu M. L., Nebbitt M., Von E. (2010) 'Food stamp program participation, informal supports, household food security and child food security: a comparison of African American and Caucasian households in poverty', *Children and Youth Services Review*, 32(5), May 2010, pp.767-773. [United States]

Detailed Methodological Reviews

Healthy action against poverty: a descriptive analysis of food redistribution charity clients in Berlin, Germany

Authors: Peter Tinnemann, Robert Pastatter, Stefan N. Willich, Nanette Stroebele

Research areas addressed:

- The food aid journey
- Different models of food aid provision, and their benefits / drawbacks
- The socio-economic drivers behind certain food aid models emerging over others

Summary of Food Aid Intervention and Research

The aims of the food aid programme examined by this study focus on supplementing the state welfare provision by providing healthy food to those below designated income thresholds. The development of this model of food aid in Germany was precipitated by research showing that 'socio-economically disadvantaged' individuals were consuming a particularly unhealthy diet.

> “The origins of this food intervention are described as follows: In 2004, ‘LAIB und SEELE’ was started as a joint project of the Berliner Tafel e.V., parochial facilities and the regional radio station Rundfunk Berlin-Brandenburg (RBB).” (p. 721)

The mechanism for distributing this food aid is as follows:

> “At the distribution points, people who fit the eligibility criteria can pick up groceries from overproduction and left over foods on a weekly basis. Mainly fruits, vegetables and bread are being offered. Adults pay about □1 per person as a symbolic token with the intention to reduce embarrassment for not being able to pay for food. Foods supplied to children are not charged.” (p. 722)

The food aid project uses demographic and income criteria for determining eligibility for receiving food aid:

> “Eligible categories are senior citizens with small pensions, students with registered social subsidies and people living on social benefits. The maximum income per month for eligibility is □900 (one person household), □1200 (two-person households), and □1500 (three-person households). An extra □150 is allowed for every child.” (p. 722)

This study aimed to “analyse the usage trends of this LAIB und SEELE project over time and to describe a sample of their clients in regards to health status and behaviour influenced by general health conditions and dietary aspects” (p. 722).

There are two main aspects to the study. The first aspect focused on ‘chronological trends’ for the programme as a whole and for demographic sub-groups within the food aid recipient population served by this programme. The second aspect of the study employed a cross-sectional survey of food aid recipients (n = 101) focused on “socio-demographic status, health condition and nutritional behavior” (p. 722).

Methodology and Critical Assessment

This paper reports on the results from two methods of research: Longitudinal retrospective descriptive analysis and a cross-sectional survey.

Longitudinal retrospective descriptive analysis

The methods of data collection and analysis employed for this aspect of the study can be considered robust, and the resulting conclusions can be accepted. These conclusions include:

> *FINDING*: "The overall number of LAIB und SEELE clients in Berlin has increased over all food redistribution points by [around] 900 additional clients per month, or almost 10%, between 2006 and 2010. Possibly, the increasing number of clients might either be a consequence of increasing publicity of the project or, rather disturbingly, it may be due to increasing numbers of poor people in the society. Among all clients, increasing numbers were mainly found in the category 'retired and others'. This is worrisome, because it could mean that for an increasing number of senior citizens who have worked regularly and are receiving pensions, the amount of pension received is not sufficient to keep them above the poverty threshold". (p. 724)

> *FINDING*: "During summers, the food redistribution points had fewer clients compared to wintertime. This pattern could be repeatedly shown annually. One possible explanation is the higher living costs during the winter months such as electricity and other expenses whereas more can be spent on food during the summer." (p. 724)

Cross-sectional Survey

The sampling approach for the cross-sectional survey is not specified in the published research report. It merely states that "a sample of 101 clients was asked to fill out a questionnaire" (p. 722)

The fact that this sample is taken to be representative of the full population of food aid recipients from this programme is justified with the statement, “Given the demographic heterogeneity of these three districts, it can be assumed that the clients surveyed are representative of the clients visiting the food redistributions points in Berlin, Germany” (p. 722). This however represents a misunderstanding of probability and sampling theory. Just because the survey respondents are superficially heterogeneous in their demographic characteristics does not make the sample representative of the broader population.

The basic problem with such non-probability sampling is that the risk of sampling error is unknown (whereas with probability sampling it can be known thanks to decades of prior mathematical research). The distinction between probability and non-probability sampling determines whether a researcher can make a viable claim that their results are representative of the larger population to which they are seeking to generalise (in this case the food recipient population for this programme). So in this case, we have no way of knowing the risk that the results are completely inaccurate or completely accurate.

The authors also acknowledge that the methodology employed in this aspect of the research has key limitations:

> “Only 101 clients responded in this survey, which we acknowledge as a small sample size resulting in limited validity and generalizability. […] In addition, the results were based on self-reports which also affect the study’s validity”. (p. 724)

The fundamental problem with the sampling approach in this aspect of the research undermines the resulting research claims.

Some of these key research ‘findings’ are identified below, followed by a critical assessment in italics.

> *FINDING (Demographic Factors)*: “one-fifth of all clients were senior citizens, more than half women and almost one-quarter lived in households with children, confirming senior citizens, women and people who live in households with children being at higher poverty

> risk. We explain the fact that the majority of clients lived in single households partly by the high percentage of divorced clients (43.3%) and senior citizens." (p. 724).

This apparent finding regarding the demographic characteristics of Berlin food aid recipients may not provide an accurate picture of the population of users of this particular form of food aid, let alone the entire population of food aid recipients in this geographical area. The eligibility criteria for this particular programme make it more likely to serve senior citizens, for example. Furthermore, the sampling approach used may have resulted in skewed data that do not represent the population of this programme's food aid recipients. Therefore, this finding cannot be considered robust.

FINDING (Demographic Factors): Surprisingly to us, in this group of poor people, more than every second had a secondary school education or higher. This suggests that high education levels do not protect against poverty among this particular group, or that among the group analysed, some bias is introduced. It could be assumed that those with higher education are more likely to attend food redistribution points, or were more willing to participate in the survey. (p. 724)

As can be seen in the highly speculative interpretation of this apparent finding, the weakness of the sampling method makes any firm conclusions impossible. This surprising finding of relatively high education levels amongst food aid recipients does however point to an important possible direction for future research: That is, does the fact the structure of informal food aid result in its use disproportionately by the least disadvantaged amongst the impoverished? (e.g. the most educated, motivated and connected to sources of information in their community)

> *FINDING (Lifestyle Factors)*: "The BMI of women in the sample was higher compared to men whereas in the general population the opposite could be found. This could suggest that women among disadvantaged groups often show even poorer health and worse dietary behaviour compared to those women with higher socio-economic standing." (p. 724)

The apparent finding of higher BMI among female food aid recipients offers a possible basis for future research, but on its own this finding cannot be considered robust given that the sample selected for this study may not be representative of the broader population (i.e. this apparent finding could be due to random variations in the population rather than to a truly significant factor).

> *FINDING (Lifestyle Factors)*: "The overall percentage of smokers in the sample, however, was more than twice as high as in the general German population. This finding is remarkable although exact quantitative information such as how many cigarettes were smoked per day are lacking for further interpretation." (p. 724)

As above, this finding about higher smoking prevalence must be taken as a possibility not a robust, generalisable finding given the aforementioned limitations.

> *FINDING (Lifestyle Factors)*: "Surprisingly, higher alcohol consumption was significantly associated with higher school education. It could be speculated that existing or past substance abuse might have lead to impoverishment". (p. 724)

This apparently 'surprising' finding may actually be the result of random variation in the population rather than a robust and valid association. The authors' speculative explanation of this insecure finding is problematic in that it is without any basis in the empirical evidence offered by the study.

The concluding 'finding' from this research is as follows:

> "The results showed that the number of clients receiving surplus produce is increasing, especially among senior citizens. Although, almost one-third of people receiving financial support in Germany have a migrant background, this subgroup is very small amongst LAIB und SEELE clients". (p.25)

However, this conclusion cannot be considered robust in light of the methodological limitations identified above.

Food Assistance Through the School System: Evaluation of the *Food for Kids* Backpack Program (2005)

Research areas addressed:

- The food aid journey
- Different models of food aid, and their benefits / drawbacks
- Impacts of different food aid types
- Food aid provided directly to children

Summary of Research and Food Aid Intervention

Rodgers and Milewska (2005) conducted an evaluation of an informal food aid programme conducted by a 'faith-based food bank' in the relatively impoverished state of Arkansas (USA). The programme was developed as an innovation by this food bank, aiming to address child hunger amongst "school-aged children by distributing ready-to-eat food in backpacks for participating students to take home for evening and weekend meals" (p. i). Despite a lack of prior evaluation evidence, this programme was seen by several other food aid organisations as a potential good practice model, and has already been emulated in other US contexts.

This food intervention is initiated by requests to the charity from schools, which in turn apply pupil need selection. Selection is not necessarily co-extensive with free/reduced lunch eligibility. Rather, selection is based on schools' programme coordinators' observations of problems in school for which hunger is suspected to be the cause.

> "The program is intended only for those students and siblings at home who school personnel suspect would otherwise go hungry. The food sent home is easy to open and prepare so that young children can fix their own evening and weekend meals in the absence of a parent. Some students are provided high-energy snacks during the school day. These snacks serve two purposes. First, children who eat no breakfast at home and are dropped off too late in the mornings for the school

> breakfast program receive a *Food for Kids* snack to tide them over until lunch. Second, children who come to school without their own food for afternoon snack time are provided with *Food for Kids* snacks." (p. 6)

The nutritional value of the food provided is of mixed quality:

> "Food items include cereal, shelf stable milk, granola bars, cereal bars, cheese crackers, peanut butter crackers, little sausages, baked beans, spaghettios, ravioli, canned soup, chili, fruit cups, dried fruits, and pudding cups. Fresh fruits and vegetables are distributed whenever possible, although the short shelf life limits the possibility of including much fresh produce in the food distribution schedule." (p. 6)

Moreover, the food aid assistance in this case is sometimes linked to 'personal care kits' to provide for basic hygiene needs for children "whose parents are not meeting their basic needs" (p. 6).

Evaluation Methodology

The evaluation research in this case employed a mixed methods approach, including:

1. Test scores analysed at school level, comparing participating schools with non-participating schools' progress in terms of test score improvements

There are a number of problems with the evidence proffered using comparisons of school-level test scores, including:

- Using school level data is highly problematic on its face when the intervention is not at the school level. In this case, the food aid intervention is at the individual level, administered informally and in an uneven manner across schools. Moreover the fact that such a small percentage of the school populations were participating (average of 50 child-participants with average enrolment per school over 14,000) makes claims of an impact at the school level unlikely.

- The study presents two statistical analysis of test scores. The first apparently showed no statistical differences that would indicate programme impacts, and for this reason detailed statistical information is not presented in the paper. In order to try to find such impacts, the authors undertook a second statistical analysis designed to make findings of impacts more likely. Indeed, they did find some impacts but also some surprising results such as participating schools serving populations with statistically higher per capita income.
- The researchers consistently fail to account for confounding variables when making their claim of positive impact on school-level test scores due to the food aid programme. In this case the possible confounding variables are numerous. For example, because schools were only counted as participating if a questionnaire form was submitted, the 'non-participating' data actually include a number of participating schools. Thus, even at this basic level, the causal variable has not been distinguished. Furthermore, any number of factors other than the food aid could have contributed to the greater gain in test scores in the participating group. For example, the fact that these schools had staff proactive enough to reach out for food aid support, coordinate its distribution and return an evaluation survey may suggest that staff at these participating schools have more competent and motivated staff than other schools. The finding of higher per capita income (which is dismissed as unimportant by the authors) could also help to explain improved performance.

2. Reports from school-based programme coordinators

Surveys of the programme coordinator at the school, asking them to report on recipient children's home situation etc. The survey also asks for a statement representing at least one case of food aid need addressed by the programme.

This approach is inherently flawed in both the 'other report' and the 'statement' dimensions.

'Other Report' Dimension

The questions asking the co-ordinator to summarise the situations of the child-recipients is inherently problematic, both because it assumes knowledge the co-ordinator may not have and because it asks the co-ordinator to make summary judgements that encapsulate multiple individuals without clear metrics for doing so. The use of this highly problematic practice of 'reporting for a third person' and using general questions that require pre-formulated answers from respondents severely undermine the claims made based on these data.

The questions and methodology employed for this survey exacerbate this inherent methodological problem:

1. Having the evaluation survey administered by the charity rather than a neutral, external evaluator.
2. By asking questions of the school-based programme coordinators for which the charity's desired response was obvious.
3. Asking questions that required the coordinators to estimate and make summary judgements across an average of 50 child-recipients in this informal programme.

Problematic questions include ones asking whether the coordinator thought the children served by the programme had improved grades. Unsurprisingly, large percentages of coordinators said 'yes' to this question, which the authors of the study accounted for using pure speculation:

> "Survey results also point to some noticeable increases during the period, particularly for the share of schools reporting improved grades among participating children. This share rose from 40 percent in 2002/3 to 60 percent in 2003/4. One explanation for this jump is that the observed improvements in students' sense of self-worth and self-esteem contributed to better academic outcomes for students participating in the Food for Kids program, but with a lag." (p. 17)

The survey design flaws include conflating data from questions constructed in different ways (albeit flawed in both ways) in different years:

> "While the 2002/3 survey does not ask for more than a checkmark on the various program impacts observed, the 2003/4 survey asks respondents to approximate the number of students who demonstrate each of the listed options. Responses to this new question yield similar conclusions regarding the importance of particular benefits. The average number of students per school showing particular outcomes is greatest for the "less worried," "healthier," and "better self-esteem" responses. On average, students per school appear less worried and also more healthy. Similarly, an average of 29 students per school demonstrate higher self-esteem, and 27 students per school experience more trusting relationships with school personnel." (p. 17)

Clearly, asking for a single check box to indicate a programme impact across an average of 50 different individuals is highly questionable and invites inaccurate measurement. This is also true for the second year's method of asking for an estimated number: Clearly this invites pure guesswork on the part of the co-ordinator who is not expected to track such information in a formal or systematic way. Such guesswork is likely to favour the charity given the charity is asking for the feedback.

Statement Dimension

The statement-based approach is clearly not going to yield representative data. Given the request for stories came from the charity providing the aid, this would most likely be interpreted as a call for compelling accounts that demonstrated the value of the food aid (rather than representative stories that would apply to the majority of the child-recipients). Thus, the accuracy and completeness of the accounts provided, as well as their representativeness and generalisability are suspect.

Critical Assessment

This evaluation study set about evaluating the impact of this 'backpack' model using 'school-level surveys'. A key conclusion of the evaluation relevant to the present evidence assessment is:

> "the Food for Kids program reaches children who have slipped through the safety net of other food assistance programs. For example, most schools providing backpack program assistance are located in areas served by a food pantry, yet children still appear to be hungry or worried about food when they come to school" (p. 3).

While the evidence underpinning these claims is far from robust, this study does offer a number of possible hypotheses that could be investigated by higher quality evaluation research.

Some of the impact statements provided by school-based programme co-ordinators are detailed enough to offer potential insight into some of the pathways leading children to need informal food support. For example, the following case highlights the possible role of concerns about preserving dignity:

> "Another series of comments signals the importance that school personnel attach to the notion that participating students can maintain their dignity by bringing food home in attractive backpacks and not having to beg for food from neighbors. One letter cites a statement from a student expressing his appreciation for the backpack idea so that no one has to know what is inside. The student says that the kids 'tease me about my clothes, but they don't have to know that I don't have enough food to eat'." (p. 21)

The following example points to the importance of temporary hardship in driving need for food aid, while also indicating that such hardship can be chronic:

> "In another letter, a household in which the father had a major surgery did not qualify for any assistance immediately and *Food for Kids* provided short-term help. For some families, the temporary hardship

> comes regularly at the end of the month when finances and food run low. In such cases, a child "comes in and gets only enough to help her family make it through till the first," according to a school counsellor". (p. 20)

This point about temporary hardship precipitating recourse to food aid was further elaborated in the study using compelling anecdote.

> The program has also assisted children who are temporarily homeless, as exemplified by this statement from a school social worker: A 7 year old boy said, "I live in a hotel." ... After talking with him I found out there was a 3 year old sister and his mother was pregnant. They ate out of vending machines every night, because his mother was saving money for a deposit on an apartment. His mom was a Taxi Cab Driver . . . After school she stopped by to pickup a family box. Before she left she hugged me and said, "now my kids can eat healthy." (p. 20)

Ultimately, such anecdotes help to explain why volunteer school-based co-ordinators value this aid, but do not offer systematic insights to address the research questions raised in this review.

Conclusions

The broad conclusions of the programme evaluation, are summarised below along with a summary assessment of whether they can be sustained based on the available evidence:

> *FINDING:* "Findings support the argument that the backpack program is an effective way to improve students' sense of self-worth and their relationships with other students and adults at school." (p. 23)

These claimed food aid programme impacts are averred based on school-based programme co-ordinators' reporting about the internal states of students in the absence of systematically collected data at the individual level. This claim cannot be considered a robust finding.

> *FINDING:* “Instead of overlapping with the efforts of food pantries and soup kitchens, the backpack program appears to be meeting the food needs of those children who may otherwise go hungry.” (p. 22)

There is little evidence provided to support this claim. It is underpinned by a handful of second-hand anecdotes presented in the paper, but cannot be considered a robust finding.

> *FINDING:* “Food pantries and other private food assistance programs operate under the premise that parents will take care of their children. But some parents are not able to properly feed their children due to some combination of reasons related to insufficient economic means, illness, drug addiction, or a lack of willingness.” (p. 22-23)

While this may indeed be the case, the present study offers only weak evidence to this effect. The evidence is based on school-based programme co-ordinators ticking a box or entering an estimate of child-recipients affected by these factors. However, these statements may be inferences, guesses, stereotypes, etc. as they are not verified by direct data collection from the children or parents concerned. As such, this cannot be considered a robust finding.

> *FINDING:* “The decrease in behavior problems and improved class environment are contributing to program impacts for all the students in the classroom, not just the students receiving food assistance”. (p. 23)

This claimed result is merely inferred from the fact that the analysis of test scores seemed to show statistically significant improvements in test scores. However, the methodological limitations of this aspect of the research and the lack of any direct data showing this causal chain means this cannot be considered a robust finding.

> *FINDING:* “The findings support the continued growth and replication of the backpack program in order to support the educational progress, physical health, and emotional development of children who face food

> insecurity. […]Results from the Food for Kids evaluation provide a solid rationale for utilizing the backpack program as a tool for meeting these goals". (p. 23)

This final and grandest conclusion clearly cannot be considered a robust finding given the many methodological flaws undermining its foundational evidence.

Ultimately this is a highly flawed evaluation study, which may nevertheless be able to serve a useful purpose by furnishing some interesting hypotheses and anecdotes that could feed into future, more robust research.

Food Insecurity and Participation in Community Food Programs among Low-income Toronto Families

Authors: Sharon I. Kirkpatrick and Valerie Tarasuk

Research areas addressed:

- The food aid journey
- Impacts of food aid models on recipients' food security and community
- Interconnections between food aid models
- How people become users (or not) of food aid
- Socio-economic drivers of potential recipients' uptake of food aid
- Different models of food aid, and their benefits / drawbacks

Summary of Food Aid Intervention and Research

This study employed "survey and mapping data to examine household food security, participation in community food programs, and [food aid recipients'] resource augmentation strategies employed when running out of food or money for food" (p. 135)

Methodology and Study Focus

This study used robust sampling methods, which are described as follows:

> "Data collection was completed between November 2005 and January 2007 in 12 census tracts randomly chosen from 23 high-poverty tracts in Toronto. Families with children and who were tenants were studied because of the association between these household characteristics and food insecurity. Potential respondents residing in rental units in each census tract were approached at the door and screened for inclusion by trained interviewers with personal experience of low income. Tenant families were deemed eligible if their gross household income was at or below the mid-level of Statistics Canada's five-category income adequacy scale". (p. 135)

The study achieved a good sample size (n = 484), with a respectable participation rate of 62%.

The study focused on household food insecurity over the 12-month period prior to data collection.

Household food insecurity was defined as:

> "Moderately food-insecure families are characterized by compromises in the quality and/or quantity of food consumed by adults and/or children, whereas severely food insecure families are characterized by reduced food intake and disrupted eating patterns among adults and/or children". (p. 136)

Indicators of household insecurity included recourse to food banks and community kitchens and gardens in the previous year, child participation in school or community-based meal (in previous 30 days) or snack programmes and 'resource augmentation strategies' such as:

> "Questions on delaying the payment of rent or bills, terminating services, pawning or selling possessions, and sending children to a friend's or relative's home for a meal". (p. 136)

The analysis examined prevalence of food insecurity, and the role of the various forms of food aid in household's efforts to maintain food security.

Results and Critical Assessment

A high percentage of this representative sample of Toronto residents living in a high-poverty area showed signs of household food insecurity:

> "Over one third of families (37.6%) were moderately food insecure and over one quarter (27.7%) were severely food insecure over the previous 12 months." (p. 136)

The demographic categories most likely to experience household food insecurity (and therefore need food aid) included low income individuals, "households reliant on social assistance, those headed by a lone mother, and those in which the respondent had not completed high school" (p. 137).

There was a clear relationship in this study between indicators of household food insecurity and use of informal food aid (viz. food banks):

> "About one in five families used food banks in the previous 12 months (Table 3). Moderately food-insecure families had two times higher odds (OR = 2.18, 95% CI = 1.17-4.07) and severely food insecure families had six times higher odds (OR = 6.41, 95% CI = 3.75-10.97) of using a food bank at least one time in the previous year compared to food-secure families. Food bank use was positively associated with reliance on social assistance or other government transfers and the respondent having less than a high school education; lower odds of food bank use were observed with increasing income and among immigrants (data not shown). Among families that used food banks, use was relatively infrequent with over half (56.7%) reporting use in 3 or fewer of the previous 12 months and less than one fifth (19.2%) reporting use in 10 or more months. Only 4.1% of all families used a food bank in 10 or more of the previous 12 months (1.2% of food-secure families, 5.0% of moderately food-insecure families, and 6.7% of severely food-insecure families)." (p. 137)

Use of such food banks was "relatively infrequent", with the majority using them three times or less in the previous 12 months and only 4.1% using such assistance in 10 or more of the previous 12 months.

Amongst the small minority of such regular food aid users, many were on social assistance or other government programmes. This finding suggests that food banks are used as a regular form of support when welfare is insufficient to provide household food security.

Conclusions

This section identifies a number of findings and conclusions from the research, subsequently identifying whether those claims are robust and reliable or not.

> *FINDING*: Higher income individuals and immigrants were less likely to use food banks than other demographic groups.

This finding is robust, *as sampling was systematic and representative. This methodological foundation allows for generalisation to the target population of Toronto residents in high-poverty areas*.

Another important finding from this study concerns the role of distance to food aid.

> *FINDING*: "The distance from each family's dwelling to the nearest food bank was not associated with whether a family used a food bank at all nor with regular food bank use (p. 137)

This robustly developed finding indicates that it is internal drivers within the household that determine food aid usage, not the proximity of food aid provision.

The next item comes from the conclusion, which challenges the use of informal food aid as a replacement for systematic reform:

> To date, the primary responses to household food insecurity have been local-level food-based initiatives, predominantly food banks, but also school- and community-based meal and snack programs for children and programs such as community kitchens and gardens aimed at enhancing food skills and food access. While it has long been recognized that such initiatives do not address the economic issues

> that underlie food insecurity, the perception that these programs play a valuable role in addressing the unmet food needs of food-insecure children and/or households persists. Our data challenge this perception. Not only were rates of program participation surprisingly low – never exceeding one third of our sample – but we found no indications that the use of food banks or children's food programs had any bearing on household food security status. The patterns of food bank use among this sample suggest that it is a strategy of desperation, not a means of routine food acquisition. (p. 137-138)

This description of the percentages of food aid users in high poverty areas identified by the research as 'small' is not credible across the board. For some sub-populations within the high poverty area, participation in informal food aid was high, for others low. However, the numbers suggest that the raw quantity of food aid users is high.

The finding of 'low' participation rates did hold true for community gardens and kitchens.

> "Participation rates were so low that we could not even analyze the relationship between community garden or kitchen participation and household food insecurity. These low participation rates were documented among a predominantly food-insecure sample of families living in neighbourhoods with ample access to such programs. Our results highlight the need for systematic evaluations of community food initiatives to determine their relevance and accessibility for food-insecure households." (p. 138)

The authors take pains to emphasise the limits of food aid as a means of addressing household food security.

> "The apparent lack of a protective effect of food bank use observed in the current study has also been previously documented, with our research on food bank users in Toronto revealing no association between frequency of food bank use and severity of household food

> insecurity. Studies of children's food programs and community kitchens have also raised questions about their capacity to address problems of food insecurity due to factors such as limited scope and inability to address the food needs of those living in severe poverty." (p. 138)

Because food insecurity generally stems from long-term problems, it is unsurprising that infrequent forms of informal food aid are not sufficient to change the underlying situation. This is robust and important finding.

The use of 'resource augmentation strategies' in this representative sample is widespread.

> *FINDING/CONCLUSION*: "the use of other resource augmentation strategies such as delaying payments of bills or rent and the termination of telephone and other services was relatively common. This is worrisome given that such strategies can only compound the vulnerability of food-insecure families by causing them to incur debts, risk eviction, exhaust social support networks and become more socially isolated." (p. 138)

The authors rightly point out the intertwined nature of household food insecurity and other forms of disenfranchisement and precariousness.

> *FINDING/CONCLUSION*: "The high prevalence of food problems among this sample coupled with low levels of participation in community-based programs and the common use of other resource augmentation strategies highlight the need for more effective responses to household food insecurity in Canada." (p. 138)

This conclusion is supported by the evidence. There are a number of key gaps in existing provision, which may leave households unsupported either by formal or informal provision.

Summary and Final Point

Overall this is a robust empirical study, which focuses its analytical lens on those in high-poverty areas in a major Canadian city. The study concludes that individuals in such settings are not being adequately supported to redress their household food insecurity within the existing system of informal supports, suggesting that greater welfare state provision is required.

Food Security of Low-Income Single Parents in East Alabama: Use of Private and Public Programs in the Age of Welfare Reform

Authors: Patricia A. Duffy, Giner Grayson Hallmark, Joseph J. Molnar, LaToya Claxton, Conner Bailey and Steve Mikloucich

Research areas addressed:
- The food aid journey
- How people become users (or not) of food aid
- Different models of food aid, their inter-connections and their benefits / drawbacks
- Impacts of different food aid models on recipients

Summary of Food Aid Intervention and Research

In light of a relative increase in private provision of food aid, the objective of this US-based research was to determine how single parents use both public and private food assistance. This particular focus is because “single parents are also far more likely than others to live in food insecure households (Andrews et al. 2000).” (p. 49). In particular, in the United States “nearly 30 percent of single-female headed households with children were found to be food insecure, triple the rate for the nation overall (Andrews et al. 2000)” (p. 50). To investigate this phenomenon, the research compared single parent households with other low-income, food poverty households. They focused on the case of low-income, food-needy households in East Alabama, including both clients and eligible non-clients of local private food assistance. (p. 49)

Methodology and Critical Assessment

This paper reports on the results from a two-stage qualitative research study:

Stage 1: Semi-structured interviews with food bank supervisors / organisers

These were conducted to inform the development of a structured interview instrument to use with food pantry clients and eligible ‘non-clients’.

> "As a first step in the process of instrument development, semi-structured interviews with pantry supervisors […] sought to discover, via open-ended questions, any obstacles agency representatives believe might be preventing needy individuals in the community from receiving aid." (p. 53)

Critical Assessment of Stage 1. From a research perspective, asking the advice of a third party such as food bank supervisors to speculate about the key factors for food aid recipients to be used in a standardised data collection instrument is only valid as an initial starting point. This should have been developed further through pilot testing, or unstructured interviews or focus groups with recipients to ensure that the data collection instrument validly captures the range of responses that recipients may like to offer.

Stage 2: Structured face-to-face interviews with food bank users and non-users

The sampling approach for the food bank users is not specified in the published research report. It merely states, "A sample of ten clients from each of the twelve pantry locations was selected to be interviewed. Ultimately, 96 of these individuals were surveyed via a face-to-face interview using a standardized instrument." (p. 53) For non-clients sampling was achieved using a mixed approach:

> "[…] we asked the interviewed clients to refer the interviewer to a "person they know who has trouble getting enough food but who does not receive any food assistance." However, these referrals did not produce a sufficient sample of needy non-clients. (Only two successful referrals were generated by this method.) At three sites, which offered an array of social services, we were able to directly interview low-income, food-needy people who did not use the food pantry.
>
> To find the remaining non-clients, we contacted the local housing authority and subsequently interviewed individuals at housing projects in proximity to the pantry sites. Two pantry sites were close to a grocery store […] we thus interviewed customers of the grocery store, based on a response to a screening question concerning whether they ever lacked enough money to buy food." (p. 54)

In total, 216 low-income and food bank eligible clients and non-clients were interviewed.

Critical Assessment of Stage 2.

The fact that the sampling approach employed for food pantry clients is not specified could be problematic: The data that were collected may not be representative of the larger population of food pantry clients. The sampling approach for non-clients also lacks detail. Thus while the approaches are not fundamentally flawed, it is not clear that the data collected can be relied upon to be representative of the broader population of non-clients.

Research Findings and Critical Assessment

Some of these key research 'findings' are identified below, followed by a critical assessment in italics.

Demographic Factors

FINDING 1 (Demographic Factors): "Most respondents were female, but the single-parent clients (95 percent) and non-clients (93 percent) consisted almost entirely of women. Of the rest of the sample, 84 percent of clients and 73 percent of non-clients were women. African- Americans were more highly represented among single parents than among the rest of the sample. Seventy-eight percent of single-parent food-pantry clients and 92 percent of single-parent non-clients are African-American, compared to 50 percent and 68 percent, respectively, in the rest of the sample. With the exception of a few Native Americans and Hispanics, all other respondents are white." (p. 55).

FINDING 2 (Demographic Factors): On average, household sizes tended to be small, with most respondents having less than three people in the household. Single-parent clients had the highest percentage of respondents with four to six people in the household, 47 percent, compared to 33 percent of the single-parent non-clients. […], 36 percent of the clients and 10 percent of non-clients had four to six people in the household. In addition, 80 percent of single-parent clients and 83 percent of single-parent non-clients had children under 17 living with them, compared to only 56

percent and 24 percent, respectively, in the rest of the sample. The larger household size of single parent clients with only one income-earner could be a significant burden on the family's financial situation. (p. 55)

FINDING 3 (Demographic Factors): “Results from survey items relating to education, income, and employment are listed in Table 2. Of the single-parent respondents, 58 percent of clients and 65 percent of non-clients had at least a high school education, compared to 57 percent and 47 percent, respectively, in the rest of the sample. Only a very small percentage of respondents had completed college. A slightly higher percentage of single parents reported working outside the home than did the respondents in the rest of the sample. Thirty-three percent of the single-parent food-pantry clients and 50 percent of the non-clients were employed, compared to 25 percent and 23 percent, respectively, in the rest of the sample. Of those working, the majority worked full-time jobs. For those not working, most had been unemployed for more than two years. (p. 55)

Critical Assessment of Findings 1,2 and 3

Because the researchers did not demonstrate the use of random sampling (or even systematic sampling), generalisations about the populations of clients and non-clients *cannot be considered robust*. Therefore the differences in demographic characteristics described above may well be due merely to who the researchers asked to participate, rather than due to any real differences between the population of clients and non-clients.

Food Security

FINDING 4 (Food Security Patterns): “Ninety percent of single-parent food pantry clients and 77 percent of single-parent non-clients indicated they sometimes or often ran out of money for food, compared to 71 percent of clients and 83 percent of non-clients in the rest of the sample. The number of single-parent clients running out of money for food (90 percent) was higher than for food pantry clients who were not single parents (71 percent), but the difference in response across categories was not statistically significant.” (p. 56)

FINDING 5 (Food Security Patterns): “When respondents were asked to describe the food eaten in their household, 23 percent of single-parent food-pantry clients and 25 percent of single-parent non-clients indicated they sometimes or often did not have enough food to eat, compared to 18 percent and 25 percent, respectively, in the rest of the sample. Forty percent of single parent food-pantry clients and 30 percent of the non-clients reported sometimes or often going to a friend or relative's home for a meal.” (p. 56)

FINDING 6 (Food Security Patterns): “which respondents worry about not having enough money for food. Eighty percent of single-parent food-pantry clients and 57 percent of non-clients indicated they sometimes or often worry about running out of food, compared to 62 percent and 52 percent, respectively, in the rest of the sample. Single-parent clients were most likely to indicate that adults in the household had cut the size or their meals or skipped meals in the past year because of insufficient money for food”. (p. 60)

FINDING 7 (Food Security Patterns): “Food insecurity among children shows a more severe level of food need, since adults only cut the size of children's meals or have their child skip a meal in extreme cases of need. The majority of respondents did not report such need. Only 12percent of single-parent clients and 14 percent of non-clients reported cutting the size of their child's meal sometimes, compared to 10 percent and zero percent, respectively, in the rest of the sample. Only 3 percent of single-parent food-pantry clients and 3 percent of non-clients reported having a child skip a meal in the past year because of lack of money for food.” (p. 60)

Critical Assessment of Findings 4, 5, 6 and 7 (Food Security Patterns)
Because the researchers did not demonstrate the use of random sampling, the reported patterns of food security extracted above *cannot be considered robust*. Therefore the different patterns of quantitative results described above may be due to sampling error, rather real differences within the populations of clients and non-clients.

Government Food Aid Use

FINDING 8: “Single-parent respondents were more likely to receive food stamp benefits than respondents in the rest of the sample. About half of single-parent clients and non-clients received food stamps, compared to 23 percent and 32 percent, respectively, in the rest of the sample.” (p. 62)

FINDING 9: “Among single parents, food stamp use was about the same for the pantry clients and non-clients, indicating that for this group at least, pantry services did not appear to be a substitute for food stamps. For the rest of the sample, the results were less clear. Those who used the pantry were somewhat less likely to receive food stamps, perhaps indicating that for this group, the private and public services substitute to a degree.” (p. 62)

FINDING 10: “Of those who do receive food stamps, the majority (60-70 percent across categories) reported that the stamps do not last all month. Almost half of all single-parent respondents reported having their food stamp benefits reduced in the past year, compared to 69 percent of clients and 38 percent of non-clients in the rest of the sample.” (p. 62-64)

FINDING 11: “The large number of respondents not receiving food stamps is troubling […] 50 percent of single-parent clients and 47 percent of non-clients were not receiving food stamps, compared to 77 percent and 68 percent, respectively, in the rest of the sample. […] 90 percent of single-parent clients indicated they sometimes or often ran out of money to buy food, as did 77 percent of single-parent non-clients. The high percentage of respondents not receiving food stamp benefits, and the high percentage reporting reduction, elimination, or expected reduction in benefits, is consistent with the recent decline in participation in the Food Stamp Program nation-wide (Wilde et al. 2000). It is also noteworthy that some respondents did not seem to understand why their benefits had been cut or eliminated.” (p. 64)

FINDING 12: “The majority of single-parent food pantry clients (72 percent) and non-clients (80 percent) with minor children living at home reported that their children received reduced cost meals at school, compared to only 52 percent and 38 percent, respectively, for respondents with minor children in the rest of the sample. The difference was statistically significant at the 5 percent level. Only a small percentage

of respondents received free or reduced cost meals at a day care or Head Start Program, and few received government assistance for day care. Twenty-five percent of the single parent food-pantry clients and 28 percent of non-clients received food through the WIC program, compared to 35 percent and 38 percent, respectively, in the rest of the sample, but the difference was not statistically significant at the 5 percent level." (p. 68)

FINDING 13: "Sixty percent of single-parent clients and 52 percent of non-clients received Medicaid, compared to only 38 percent of clients and 42 percent of non-clients in the rest of the sample. Respondents in the rest of the sample were more likely to be over age 55, and thus, received Medicare as opposed to Medicaid. Only 15 percent of single parent clients and 18 percent of single-parent non-clients received Medicare, compared to 45 percent and 35 percent, respectively, in the rest of the sample." (p. 68)

Critical Assessment of Findings 8 – 13 (Government Food Aid Use Patterns)

As in the previous sections, the quantitative claims contained in this section *cannot be considered robust*, given the lack of clarity and systematicity in the sampling practices described in this paper. This study appears to show some important differences, but these differences may not hold up if systematic / random sampling is.

Non-Governmental Food Aid Recipient Patterns

FINDING 14: "Most food pantry clients had been receiving food at the food pantry for at least several months […] rather than providing a response to a single acute emergency. About the same percentage of single parents (46 percent) as the clients in the rest of the sample (43 percent) had received food for more than a year. More than half of all clients expect that they will still need the pantries' services in three months, and only 23 percent of single parents and 27 percent of the clients in the rest of the sample said they did not expect to need the pantry then. […] The majority of respondents in both categories received food only "every now and then" as opposed to getting pantry food on a weekly or monthly basis." (p. 69)

Thus, Finding 14 indicates that amongst those participating in the research, food banks were providing support of a longer period to address chronic food insecurity. However, the self-reported level of food aid use as “every now and then” suggests that these food aid recipients are first trying to meet their needs through other means before falling back on private food assistance.

FINDING 15: “Overall, respondents reported a fairly high level of satisfaction with the food received at the pantries, and no large differences were noticed in the satisfaction levels of single-parent clients and the clients in the rest of the sample. Over 80 percent of all clients were satisfied or very satisfied with the quality of food. When asked about the amount of food, 80 percent of respondents in both categories were very satisfied or satisfied. Similarly, about the same high percentage of all food pantry clients indicated they were satisfied or very satisfied with the variety of food.” (p. 69)

FINDING 16: “The majority of both groups indicated that it is never hard to find transportation to the site, but a slightly higher percentage of single parents, 10 percent, reported always having problems accessing the food pantry, compared to 4 percent of clients in the rest of the sample. Most of the pantry directors indicated they would deliver food if a client could not access the pantry.” (p. 69)

Critical Assessment of Findings 14 – 16 (Non-Governmental Food Aid Recipients)
Although the same caution must be employed when interpreting these findings, there are important directions for more robust research highlighted here. The idea that private food assistance can be used on a relatively long-term basis, but yet be limited to ‘every now and then’ suggests the counter-intuitive idea that food aid needs can be both chronic/long-term and infrequent. These findings suggest that the food bank is being used as a second-choice strategy for meeting food needs when other means of securing food occasionally fail.

The finding that 80% of sampled food aid recipients were satisfied with the service raises at least one question not addressed by this research. What is making the other 20% dissatisfied with the food bank service?

Possible Barriers to Food Aid Use Among Current Non-Users

FINDING 17: "Most of the respondents did not know about the East Alabama Food Bank or food pantries in their community. Of the single parents, 63 percent said they did not know about EAFB, compared to 67 percent of non-clients in the rest of the sample. Likewise, 57 percent of single parents did not know about food closets or pantries in their community, and 62 percent of non-clients in the rest of the sample were unaware of these services. Differences were not statistically significant at the 5 percent level." (p. 72)

Thus, the major factor that this research identified in non-use of private food aid was a lack of awareness of its existence. This was further reinforced by the following finding:

FINDING 18: "Ninety percent of single parents and 93 percent of the non clients in the rest of the sample reported they would receive food from a pantry if they were eligible." (p. 72)

Critical Assessment of Findings 17 and 18 (Barriers to Food Aid Use for Non-Users)

Although subject to the same limitations as the previous findings, the very high percentage of needy non-clients who indicated they would like to receive food from a food bank (if they knew they could) is striking. This could be an important hypothesis to investigate further using more robust sampling methods.

Logit Model Analysis: Use versus Non-Use of Food Pantry

A statistical analysis within the data set was used to identify any patterns of differences between users and non-users of the food bank.

FINDING 19 (Barriers to Food Aid Use for Non-Users): The results of this analysis showed the variables that were associated with food pantry use "included being married with children (MARCHILD), skipping meals (SKIPMEAL) and church attendance (CHURCH). Food stamp use, however, was not a significant factor in the model." (p. 76)

FINDING 20 (Barriers to Food Aid Use for Non-Users): Single parents actually represent a larger percentage of clients (42 percent) than married couples with children (33 percent), but the non client sample also had a high percentage of single parents (50 percent), resulting in a greater significance of the married with children variable. Again, the method of selection of the non-clients could account for the significance of this variable for our sample." (p. 76)

FINDING 21 (Barriers to Food Aid Use for Non-Users): "Church attendance was also significant. Ten of the twelve food pantries in our study were connected with a church or religious organization. None of the 10 church sites restricted their services to church members alone, but the greatest barrier to use of food pantries was lack of knowledge of the programs. Therefore, those who attend a church regularly are more likely to know about the services and thus use the pantry." (p. 76)

FINDING 22 (Barriers to Food Aid Use for Non-Users): "The three significant variables, being married with children, skipping meals, and church attendance were also significant in models with alternative specifications, showing that they indeed have an association with food pantry use in this sample. Food stamp use, on the other hand, did not distinguish the populations of clients and non-clients. The selection method in our sample might have been expected to bias upward the percentage of food stamp users in the non-client sample, but even with this possible source of bias, food stamp use was not significantly different between the two groups. Hence, it does not appear likely that, in the aggregate, the food-insecure population views pantries and food stamps as substitutes." (p. 76)

Critical Assessment of Findings 19 – 22 (Barriers to Food Aid Use for Non-Users)
The striking result above in Finding 19 is that the use of public food aid (food stamps) did not make someone more likely to use food banks. This suggests that public and private food aid are operating with separate and distinctive use patterns. The finding that being married with children and attending church also were positively associated with food bank use highlights the possibility that the use of such private provision operates according to a logic that may not align exactly with need. Indeed, given this paper started by highlighting the plight of single parent households, the finding that married couples with children are more likely to be

getting support from the food bank in this case raises important questions about the relationship between level of need and knowledge / access to private food assistance. Of course, these findings must be interpreted with caution: the *results cannot be considered robust* due to the non-random nature of the sampling procedures. Nevertheless, this analysis highlights an important area for future robust research to examine.

Conclusions

The first conclusion from this research is as follows:

> "Despite the high level of need indicated by the single-parent respondents, food pantry clients are characterized by a fairly high percentage of married couples with children. The finding shows that the hunger needs in this area are not limited to one-income, female headed, single-parent households. They may also provide an indication that single mothers, who are probably more harassed for time than adults in two-parent families, are less able to coordinate regular contact with a pantry supervisor." (p.77)

Of course, this explanation for the finding that married couples with children were more likely to benefit from food bank assistance is relatively speculative. Given the heavy representation of churches amongst private food aid providers in this study, an alternative explanation is that those who are already better connected to their communities and local organisations such as churches will be more likely to be provided with information about available food assistance. Such a circumstance would be unsurprising given that food banks are unlikely to have the resources to advertise their service (and may even actively try to limit their visibility to avoid being overwhelmed by clients). Therefore, word of mouth and local informal networks would have to be the source of information about such private food assistance. This alternative explanation for the (albeit non-robust) study findings raises the concerning possibility that private provision may be *least* likely to benefit those who are most socially excluded and isolated.

The second main point in the conclusion recognises (to a degree) this possibility, arguing that greater public food aid assistance outreach is needed.

> "[…] many food-needy individuals in our local area do not use food pantries because they are unaware of the availability of the services. The pantries […] usually cannot afford an extensive outreach or advertising campaign, so it is not likely that this information problem will be addressed soon. Most pantries, also, are already strained to serve the needs of their existing clients, and it is not clear how these pantries could respond to a large increase in demand. Given the negative consequences of hunger and malnutrition, our study highlights the importance of increased efforts to make food stamps and other forms of long-term government food assistance more accessible to the needy population." (p.79)

This is a reasonable conclusion, although it downplays the possible problem uncovered by the study that need may be only one of three major determinants of private food assistance. Given the limitations of the sampling and the particular local context (one region of one state within the USA), the details of this study's claims cannot be relied upon as robust knowledge. Nevertheless, a number of interesting and potentially important direction for future research have been revealed through this investigation.

Food stamp program participation, informal supports, household food security and child food security: A comparison of African-American and Caucasian households in poverty

Authors: ManSoo Yu, Margaret Lombe, and Von E. Nebbitt

Research areas addressed:

- How people become users (or not) of government food aid
- Socio-economic drivers of potential recipients' uptake of government food aid
- Different models of food aid, and their benefits / drawbacks for recipients
- Distinguishing Household Food Security and Childhood Food Security

Summary of Food Aid Intervention and Research

This US-based study used secondary data analysis to study differences between African-American and Caucasian households' use of public and private food aid, and such food aid's impact on household food security and child food security:

> "Evidence does exist suggesting that household characteristics may be important in understanding welfare utilization and outcomes (Bartfeld, 2003; Stevens, 1999). […] A racial disparity has been identified in food stamp-take up and household food security (Bhattarai, Duffy, & Raymond, 2005; Gleason, Schocher, & Moffitt, 1998; Zekeri, 2006). In addition, household income has been indicated as a correlate of food security." (p. 768)

Using secondary data analysis, this study investigates the following hypothesis:

> "[…] household characteristics, FSP [food stamp programme] participation, informal food supports and household food security will be associated with child food security. Particularly, the model […] posits that FSP participation or informal supports will moderate the effect of household food security on child food security after controlling for household characteristics. (p. 768)

Methodology and Critical Assessment

This national study undertook secondary data analysis focused on people who completed both the Current Population Survey (CPS) and the Food Security Supplement, focusing on a subset of the original respondent population. The sampling methods employed are described as follows:

> "First, out of 31,000 households with children, 17,087 subjects who rated [issues with] children's food security were selected. Second, out of 17,087 subjects, 6,327 subjects remained in the study because there were 10,760 who did not provide information about number of children that is one of the most important variables in studying child food security. Third, out of 6,327 subjects, we uses [sic] 3,799 subjects (708 African American households and 3,064 Caucasian households) with income below 185% poverty of the [US] federal poverty level who answered questions on other key study variables." (p. 769)

Therefore, the sampling method ensures that the data are able to speak to the topic of child food security (not necessarily household food security more generally). Moreover, the representativeness of the study may be adversely affected by the

exclusion of the large number of households indicating some form of child food insecurity, but also either incomes about 185% of the poverty level or registered non-responses for some relevant variables (n = 2528). Nevertheless, this study is using robust sampling within these specified parameters.

Using this set of respondents, the study defined a number of dependent and independent variables for analysis:

1. (*Dependent Variable)* Using indirect-report, by the children's head of household, child food security ranking measures were recorded as:

> "1. the children were not eating enough because they just couldn't afford enough food;
>
> 2. the household ever cut the size of their children's meals because there wasn't enough money for food;
> 3. the children were hungry but they just couldn't afford more food;
> 4. the children ever skipped a meal because there wasn't enough money for food; and
> 5. the children did not eat for a whole day because there wasn't enough money for food.
>
> Items on were [sic] summed up such that higher scores indicate greater food security among children. The measure demonstrated acceptable reliability (Cronbach α=0.61) (Lombe, Yu, & Nebbitt, 2009a)." (p. 769)

2. (*Dependent Variable)* Household representatives were also asked to rate (on a 3-point scale) their household food security over the previous year, responding to each the following queries:

"1) Worry[ing] their food would run out before they got money to buy food;

2) Food […] didn't last and they didn't have money to get more;

3) They couldn't afford to eat balanced meals;

4) Relied on only on a few kinds of low-cost food to feed their children because they were running out of money to buy food;

5) [If] they ever cut the size of their meals or skip meals because there wasn't not enough money for food;

6) They […] ate less than they felt they should because there wasn't enough money to for food;

7) [If] they were ever hungry but didn't eat because they couldn't afford enough food;

8) They lost weight because they didn't have enough money for food; and

9) [If] they [did] not eat for a whole day because there wasn't enough money for food." (p. 769)

3. (*Independent Variable)* Participation in the Food Stamp Programme, defined by: "anyone in [his or her] household had participated in the food stamp program in the past 12 months." (p. 769)

4. (*Independent Variable)* Use of Informal Food Supports, defined by: "anyone in a respondent's household received any meals delivered to the home from community programs […], went to a community […] center to eat prepared meals, and ever got emergency food […] in the past 12 months" (p. 770)

Critical Assessment of Methodology

The measurement tools for child food security and household food security are reasonable. However, relying only on the head of household's reporting of these factors for their children could potentially be problematic. The head of household may not always be in the optimal position to make these judgments, potentially leading to under or over-counting. Moreover, there may be a social desirability driving heads of household to under-state the level of child food insecurity in certain cases (and this bias may not apply equally across African-American and Caucasian households). A further set of possible biases and limitations are acknowledged by the researchers:

> "Data used in this study […] is based on recall [limiting] the precision to which respondents recalled and reported their perceptions of the food situation of their offspring". (p. 770)

> "Issues of measurement […] in relation to informal food assistance […] may [have] important aspects of this variable […] that are not fully captured by the measure used in this study". (p. 770)

> "The measures […] only assess program usage and not degree of utilization". (p. 770)

> "Further, they may be other factors not covered in this study […] that may be important in understanding child food security". (p. 770)

The sample for this study is certainly derived from a robust larger sample, which should allow for generalisation to the broader national population. However, it is odd (and not explained) that the sample was neatly divisible into African-American and Caucasian households, with no cases of mixed ethnicity. This division suggests that

the researchers excluded cases of mixed ethnicity, which could have been a revelatory category in this study of the role of ethnicity in food aid use and impacts.

Findings and Critical Assessment

These results focused on the demographic characteristics of food insecure households in the US can be considered robust given they are based upon statistically representative sampling methods. However, these results should be considered to be limited to only those who have indicated some form of child insecurity may be taking place in their household, are below 185% of the federal poverty line and answered questions relating to relevant variables.

> *FINDING 1 (Socio-economic drivers of food insecurity)*: "The level of education reported by the head of the household ranged from 1 (less than 1st grade) to 16 (doctoral degree). Forty-one percent of respondents reported having completed 12th grade; 3% without a high school diploma and 38% with a high school diploma." (p. 770)

> *FINDING 2 (Socio-economic drivers of food insecurity)*: "The average number of hours worked was 10.6 hours [SD=8.6] with a range of 0-22. Respondents' annual household income ranged from 1 (less than $5,000) to 13 ($74,999) with the mean lying between $15,000 and $19,999." (p. 770)

Likewise, the results showing the level of usage of food aid programmes (government and non-government) *can be considered robust*, albeit with the same caveat that the focus is on households that have indicated some form of child food insecurity may be present.

> *FINDING 3 (Food Aid Programme Use)*: "Approximately one in three (32%) of the subjects participated in food stamp program; and one in five (19%) had received informal food supports in the past 12 months. […]

However, the following finding regarding levels of food insecurity *may not be entirely robust*, given the concerns raised in the previous section about the method of measuring child food security in particular.

> *FINDING 4 (Food Security)*: respondents reported a mean household food security of16.8 [SD=2.3], this scale ranged from 4 to 22. Respondents also indicated an average child food security score of 6.2 [SD=3.7]; this ranged from 3 to 11." (p. 770)

The following results clearly show that food pantry use corresponds to household food insecurity in the United States. However, there are many food insecure households that do not use food aid. These results *can be considered robust*.

> *FINDING 5 (Food Security)*: "Ninety percent of single-parent food pantry clients and 77 percent of single-parent non-clients indicated they sometimes or often ran out of money for food, compared to 71 percent of clients and 83 percent of non-clients in the rest of the sample. The number of single-parent clients running out of money for food (90 percent) was higher than for food pantry clients who were not single parents (71 percent), but the difference in response across categories was not statistically significant." (p. 770)

The study identified some differences in the characteristics of African American and Caucasian American households in the sample. There may be some substantive

significance in these differences, but it is important to keep in mind that these results only apply within the narrow parameters of the study (not to the entire populations for these two ethnic groups).

> *FINDING 6 (Socio-economic Drivers of Food Insecurity - Ethnicity)*: "African American households reported higher levels of education ($t=5.38$, $p<0.001$), more female heads of households ($\chi2=179.6$, $p<0.001$), more participation in the FSP ($\chi2=96.1$, $p<0.001$), and more informal food supports ($\chi2=0.614$ $p=0.01$) than Caucasian households. On the other hand, Caucasian households reported more hours of work ($t=2.96$, $p=0.003$), more household income ($t=10.7$, $p<0.001$), and higher household food security ($t=2.96$, $p=0.003$). The two groups did not differ in terms of age, number of children and child food security." (p. 770)

These robust findings (above) show greater household food insecurity and greater uptake of both government and non-governmental food aid amongst African American households when compared to Caucasians.

The research highlights different patterns of child food security for Caucasian and African American households in the sample. A key point of interest is that the inter-relationships between different socio-economic variables and household food insecurity were different within these two ethnic categories.

> *FINDING 7 (Socio-economic Drivers of Food Insecurity - Ethnicity)*:
>
> "Among Caucasian households […] child food security was positively associated with the level of education attained by the head of a household, being a female head of a household, participation in the

> FSP and informal food supports, and negatively associated with household food security and household income.
>
> Household food security was positively related to education, household income and hours of work, and negatively related to age, being a female head of a household, participation in the FSP and informal food supports.
>
> Informal food supports were positively related to female headship of a household, number of children and participation in the FSP, and negatively related to hours of work and household income.
>
> FSP participation was positively associated with female headship of a household and number of children, and negatively associated with age, hours of work and household income." (p. 770)

These results indicate that used of informal food aid was more likely for female-headed households, with more children, and who also participate in government food aid, while working fewer hours and having a lower income. Moreover, government food aid use was more likely for female-headed households with more children, who were younger, worked fewer hours and had lower incomes. Perhaps the most noteworthy point above is the relationship between government and non-governmental food aid, which suggests that food stamps alone were not sufficient to address food security needs.

These relatively unsurprising findings *can generally be considered robust*, with the caveat that the head of household reporting method for food security determinations may not be 100% accurate.

> *FINDING 8 (Socio-economic Drivers of Food Insecurity - Ethnicity)*: "African American households […] child food security was positively associated with membership in the female headed group (p=0.020),

participation in the FSP and informal food supports, and negatively associated with household income and household food security.

Household food security was positively associated with family income, and negatively related to being a female head of a household and informal food supports.

Informal food supports were positively related to participation in the FSP, and negatively related to hours of work and household income.

FSP participation was positively associated with female headship of a household, and negatively associated with the age of the head of a household, level of education held by the head of a household, hours of work and household income." (p. 770-771)

The following findings are derived from inferential statistical analyses, yielding robust findings for the Caucasian sub-sample.

FINDING (Multivariate Analyses for Predicting Child Food Security (CFS) with the Caucasian sub-sample):

"Higher levels of education reported by the head of a household, participation in the FSP, informal food supports, and lower household food security predicted greater child food security, […] explain[ing] 13% of the variance in child food security". (p. 771)

"Informal food supports significantly interacted with household food security in predicting child food security. Caucasian households who utilized informal food supports reported significantly greater child food security compared to those who did not utilize informal food supports." (p. 771)

Similar statistical analyses were employed with the African American sample, providing robust results as follows:

FINDING (Multivariate Analyses for Predicting Child Food Security (CFS) with the African American sub-sample):

> "The model revealed that the level of education attained by the head of a household and informal food supports positively predicted child food security while household food security negatively predicted the dependent variable [child food security], [… in total] explain[ing] 13% of the variance in child food security." (p. 62)
>
> "Unlike with the Caucasian sub-sample, FSP participation was not predictive of child food security. The age of the head of a household negatively predicted child food security." (p. 62)

This is a major finding specific to the African American sub-sample, revealing that government food support did *not* predict child food security, while a household's use of non-government food aid *does* predict child food security, to a degree. Of course, it is worth keeping in mind that the above models only reached the level of explaining 13% and 14% of variance in child food security. While such results are certainly significant, they indicate that there are other variables not captured in this analysis that explain the majority of variance on this outcome measure.

Conclusions

The conclusion summarises some of the key robust research findings:

> "[…] an interesting observation; household food security was negatively related to child food security in both racial groups while child food security was positively related to food stamp program participation and informal food supports. The negative relationship between household

> and child food security observation is counter intuitive and, to our knowledge, has not been reported in the extant literature." (p.772)

The speculative explanation for this latter finding, however, is ***not robust***.

> "On the other hand, child food security may be a function of maternal managerial capacity and feeding practices having little to do with the resources a household commands including its food security." (p. 772)

Nevertheless, the final points are well grounded in the data and can be considered robust.

> "A conservative interpretation of our results would indicate that food insecurity and hunger, among children, persist despite effort of both formal and informal food assistance programs. Indeed, there may be a gap between the supports provided by the safety net and their consumption needs among children in poor households and other vulnerable household types." (p.772)

> "Results of this study also indicate that vulnerable households are likely to turn to informal food assistance networks to cushion consumption. This is important and may suggest that the food stamp program is not adequately meeting consumption needs within this group." (p.772)

These conclusions raise important points for policy, while some of the other findings point to possible considerations for future research. For example, this study suggests that future research should take ethnicity into account, running the analyses in such

a way that differences in the causal patterns within such households can be identified.

Low Income Families' Utilization of the Federal "Safety Net": Individual and State-Level Predictors of TANF and Food Stamp Receipt

Authors: Kelly M. Purtell, Elizabeth T. Gershoff, and J. Lawrence Aber

Research areas addressed:

- How people become users (or not) of government food aid
- Socio-economic drivers of potential recipients' uptake of government food aid
- Different models of food aid, and their benefits / drawbacks

Summary of Food Aid Intervention and Research

Purtell, Gershoff and Aber (2012) evaluated the two primary US federal food benefit programmes: Temporary Assistance for Needy Families (TANF) and the Food Stamp programme. The researchers starting assumption is that many eligible low-income families do not receive the benefits of these programmes:

> "Prior research has shown that a large number of eligible low income families do not utilize these programs (Meyers, Gornick & Peck, 2001). […] Most prior research answering this question examined these benefits prior to the welfare reform era of the mid-1990's, which created TANF and changed regulations surrounding Food Stamps." (p. 4)

The primary aim of this study was to evaluate current data to determine the "family and state-level predictors of TANF and Food Stamp receipt" (p. 4). Therefore the focus of the study is on gaps in government food aid provision.

Methodology and Critical Assessment

This US-based national study uses secondary data analysis of the "Early Childhood Longitudinal Study-Kindergarten Cohort (ECLS-K), a nationally representative sample of 21,260 children enrolled in 944 Kindergarten programs during the 1998-1999 school year (West, Denton, & Reaney, 2000)." (p. 12). The following sampling method was used to select an appropriate sub-sample for this particular study:

> "The current study utilizes a subsample determined by the following inclusion criteria:
>
> - families […] that reported income-to-needs ratios below 200% of the Federal Poverty Line
> - families resided in a state that was represented in the ECLS-K sample by at least 20 low-income families (40 states);
> - families did not reside in Alaska and Hawaii, states whose data were excluded due to extreme values on state measures (per Meyers et al., 2001)." (p. 11)

Ultimately a sample of "6,200 families from 38 states" (p. 11) was used in for secondary data analysis.

Using the selected children, the researchers identified the following measures for study:

1. (*Outcome Variables)* Indirectly-reported parental food aid and food security questions:

> "1. Since (date of fall interview), have you or anyone in your household received Aid to Families with Dependent Children-

sometimes called AFDC or ADC, Temporary Assistance for Needy Families, sometimes called TANF or (state AFDC program name)?

2. In the past year, have you or anyone in your household received food stamps?" (p. 12)

2. (*Family-level Predictor Variables)* Data was also collected on socio-economic family characteristics:

- "family income-to-needs
- family race/ethnicity
- marital status,
- maternal employment
- whether the child was born in the U.S.
- primary language spoken at home
- [Living] in an urban or rural area
- residential instability (number of places the child has lived since birth)
- financial troubles for 1 year or less
- financial troubles for more than 1 year
- low or very low food security
- marginal food security" (p.13-14)

3. (*State-level predictor variables)* 1998 state-level data was used to define four variables used in the analysis: *TANF coverage* reflecting the degree to which benefits are being received by those in need; *TANF generosity*, reflecting the average amount per family receiving the benefit; *Food Stamps coverage* in terms of amount of families with children who are getting benefits relative to the total number of poor families with children; *Food Stamps generosity, reflecting* the "annual federal benefit expenditures for families with children by the number of families with children on the caseload" (p. 14).

Critical Assessment of the Methodology

This research follows a sound methodological approach. While some of the indicators and variables employed may have limitations in terms of their validity, the overall robustness of the paper is strong. There are further limitations, however, in the reliance on self-reported data which are acknowledged by the researchers:

> "One limitation of this study is our reliance on self-reported annual household income and benefit use. While benefit use is typically underreported in survey data, many studies rely on it because administrative data is largely unavailable to researchers (Zedlowski, 2002). However, the possibility for reporting error does need to be considered when interpreting and extrapolating from our results. Additionally, monthly income data would be ideal but was unavailable for this study." (p. 23)

Some of the key research 'findings' are identified below, followed by a critical assessment in italics.

Factors Predicting Use of Government Food Aid

This robust analysis identified clear patterns in the demographic categories most likely to use government food aid.

> *FINDING (Predictors of Government Food Aid Use)*: "[…] family sociodemographic characteristics predicted receipt of Food Stamp benefits. Lower family income-to-needs ratios were associated with higher odds of Food Stamp receipt. Families in which the highest level of parent education was a high school degree or less, Black families,

> single parent families, and families in which the mother was not employed all had higher odds of receiving Food Stamp benefits." (p. 18).

As can be seen in the robust finding above, those most disadvantaged in society are most likely to be in receipt of government food aid. However, as the following (also robust) finding highlights, one's ability to access government food aid is also mediated by language capabilities and whether one is located in urban or rural areas.

> *FINDING (Predictors of Government Food Aid Use)*: "Families in which the focal study child was born in the U.S. and families in which the primary language spoken was English both had higher odds of Food Stamp receipt as compared to families in which the focal child was born outside the U.S. and families in which the primary language spoken was not English, respectively. Families living in urban areas had higher odds of Food Stamp receipt than families in suburban areas; there was not a significant difference in the odds of receipt between rural and suburban areas." (p. 18).

The finding that people for whom English was not their primary spoken language are less likely to benefit from government food aid highlights that factors other than need play an important role in determining whether needy individuals and families are able to access food assistance from the government. The finding that urban households are more likely to access government food aid also highlights the importance of outreach to needy households in rural communities.

Perhaps one of the most surprising findings from this study is that reported levels of food (insecurity) did not predict government food aid usage.

> *FINDING (Predictors of Government Food Aid Use)*: "The odds of Food Stamp receipt for families that reported low or very low food security was not significantly different from the odds of families that reported food security. […]

This surprising result may raise questions about the targeting of US government food aid, and whether it is focused on the most needy and food insecure households.

Conclusions

This research concludes that government food aid was helping those most in *economic* need (although not necessarily the most food insecure). This suggests that the government food aid is operating to address poverty first and foremost, rather than food security per se.

> "Our findings reveal that families in greatest need of assistance are generally more likely to receive TANF and Food Stamps. In particular, families experiencing severe economic hardships, such as frequent moves and food insecurity, are more likely to receive both benefits than families not experiencing these hardships" (p. 20)

The study also highlights a potentially very important direction for future research on food (in)security, that is, the role of mental illness.

> Interestingly, families in which parents reported higher levels of depressive symptoms were more likely to receive both TANF and Food

> Stamps. While we do not know directionality of this relation, it is plausible that parents with depressive symptoms face more challenges in the world of work, which creates a need for public benefit use. However, it is also possible that the stress of needing and receiving these benefits takes a toll on adults' mental health. Families in which the parent reported fair or poor physical health were more likely to receive Food Stamps, which again may be a signal that families with greater need are receiving benefits." (p. 21-22)

As acknowledge above, the causal direction of this finding is unclear. But the researchers' speculation about possible explanations highlights an important direction for future research.

The conclusion of the study suggested that the government food assistance programme was operating more or less as intended, helping economically needy families.

> "This study has demonstrated that relatively few low income families […] receive the "safety net"' benefits that are targeted to them, [but] families with more health and economic hardships are most likely to receive benefits. (p.25)

Indeed, this finding of effectively targeted welfare provision is a robust result from the study, however it underplays the additional factors influencing government food aid use. Clearly, use of US government food aid is not equally distributed amongst the needy, and greater rural outreach and targeting of the food insecure for assistance is needed.

To What Degree Does Food Assistance Help Poor Households Acquire Enough Food? A Joint Examination of Public and Private Sources of Food Assistance

Beth Osborne Daponte, Amelia Haviland & Joseph B. Kadane

Research areas addressed:
- Impacts of food aid on household food security
- How people become food aid users
- Food aid users' journey through the food aid system
- Socio-economic implications for food aid users
- Different food aid models
- Socio-economic drivers behind certain models emerging over others

This US-based study evaluates the relative contributions of governmental and non-governmental food aid to addressing the food needs of low-income households in the state of Pennsylvania.

Methodology and Critical Assessment

This study employed a secondary data analysis of a sample of "405 households with incomes below 185% of the national poverty level living in Allegheny County, Pennsylvania. The survey over sampled food pantry users and included comparably poor nonusers residing in the same neighborhoods as food pantry users" (p. 72).

The survey data cover variables including:

> "The dynamics of household composition, household economics, participation in various social support programs, food assistance, and health. To the authors' knowledge, this is the *only* data set that includes detailed data on food pantry usage (including respondent estimates of the value of food obtained from food pantries) in addition

> to other forms of food assistance and household food expenditures. The data set is unique in providing respondent estimates of the value of food assistance received during the month from each possible source of food assistance (with the exception of school lunch/breakfast programs). It is this aspect of the data that allows us to assess and contrast the effectiveness of public and private food assistance". (p. 72-73)

The outcome measure used in this research captures a form of food security:

> This research also differs from most in how we assess the effectiveness of food assistance programs. Instead of measuring how much food assistance increases food expenditures or nutritional intake, we assess the food assistance's impact on a household acquiring enough resources to potentially meet the nutritional needs of its household members. To measure "enough to meet basic nutritional needs," we start with the U.S. Department of Agriculture's (hereafter, USDA) Thrifty Food Plan (hereafter, TFP). According to the USDA, "The TFP serves as a national standard for a nutritious diet at a minimal cost […]" (p. 65)

The above data are used to answer the following research questions:

> "1. To what extent do different forms and amounts of food assistance move a household closer to acquiring its Thrifty Food Plan [i.e. basic nutritionally satisfactory diet]?
> 2. Do the major forms of food assistance differentially impact the probability of a household achieving at least its Thrifty Food Plan [i.e. basic nutritionally satisfactory diet]?" (p. 65)

Critical Assessment of Methodology

The research methodology employed in this study is largely robust, within the tight constraints of a regional data set in one county of one state in the United States. The

measures of household food security, while not comprehensive, do offer insights on a comparative basis between public and private food aid provision.

However, the validity of the 'Extended Thrifty Food Plan' as a measure of household food security is questionable, particular given that it relies on national average prices as an input but is applied at the level of individual states or regions that may have greater or lower prices than the average. Moreover, the focus on the amount of money spent, rather than what food precisely is obtained with that money, represents a thin and potentially misleading method of measuring household food security as an outcome variable.

Findings and Critical Assessment

One of the main study findings is that food aid does in fact result in greater total household resources being put towards securing nutritionally satisfactory food:

> *FINDING 1 (Impacts of food aid on household food security):* "Households that receive high food stamp benefits acquire on average nearly 20% more of their ETFP amount than similar households that do not receive any food assistance. Households that receive a moderate level in food stamps acquire 8% more of their ETFP amount". (p. 77)

The following finding highlights the role of ethnicity as a moderating variable between food aid provision and food security:

> *FINDING 2* (*Demographic factors in food aid and food security*) "With respect to the other independent variables included in the model, none but the variable that reflects whether the household is headed by an African- American show statistical significance. The results show that such households acquire 10% less of their ETFP than comparable households that do not have an African-American head". (p. 77)

The study also found lower levels of African-Americans achieve a minimally satisfactory food standard.

> *FINDING 3 (Demographic factors in food aid and food security)* "Households headed by an African-American are less likely to be above versus just reaching their household's ETFP amount." (p. 80)

Findings 2 and 3 above indicate that there is greater food assistance needed amongst African American household in this study. The larger point here is that minority ethnic groups may face more acute food security challenges than those of the dominant ethnicity.

Impacts of government food aid on household food security

The statistical analysis for this study revealed large effects on household food security for government-provided food aid programmes. Within the constraints of the study, these findings are robust.

> *FINDING 4.* "With respect to food assistance, households receiving a high level of FS [food stamps] (at least 75% of their ETFP amount) are three and a half times more likely than those receiving no food assistance to acquire rather than acquire less than their ETFP amount (calculated by e(log odds) = e 1.2555 = 3.51). Receipt of FS benefits below 75% of a household's ETFP does not have a statistically significant impact on whether a household acquires at least rather than less than its ETFP amount". (p. 80)

While the largest effects were found with food stamps, the other major government food aid programme (WIC) also showed a substantial effect on the food security measure.

> *FINDING 5.* "While participation in the WIC [government food aid] program is associated with a 78% increased probability of a household exceeding rather than just reaching its ETFP". (p. 80)

Unlike the government-provided food aid programmes (which have more consistent eligibility criteria and

FINDING 6 (Impacts of non-government food aid on household food security)

"Use of food pantries is not statistically significant [as a predictor of food security outcomes]". (p. 80)

In sum, the findings above indicate that intensive government food aid provision is strongly associated with households having the capacity to spend enough to achieve at least a minimally nutritious diet. In contrast, non-governmental food assistance does not affect this capacity within the context of the study's data.

Critical Assessment of Findings

This research is cross-sectional, making it difficult to definitively identify causal factors. It is likely that the results represent a mix of correlation and causal factors. Therefore, causal inferences stemming from this research must be interpreted with caution. Nevertheless, these results support the idea that government food aid programmes are far more effective than food pantries at alleviating household food insecurity on the present measure.

Conclusions

This study focused on whether on the level of expenditure by households above or below the level required to achieve a satisfactorily nutritious diet (ETFP). The findings showed that low levels of food aid (including those provided by food pantries) did not significantly alter the level of food expenditure (used as a proxy for food security in this study). The researchers attempted to explain this somewhat surprising result as follows:

"One reason may involve household budgeting decisions. Households receiving low amounts in FS may not supplement the benefit and incur enough out-of-pocket food expenses to make up for the difference between the household's ETFP and the household's [amount of food aid received]". (p. 80-81)

The main point of the study is that there is a clear impact from national food aid provision that is at an intensive level (at least 75% of ETFP). In addition the large impact of such government food aid, the research also showed that households in this benefit category did not over-consume (expenditure beyond the ETFP level). All of this argues strongly in favour of vigorous government food aid provision to combat household food insecurity.

> "Another way of considering the impact of food assistance is to examine the probability that the food safety net helps households acquire enough food to meet basic nutritional needs. This research shows that compared with households receiving no food assistance, similar households receiving a high amount in [food stamps] are three times more likely to acquire rather than be below their ETFP [indicating satisfactory food security]. No other form of food assistance has a statistically significant impact on a household reaching its ETFP rather than acquiring too little food. This finding suggests that when the FSP [food stamp programme] assures that a household receives at least 75% of its ETFP in the form of a restricted benefit, a household benefits in terms of food acquisitions. Further, households receiving [food stamps] are not more likely to be acquiring more than a household's ETFP than comparable households not using any food assistance". (p. 81)

The researchers acknowledge that this regional study would have to be replicated at a national level to be considered generalisable and a worthy basis for policy decision-making. Nevertheless, their articulation of the study's implications for government food aid is sound and well grounded in the data:

> "These results suggest that more emphasis should be placed on assuring that the [US government's food stamp programme] provides enough in benefits to affect the frequency and severity of household food shortages. This research clearly indicates that receiving a low amount in [food aid] benefits has no significant impact on household food acquisitions". (p. 81)

The other side of this coin is also articulated in the Discussion section of this paper, highlighting the limitations of private food aid provision:

> "This research indicates that while receiving private food assistance marginally increases food acquisitions, it has no impact on whether a household receives *enough* food. Private food assistance efforts do not meaningfully substitute for public efforts". (p. 82)

Given this conclusion in favour of government-administered food aid dovetails with other studies in the empirical literature on food aid, the above conclusions should be given due consideration (despite the circumspect nature of this specific study).

The Shifting Pattern of Food Security Support: Food Stamp and Food Bank Usage in North Carolina

Maureen Berner and Kelley O'Brien

Research areas addressed:

- Relationship between government (food stamp) and private food aid programmes
- How do people become private food aid users (macro explanations)
- Emerging trends in the provision of food aid
- Benefits and drawbacks of different models of food aid (addressed in Conclusion)

This 2004 US-based study presents a secondary analysis of non-governmental food aid usage patterns, along with primary research on the views of emergency food providers (n = 193). Taking place in the central region of the state of North Carolina, the study examines the trajectories of government and non-governmental food aid. The rationale for the study centres on the steady expansion in the amount of food distributed by charities, while welfare and government food aid expenditure was undergoing a long-term decline.

Methodology and Critical Assessment

The research methods underpinning this paper involve two inter-related sets of data, summarised as follows:

> "This study examines that possibility, using data from nonprofit EFPs in central and eastern North Carolina from1995 to 2000. To better understand perceptions of frontline administrators, the quantitative analysis is supplemented with interviews of 135 EFP or food pantry directors in the same area". (p. 656)

The first data set focusing on providers' views is described further as follows:

> “To provide a more complete picture of potential causes of increased food bank usage, we surveyed directors of nonprofit EFPs on their impressions and explanations of trends in their provision of emergency food. (p. 660) […] The telephone survey asked respondents if they had noted an increase in clientele since July 1995 and what explanations they had for any increases. […] Agencies were asked to provide the interviewer with numbers of clients served for each year since 1995. Although some agencies were able to provide this information, most could not”. (p. 661)

It is noteworthy from a methodological standpoint that these respondents were quite prepared to speculate about the causal factors underpinning trends in food aid usage.

> “Respondents were able to discuss general trends since 1995 of increase, decrease, or no change for all clients, as well as changes in the subpopulations their agencies serve, including families, Latinos, and single men. It is important to note that interviewers did not give a list of reasons for trends from which respondents could choose. Respondents provided answers based on a wide range of experiences and perceptions”. (p. 661)

The methods described above can be expected to reveal valid evidence on the perceptions of food aid providers. These perceptions were then tested using direct secondary analysis of empirical evidence.

> “Respondents were able to discuss general trends since 1995 of increase, decrease, or no change for all clients, as well as changes in the subpopulations their agencies serve, including families, Latinos, and single men. It is important to note that interviewers did not give a list of reasons for trends from which respondents could choose. Respondents provided answers based on a wide range of experiences and perceptions”. (p. 661)

The second dataset was provided by the Food Bank of North Carolina (NCFB), which acts as a "central food warehouse for EFPs [emergency food providers] in 34 counties in central and eastern North Carolina" (p. 657). This is one of major charitable food aid distribution centres operated by the largest national US food aid charity at this time. The dataset centres on trends in the total amounts (based on weight) of food withdrawn during the study period:

> "The NCFB distributes food to various types of agencies in its service area.
> To maintain consistency in data, this study includes the combined pounds of food withdrawn monthly from the full population of 193 nonprofit EFPs that have been NCFB member agencies in 30 central North Carolina counties from July 1995 to May 2000. Officials at the NCFB estimate that it serves the vast majority of established EFPs in the service area, if not the complete population". (p. 660)

The 193 emergency food providers mentioned above were then invited to participate in the study, forming the basis of the first dataset.

Critical Assessment

Clearly having the sample for the second data set in this study limited to a single North Carolina food aid distributer raises the risk that the results are not representative of the larger North Carolina context, much less the national context.

Another limitation is the use of 'amount of food withdrawn' as the variable to measure increased use of food aid. While this may be a useful indicator, it is also somewhat ambiguous as it could signify greater breadth of usage (more clients) or greater depth (more food provided to the same number of clients). This ambiguous measure was used because the participating charitable food agencies did not consistently capture information about numbers served.

Research Findings and Critical Assessment

The headline finding from the regression analyses examining predictors of the quantity of food aid usage is that there was a direct relationship between the introduction of welfare reforms tightening eligibility criteria for government food aid provision and a long-term increase in the amount of food aid provided through non-governmental agencies.

> "The number of welfare clients has a negative or inverse relationship with food bank drawdown. As the TANF[5] [welfare] client base erodes, food bank usage increases. If one were to interpret the coefficient literally, one would say that for every person leaving welfare, an additional two pounds of food were withdrawn monthly by EFPs". (p. 669)

The second major finding from the regression analyses is the finding of positive correlation between aggregate numbers of food stamp clients and aggregate food bank usage.

> "The number of FSCs has a positive relationship with food bank drawdown. As participation in food stamps went up, so did food bank drawdown. For every additional person receiving food stamps, an additional three pounds of food were withdrawn from the food banks monthly". (p. 667, 669)

This moderately robust (if localised) finding further supports the hypothesis that private food aid often acts as a stopgap measure when government food aid comes up short.

Provider Survey Findings

As private food aid provision becomes increasingly important, coordination between providers clearly becomes more important. As such, the following finding from the

[5] TANF - Temporary Assistance for Needy Families (governmental food aid provision).

verbally administered telephone survey with emergency food providers highlights a key problem:

> "To gauge interagency communication, respondents were asked to name other EFPs in their county. Many (19%) were unable to name any EFPs, and 44% could only name one or two. Although a few counties have only one or two EFPs, most counties have upwards of 10 EFPs. Yet, there appears to be little communication between these agencies". (p. 666)

This finding highlights a need for non-governmental food aid providers to better engage to ensure they are meeting food security needs in the most efficient manner possible. As food aid becomes an increasingly mixed public and private system, the need for effective co-ordination between government and non-governmental providers will also take on greater urgency.

The research also uncovered the fact that charitable food aid provision is unevenly distributed chronologically, with consistent peaks in demand:

> "Nearly half of respondents stated that the number of clients coming for emergency food assistance varies according to the time of year, with 25% of those noting an increase in winter months. Sixty two percent of respondents stated client service varies according to time of month, with 69% of those noting an increase at the end of the month. Nearly half of those identifying an increase at the end of the month attributed this increase to a lack of food stamps for clients". (p. 666)

The final point about charitable food aid usage spiking at the end of each month in response to shortfalls from government food aid provision is particularly striking and worthy of further exploration.

Methodological Finding and Critical Assessment

The researchers tested the explanations offered by administrators of emergency food provision in North Carolina against relevant data using secondary analysis.

> “Most respondents attributed any increase in clients to an increase in population in the NCFB’s service area. As will be seen below, this reason begs further investigation, because the time series analysis found no relationship between increased withdrawal of food from the NCF Band changes in population. Unemployment and underemployment were also common explanations of an increase in clients; however, again, the time series analysis indicated no relationship between unemployment and increased food withdrawal. Welfare reform was mentioned, but it was not a common response”. (p. 666)

This finding that non-governmental providers of emergency food aid cannot be relied upon for causal explanations of the macro-social and economic drivers for shifts in usage is important for guiding future research. While such providers are relatively easier to access, research on the factors driving food aid usage patterns should instead systematically collect data directly from food aid recipients and/or analyse existing social statistical data available through nationally representative surveys.

The authors of this study express surprise at the unreliability of the emergency food providers’ attributions of the macro-social and macro-economic drivers of reliance on private food assistance:

> “These results deserve attention. One would assume EFP directors would have the most accurate and firsthand knowledge of EFP utilization. In fact, they are correct in reporting perceived increased usage. However, their thoughts on potential causes do not fit with either reported descriptive data from the area or the model results. Why would this occur?”. (p. 669)

However, this conflicting result should not be surprising. Asking providers to speculate about the broader causes of private food aid need was a case of empirical over-reach, inviting these individuals to make claims about factors extending well beyond their immediate purview. Research with private food aid providers should

instead focus on the aspects of food aid with which they have direct contact, such as trends in the quantity of usage.

Conclusion

Overall, this study employs robust research methods, and its knowledge claims (detailed above) are well-justified by the analysis that was conducted. However, the regional focus of this study within a single US state makes its representativeness difficult to judge. Nevertheless, the study brings to light some important patterns in the relationship between different food aid types and the growing reliance on private provision of food aid. The authors highlight a few implications from this research:

> "The growing role of nonprofits in food security has certain implications. […] The burden for food security simply may be in the process of being shifted outward to nonprofit organizations and, indirectly, to the local governments that support them". (p. 670)

The identification of this broader shift towards private provision of food aid is supported by the research literature in which this study is embedded. This conclusion cannot be considered robust based only on the present study.

An interesting speculative line of discussion in the authors' conclusions identifies the potential ambivalence in a shift towards non-governmental food aid provision:

> "The shift to nonprofits may not be entirely negative. One might argue that nonprofits can better serve overall community goals. But by working through nonprofits, the government may also make it easier to abdicate its role in social service provision". (p. 670)

Finally, the authors identify an important direction for future research, wherein welfare and food aid clients are studied directly (not relying on third-party reporting on their behalf).

> "These results indicate the need to study the behavior of the EFP [emergency food provider] clients directly to see if, indeed, there is a

> fundamental shift occurring in the food security network in the United States and what that shift means for local governments, for social service nonprofits, and, most important, for people in need". (p. 670)

This and other studies highlight the gap in research knowledge about the factors contributing to household food insecurity amongst needy food aid clients and non-clients.

Use of Food Pantries and Food Stamps in Low-Income Households in the United States

Authors: Gandhi Raj Bhattarai, Patricia A. Duffy, and Jennie Raymond

Research areas addressed:

- The food aid journey
- Different models of food aid provision, and their benefits / drawbacks
- The socio-economic drivers behind certain food aid models emerging over others
- Emerging trends in food aid
- Comparison and interconnections between public and private food aid

Summary of Food Aid Intervention and Research

Using national US 'Current Population Survey' data from the 1999 survey, this study employed secondary statistical analyses of low income households to investigate trends in food pantry and food stamp participation in the previous decade. The backdrop for the study is described as follows:

> "Throughout the latter part of the 1990s, enrollment in the Food Stamp Program steadily declined (Wilde et al. 2000). At the same time, use by low-income families of private food assistance, primarily in the form of food pantries, appeared to grow precipitously (U.S. Conference of Mayors 1998, 1999, 2000)." (p. 276)

The primary objective of the study was to understand factors leading families to use (or not) food pantries and government food aid (i.e. food stamp) programmes. Additionally, this study sought to:

> "Contribute to […] knowledge about food assistance use by low-income families [and] assess the relationship between food stamp use and food pantry use." (p. 277)

Thus, the study focuses on two main forms of government and non-government food aid from the perspective of potential and actual food aid recipients.

Methodology and Critical Assessment

The 1999 Current Population Survey (CPS) was used to conduct a secondary analysis of the data for the months of March and April:

> "March [1999] CPS data contain information related to government program use. April data provide the food security supplement, which measures levels of household food insecurity and asks about the use of food pantries." (p. 281)

The base CPS data are described as follows:

> "CPS data are collected monthly on about 55,000 housing units, with observations on each individual in the household. A sample household is interviewed for four consecutive months, and then, after an 8-month rest period, for the same four months, a year later. Thus, about 75% of the sample is common from month to month. To obtain the CPS data, an 18-question survey was administered to each family reference person, regarding the behaviours and experiences of the household related to food security". (p. 281)

This is clearly an unusually in-depth form of data collection underpinning the larger CPS dataset. Using this dataset as the starting point, the present study selected a sub-sample for study.

> "A single observation per household (the ''household reference person'') in each month. Data for the two months were […] merged using an identification number created by concatenating state code, household ID, and number of people in households. To ensure matching across months, we looked only at households that did not

> change size over the time period […] result[ing] in a sample of 32,893 observations.

Ultimately the sample for the present study included "only households with [income] less than 125% poverty level, yielding a sample for secondary analysis of *n* = 3,010. Family data were collected during both the fall (1998) and spring (1999) waves of Kindergarten." (p. 282)

Therefore the focus of the present analysis was on low-income households per se. These households would generally qualify for both government and non-governmental food aid.

Critical Assessment of Methodology

This study faces a number of potential limitations, some of which are largely unavoidable (self-report of food aid usage levels) and some of which inhere in the particular approach of cross-sectional secondary data analysis.

Firstly, the authors acknowledge (then downplay) the substantial risk that the statistical analysis they have selected may not be entirely appropriate for this dataset:

> "Another concern is that the food security level of a household may be affected by participation in food assistance programs, leading to simultaneous equation bias. However, recent work by Gundersen and Oliveira (2001) indicates […] participation in the program has no significant impact on household food security status." (p. 288)

The authors acknowledge further limitations, which threaten the validity of the present analysis. In particular, treating food security status as an exogenous variable is questionable at best.

> "[…] the possible endogeneity of food security could be handled through the use of instruments. To provide consistent estimates, the instruments must be highly correlated with food security status but not

> with program participation decision. Research studies, however, have shown that the same household characteristics linked to program participation are also linked to food security […]. Thus, […] we treat food security status of the household as an exogenous variable." (p.288)

The authors also acknowledge the challenge of relying upon self-reports for programme participation data.

> "Data may be subject to measurement error if respondents under- or over-report their use of programs." (p. 289)

This risk of measurement error is particularly acute, given that this topic may be especially sensitive to social desirability and other biases.

Finally, as with most of the studies reviewed for this report, the present study presents a cross-sectional analysis that makes disentangling correlation and causation impossible. This limits the value of the research as it does not offer clear pathways for making improvements in the food aid system. The effects of this drawback in existing food aid literature can be seen in the authors' acknowledgement of the validity threat to their variable for food aid availability.

> "Although we have tried to control for transaction costs through use of variables describing conditions surrounding ease of access to the programs, these access variables are based on state level data and do not reflect the conditions in a particular county human resource office […] or the local conditions with respect to pantry hours or food availability." (p. 288)

Greater emphasis on empirical longitudinal evaluation research is needed within the comparative food aid literature in order to provide clearer answers for policymakers and practitioners in this field.

Findings and Critical Assessment

Some key research 'findings' are identified below, along with critical discussion as appropriate. Because these findings are based on robust data and sampling methods (albeit with the limitations described above), the findings below can be considered robust unless specified otherwise.

Relative Contribution of Government and Non-Governmental Food Aid

A headline finding from the present study (in terms of its bearing on this report) is that government and non-government food aid tend to be accessed together by the same households. Therefore, rather than food banks acting as an alternative to government food aid, they tend to act as a supplementary source of food to 'top up' what is provided through government aid.

> *FINDING*: "In each model, participation in the alternative food assistance programs was significant and positive at much less than the 1% level. Thus, these results do not support the notion that increased food pantry use could explain part of the decline in food stamp use among eligible households. Rather, from these results, it appears that both forms of food assistance are likely to be used in conjunction by food-insecure households" (p. 289) […] "food pantries are not viewed as an alternative to food stamps by the low-income population they serve." (p. 292-293)

Given this result is based on a nationally representative sample of low-income households in the US, this finding of complementarity rather than displacement of government food aid by private food assistance demands careful consideration.

Demographic and Food Security Statistics amongst Low-Income Households

The demographic characteristics of the selected low-income sub-sample are described below.

> *FINDING*: "Most observations come from metropolitan areas (73%), with a non-Hispanic (82%), white (70%), female (65%) listed as the

> household reference persons. Thirty-three percent of the households in the entire low-income sample owned a home. About one-half of the observations (51%) were single member households, followed by a single adult with children (26%) and then married couples with children (15%). The average household size of the sample population was 2.55 individuals per households. The average annual household income was $9,614. […] Most reference persons had a high school education or less. About 40% did not complete high school. About 51% graduated from high school, while less than 9% pursued postsecondary education". (p. 289)

These demographic details can be considered robust and offer some potentially useful insight into the population of low-income individuals who qualify for food aid support. The percentage breakdown in levels of food security are also potentially important, with less than half of these low income households being rated as less than absolutely food secure.

> *FINDING*: "About 46% [were] absolutely food secure without any indication that they worried about food availability. Another 19% were in a ''marginal food security'' class, which showed one or two positive responses to the questions about food insecurity. Twenty-three percent were food insecure without hunger, and over 11% were food insecure with some degree of hunger, either moderate (9%) or severe (2%)." (p. 289)

The spectrum of food (in)security within this category of low-income households found (above) is particularly significant in its implications for food security policy.

Factors Affecting the (Non-Use) of Government and Non-Governmental Food Aid

The statistical analysis identified the household characteristics most likely to be associated with participation in government food aid. The finding below describes the types of household most likely to be using food stamps:

> *FINDING*: “In the single-equation model for food stamps, household size, low education level, being single with children, receiving other forms of assistance (cash or noncash social welfare program benefits), and female sex of the reference person were found to positively affect the probability of participation. Higher income levels within the sample, home ownership, metropolitan residence, and higher food security status negatively affected the probability of food stamp participation, as did Hispanic origin. Additionally, the length of the food stamp application, which varies from state to state, negatively affected food stamp use.” (p. 289)

The findings above are broadly in line with what one would expect if government food aid was targeting those most in need. The exceptions are the negative correlations between government food aid use and (1) metropolitan residence, (2) Hispanic ethnic origin and (3) length of food stamp application. These characteristics are unrelated to need and should therefore be prioritised by policymakers and practitioners seeking to re-focus food aid on those most in need.

The participation patterns for non-governmental food aid in particular show a distinct demographic profile:

> *FINDING*: (*Non-government food aid use patterns*) “The pattern of food pantry participation suggests that families with children, and those who are severely food needy, are most likely to participate. We also observed that elderly residents in non-metro areas are more likely to use a food pantry, compared to their younger counterparts.” (p. 295)

This finding suggests that the elderly and severely food needy families are disproportionately reliant upon food banks.

Conclusions

The conclusions from this research are well-justified by the data and statistical analyses that were conducted. These US findings about aggregate patterns in food

aid use offer important insights and directions for future research to investigate in other countries.

> "The general household characteristics found to influence food pantry and food stamp use were similar to the characteristics reported by other researchers, with poorer, more food-insecure households more likely to use such assistance. […] We found that non-metropolitan, low-income households were generally more likely than metro households to use both types of food assistance programs. Single-parent households were more likely to use food stamps than other types of households but were not more likely than married-parent households to use food pantries." (p. 295)

The conclusion of the study highlights the very important finding that use of public and private food aid tends to be inclusive rather than exclusive:

> "Although some may view private food assistance as a plausible substitute for food stamps, and thus believe that the growth of food pantry services may partly explain the decrease in food stamp[s] […], our results indicate otherwise. Participating in one food assistance program increases the likelihood of participating in the other. Food insecurity appears to push motivated families to look for more than one possible source of food assistance." (p. 295)

This crucial finding was very well-supported by the evidence adduced in this study, as it emerged from different directions through distinct statistical analyses:

> "The significant correlation on the error terms for the bivariate probit specification indicates that the decisions to participate in food stamps and food pantries are interdependent." (p. 296)

Another important and robust finding with policy and practice relevance is that the bureaucratic barriers to obtaining government food aid can depress usage of such aid, even when it is severely needed.

> “An important finding, from a policy perspective, was that the length of the food stamp application had a negative effect on food stamp participation, giving credence to the hypotheses that red tape keeps some food-needy families from using this program. A uniform simplified questionnaire would be a policy remedy to this problem.” (p. 296)

Although it is not explored in this case, it would be reasonable to hypothesise that slow or inefficient government food aid application processes could put greater strain on private food aid to plug the gap between need and available provision.

Appendix 3: Case Study Research

1. Case study descriptions

Study 1: Community Care Initiative

For an example of food aid as community care a meals on wheels programme was visited. This initiative operates throughout a county in the East Midlands of England and incorporated both food production and distribution. Around 4,000 meals are produced by this initiative every day and as well as being distributed in the home county they are also sent to other locations for provision via similar community care distributers elsewhere. The meals produced go mostly to people in their individual homes but also to day centres, lunch clubs or to provide for special diets at care homes.

In terms of the distribution arm of the initiative (the key concern for this research) the meals are sent out either hot ready to eat, or frozen for people to re-heat themselves. Dietary needs are catered for (including diabetic, vegetarian, Halal, gluten free) as are other needs such as the provision of pureed and minced meals for those who have difficulty chewing or swallowing. Breakfast and tea time snack packs are also provided as are 'home from hospital hampers'. The organisation is looking to launch a shopping service.

Food is distributed seven days a week, although the weekend provision is particularly for people who aren't able to obtain food in any other way. The food is not free, but subsidised by the County Council and costs £3.95 for a main course and desert. For those unable to pay, this is funded through the personalisation agenda in social care.

In the current financial year, between 1st April 2012 and 25th February 2013 262,413 meals had been distributed across the County; with a weekly service of around 5-6,000 meals.

Food is provided to a range of people. In addition to more elderly people suffering from both physical and dementia-related health issues, the service also provides for younger people with a range of disabilities. The delivery of food itself is seen as an

important aspect of the provision, with policies stipulating that drivers must interact with the recipient and conduct what are referred to as ‘safe and well checks’ being conscious of the fact that for some people this interaction maybe one of the few they have in the week.

Study 2: Building-based initiatives

For an example of building-based food aid a Christian faith project in a city in the West Midlands of England was selected. Established 10 years ago, this centre currently operates a number of different social action projects and initiatives including food provision. Their food related activity involves a low-cost community café, breakfast served for local homeless and roofless people five days a week, an over-50s lunch club every other Monday and food parcels (also a partner in the local Trussell Trust foodbank, but they had been providing these prior to the foodbank opening).

People from a range of circumstances receive assistance or participate in this provision. In addition to the homeless and roofless who attend the breakfast, the over 50s lunch club tends to be frequented by people who may not be in poverty but are seeking friendship, often living on their own and benefit from the opportunity to socialise. Some individuals attend the over 50s club who previously attended the centre for other provision. The low cost café and other community services are used by wider groups, particularly those on low incomes but who are not homeless.

In terms of numbers served, around 16 people regularly attend the fortnightly over-50s lunch club and the breakfast drop-in has around 40 people every morning.

Study 3: Non-building based provision

As an example of a non-building based food aid programme a soup run was visited in a city in the Yorkshire and Humber region of England. The initiative has been running for over two years. Every Tuesday and Thursday evening of the year from 20:30 in the evening, volunteers visit a number of car parks in the city providing

soup, sandwiches, biscuits, tea and coffee for people who attend as well as clothing and sometimes sleeping bags.

The food is provided by those that organise the project with support from the wider church congregation. The clothing is donated by members of a partnership of 5 or 6 churches in the city.

The numbers of people who attend the soup run can vary: if they are particularly small numbers these tend to be the people who are sleeping on the streets; other times there will be more people and these will include people with some sort of accommodation. At the time of the research visit around 10 people were regularly attending the soup run for food but they have had as many as 30 people turn up. The users were mostly men aged between 18 and 40.

The people that visit the soup run tend to be homeless or roofless with very complex needs, often involving drug or alcohol addictions. Given the limited capacity of the project the volunteers aim simply to provide some food, support and a listening ear.

Study 4: Food bank

For a case study of a food bank initiative (defined as a project which provides parcels of food – usually long life – for people to take away, cook and eat at home) an independent local project was selected in a city in the Yorkshire and Humber region of England. This project has been running for 18 years. In addition to the food bank project the church also runs a ‘soup kitchen’ providing a hot lunch weekly for between 50-60 homeless people in the city. Other services are also provided including budgeting, menu and shopping advice. Whilst the food bank scheme originally linked to this homeless provision, more recently it is assisting more families with food parcels.

Each food parcel contains key long life food items including milk, tinned meat (x3) and vegetables (x1), tinned soup (x1), tinned beans or spaghetti (x1), cereal, tinned desert or fruit (x1), tea (10 bags) and biscuits, instant noodles and instant mash potato. Family parcels also contain pasta, rice and other items such as jam.

The food is obtained through the church congregation, supplemented by an online weekly shop done by the project manager using church funds. The project also obtains food from the local FareShare and has used another surplus redistribution project – His Church – in the past. A local food manufacturer also provides the food bank with surplus loaves of bread. Food from these other sources which do not fit into the categories included in the parcels, for example nut bars or pickled items, will be offered in addition to the food parcel to any recipients when they visit.

To obtain a food parcel a referral letter is required. This could be from any professional working in the community; the project does not work with any agencies in particular. 1 food parcel is provided a fortnight and there is no strict time limit; the project supports people for as much as 6 months.

The food bank provides parcels to feed 30 people every week. The majority of food parcels go to single people (aged anything from 16 upwards); however it does also help families which it has been doing so increasingly over recent months after engaging with local health centres, and particularly families with younger children who aren't at school. Reasons for families visiting the food bank included job loss, high bills and issues with budgeting. For single people reasons behind visits to the food bank seem to centre on low wages and finding work which covered all living expenses of housing, council tax, food and fuel. Problems with benefits, including delays and sanctions were also seen as a key reason for people seeking help from the food bank.

Study 5: International

The international case study was located in a large city in California, USA. The project is currently under development, based on the model of a longer-standing initiative in Washington DC. The Washington DC project is a redistribution initiative, dealing with 3000 pounds of surplus food a day and providing this, in the form of 'healthy meals', to partner agencies. In 2011 the Washington DC project reports that it recovered 816,000 pounds of food, and distributed approximately 1.86 million meals to its partner agencies.

The aims of the California project which formed the case study are:

- Collect millions of pounds of California's abundant fruits and vegetables;
- Prepare healthy meals to strengthen our marginalized neighbours;
- Train older adults returning from prison and youth aging out of foster care in culinary arts;
- Provide powerful volunteer and employment opportunities for local people;
- Embrace social enterprise businesses and generate our own income.

A further aim of the project is to 'support programmes which promote an inclusive and empower[ing] agenda for older people in America'.

Study 6: Other dimensions of food aid: food redistribution, cookery skills, and emergency food packs.

This case study was of a large scale initiative, based in a major city in Scotland. The charity works to find 'creative solutions to the contemporary problems faced by people on the margins of society' and has a range of programmes and services on offer. It was selected for the work undertaken which related to food aid, notably the range of relevant work it undertakes beyond direct provision – the redistribution of surplus food to project which in turn provided the food to users, the value placed by the project on building confidence and skills around cooking and eating, and a distinct approach to the provision of emergency food packs/parcels. This was seen to add value to the other cases which all looked explicitly at key features and ways of working across the typology of direct food aid provision. The study of this case also involved engaging with a partner project, a local food bank who receives surplus food from them.

The food aid elements, which formed the focus of this study, are one of a variety of food-related projects that the wider charity manages. They also run a community garden in the grounds of the city hospital, a food and catering waste recycling initiative, and a working organic farm which is home to a community of vulnerable young people.

2. City focus

The city chosen for the food bank and non-building based cases is located in the Yorkshire and Humber region of England. It was selected on the basis that very little is published about food aid activity in this city, and a key aim of the visit was to gain some insight into the level of such activity. In addition to the project visits which were undertaken other contacts were made and informal discussions were had around the local food aid landscape.

Insights into provision available

Discussions with research participants, other informal conversations and a web-based search indicate that there is a range of food aid provision in the city. Evening soup runs take place on Tuesdays – Fridays (inclusive); a drop-in centre for 'rough sleepers' is also open providing lunch and other services from Monday – Saturday (inclusive). Two food banks currently run in the city: the one studied which is open every week day and a Trussell Trust foodbank which is open several days in the week. Importantly, however, this is based on publically available information and the knowledge of the few people who were spoken to. It is likely that other initiatives may take place which are not captured here.

Co-ordination by food aid providers

There is some indication of people involved with food aid working together. The manager of the independent food bank (included here as a case study) was involved in setting up the relatively newly established Trussell Trust foodbank locally. The manager of the soup run also spoke about aspirations for working more closely with other church-based food aid providers in the city to engender a more co-ordinated response and comprehensive provision.

Engagement from policy makers

The visits and conversations indicated increasing engagement with issues of food poverty and food aid from local policy makers. In January 2013 a food poverty 'action planning day' was held, facilitated by the city council. Local Councillors and also Members of Parliaments are reportedly engaging with the food, poverty and food aid agenda.

3. Key findings: thematic analysis

Case study area of interest 1/ research question 2: Operational workings of different food aid types

The operational workings of the various food aid types are outlined in the description of the projects. One point of potential interest is the fact that the organisations in charge of three of the five UK case studies (the food bank and the building-based project) run more than one type of food assistance initiative. The church running the food bank also runs what they refer to as a 'soup kitchen' providing a hot lunch every Monday. The building-based project runs a number of food initiatives including an over 50's bi-weekly lunch club, breakfast service for homeless people and food parcel provision. Four of the five UK case studies were Christian faith-based initiatives (building-based, food bank, soup run) and the fourth (community care) was part of a local authority.

The process of the case study research highlights the considerable operational diversity between the different types of food aid initiatives this research project aspired to cover. This suggests that the typology may be a particularly helpful way of approaching a better understanding of food aid provision in the UK, assisting as it does with a distinct conceptualisation of different types of provision within this broad category.

Each case study project was asked a question about what they anticipated the future would hold for their project. Each response involved a continuation of the provision and in most instances some kind of expansion. The food bank manager talked about expanding the church's work, for example setting up a café and furniture store. The manager of the soup run talked about continuing the provision as well as putting increasing efforts into more co-ordinated church provision; the manager of the community care project said they would like to see national Meals on Wheels programme. The building-based project anticipated particular growth in the area of supporting families and others who aren't homeless but are living in poverty.

Area of interest 2/research question 1: Food aid user journeys through these projects

The case study research revealed that the ways in which users access food aid can vary across the distinct types of provision. The food bank was the only case where there was any sense of a procedure for accessing the provision (in this instance by obtaining a referral letter). The other cases appeared to operate an open policy; however each seemed to be premised on the notion that whilst in theory 'anyone' could access this provision, it would only be the very needy which would do so. In these instances to queue for soup in a car park, to have their meals delivered in the middle of the day or to access a homeless breakfast/ over 50s lunch club.

> 'The meal service is there for absolutely anybody but someone who is fit and well wouldn't want to wait in everyday for a driver so it sort of does filter its own users' [Community Care Manager]

In terms of a notion of a journey 'through' the projects, the community care case appears to offer an example where the notion of 'coming out' of the project may not always apply. The interview provided a sense that many users will receive this provision on an on-going basis. The recipients interviewed had both taken up 'meals on wheels' after a spell in hospital and had been using the service for several years (4 and 7 respectively). Both relied on it for their main meal of the day five days a week and would require a similar service if this wasn't available. In the interview with the manager there was, however, an emphasis placed on 'prevention', on the ways in which this provision was an enabler for a more healthy life in the longer term:

> 'we like to see it as a prevention as well so we don't just deliver to the very very vulnerable, we're trying to get to people to help prevent them getting to that vulnerable state where they're malnourished.' [Community Care manager]

For the food bank, users had to have a letter of referral from an agency who were working with them to 'get them out of the position they're in'.

> 'So anyone who's working with an agency to get them out of the position they're in at the moment we will support them with a food parcel.' [Food bank manager]

This organisational approach indicates more of a sense of journey through and out of the assistance, providing some level of assurance that the provision will be

temporary. Reasons for food bank referrals do seem to vary, including problems with benefits, low income, issues with housing, loss of a job or illness. Given the variety of provision by the building-based case study the ways in which people became users necessarily varied according to the type of assistance sought, with the over 50s club attended by single people who may be living alone and the breakfast sought by homeless or roofless individuals. The soup run was seen to be attended in the main by those who were homeless or roofless. As with the community care programme, a sense of journey 'through' these initiatives was harder to determine.

From the case study research one important dynamic of the food aid user 'journey' may be the other forms of support (be it formal or informal) offered by the providers and a sense of providing "food plus". This was referred to differently by different case studies. For example the soup run was seen as also providing an important source of stability and continuity in the lives of highly vulnerable people, and providing a time for them to have 'personal contact' and the opportunity to 'chat'.

> 'I think the greatest things that we provide is the continuity and the stability more so than anything, regardless of whether it's thick in snow we never ever miss, we are always there and they know that so the ones that are really homeless, that have nowhere to go know they can actually come and they can have someone to talk to as well as get the food and the drinks and I think it's quite an important part of their routine.' [soup run manager]

For the building-based project the morning breakfasts for homeless people was one of a number of different services individuals could access while they were there. The manager of the food bank also emphasised the importance of users feeling that 'somebody cared' and this was seen as equally important to the food provided. The meals on wheels programme differed slightly in that these other supports were formalised through what are referred to as 'safe and well checks' which are undertaken by a delivery driver every time someone is visited in their home.

> 'We would never ever leave a meal without having seen the service user, the customer, part of what our service is saying is that we delivered this meal and the person was as well as could be expected. If there is any cause for alarm at all … we will raise the alarm.' [Community Care manager]

Furthermore, in the case of the food bank and building-based project this is also extended to the other projects on offer by the organisers, such as the soup kitchen and budgeting advice run by the church managing the food bank and support for job advice, addiction support and healthcare on offer at the building-based centre. For each case reference was made to notions of signposting and/or information giving to users about other forms of support and help.

Ultimately, however, the user experience is extremely hard to determine from this small scale, light touch case study work. The three recipients that were interviewed (2 from the community care programme and 1 from the building-based initiative) provided highly useful insights but it is necessarily impossible to draw any robust findings from such a number. In each case the recipients drew benefits from the food assistance they were provided. The user from the building-based project had initially attended in 2002 as a result of issues around homelessness and an alcohol addiction following a divorce; at the time of the interview they were volunteering at the centre and living in a two bedroom house. They talked about how the project had had a 'great impact' on their life.

The two recipients of meals on wheels also spoke about their experiences. One recipient talked about some of the challenges, for example not liking some of the foods or the combination of foods in the meals and also spoke about how they would ultimately like to be able to provide for themselves. The other recipient spoke about the ways in which the provision helped them eat healthily and the fact that they didn't need to buy fruit and vegetables because all the meals came with them.

Apart from the community care recipient speaking about wishing they were able to provide for themselves, the research didn't capture other, more negative emotional aspects of food aid assistance. The food bank manager did, however allude to this to some extent:

> 'And lots of the families their agencies have had to come and pick up their food parcels for them. Because the families, they're embarrassed to accept help, they're embarrassed to admit that they can't feed their children.' [food bank manager]

Area of interest 3: how they may be working with other organisations/activities locally

Each of the case study projects appear to work with other agencies locally in some way. The food bank manager, for example, in recent months had been going out to health centres in the local area raising awareness of the project and highlighting the fact that members of staff can refer people to them. The building-based project highlighted that they work closely with the local council and police as well as with other local service providers such as drop-in centres or accommodation projects. The managers of the soup run referred to an on-going and developing relationship with other church-based providers of food assistance. The community care project also reported to work as an information provider for other services, for example providing recipients with information leaflets about the digital switchover, from trading standards and advertising local luncheon clubs; being part of a County Council the initiative also works as part of the social care framework.

Area of interest 4: To get a sense of the impact of these initiatives.

For many of the case studies there was an attitude of, whilst the food helped, the 'other' things the project provided – listening ear and other informal support – were actually key.

> 'I think it shows that somebody cares. More than the food that we're giving them what I want them to know is somebody cares about them, somebody listens to them, I want them to know that we're here to support them.'
>
> [Food Bank Manager]
>
> 'As well as the food and the clothing that we give them it's the chat and the personal contact that is really important.' [Soup run co-manager]

In a similar way the building-based provider stressed the wider impact and located the notion of impact within the centre's wider provision:

> ‘It’s a place where people can feel safe … It’s a place for people to come and do the basics, then we have support workers who work with the guys so we work with different agencies’ [Manager of building-based food aid provider]

The impacts of the community care food aid initiative where much more food focussed. The manager spoke about the role of meals on wheels provision as ‘preventative’ and how it helps people who otherwise would not be able to manage to shop, cook and eat:

> ‘It is a lifesaver for a lot of people. We have people who come on the meal service who previous to us providing they were surviving off crisps and biscuits.’ [Community Care Manager]

However, impacts were also seen to extend to family members and the wider community of those receiving meals on wheels:

> ‘It is very beneficial to family members … it’s taking pressure off carers, it’s taking pressure off family members, it reduces worry, it often enables family members to go out to work, it obviously helps people to remain independent in their own homes, it knocks onto the GPs because people who are lonely go to the doctors more, less hospital visits, people can be discharged earlier because there’s a package as soon as people are discharged we can be alerted and go in that day.’ [Community care manager]

Findings from case study 6: other dimensions of food aid.

Whilst findings relevant to each of the particular aspects of relevant work (emergency food packs, cookery classes and food redistribution) are presented below, in the first instance from the case study research it was clear that a central ethos ran through all aspects of food-aid related work. A notion of ‘hand up not hand out’ was seen to be key and more particularly that any food assistance which was facilitated by the project (through providing surplus to projects or emergency food packs) was accompanied by other support with what were seen to be more underlying issues such as addictions, problems with debt, or confidence in food skills.

‘if we just give the food without the serious help, then I think we’re failing them. It’s a bit like the third world thing about we can give people fish but if we give them a fishing rod and teach them to fish then they’ve got a bit of stability.’

As will been seen throughout the analysis below, this is a key theme and one which is also apparent in the work of the partner agency.

Surplus food redistribution

The food-aid related aspects of the work began in 2000. The decision to establish the surplus food redistribution arm of the initiative was based on a feasibility study which looked at whether food was going to landfill, whether that food was fit for purpose and nutritious, how much it would cost to run and what kind of volunteer and staff capacity would be required. The programme began by delivering one ton of food a week to 8 projects and has grown to redistribute 9 tonnes of food (from a range of food industry partners) every week to around 40 projects locally.

The approach to this distribution has a specific ethos behind it, driven by an understanding that the projects which receive food are coupling food provision with other forms of support (for example addiction support, or work with offending behaviour) for the vulnerable people they work with. An emphasis is placed on holistic assistance, that food is linked to wider support so that people don’t become reliant on food provision:

‘We’ve always felt it is a hand up and not a hand out, it’s about supporting projects that are supporting people to move on in life’

Whilst the project does redistribute a range of surplus food, including snacks of crisps and chocolate, an emphasis is placed on the value of redistributing fresh fruit, vegetables and meat to projects which may traditionally have had to rely on tinned or long-life food stuffs (for considerations of cost and more large scale catering provision). The manager talked about the value that projects placed on the fresh food redistributed:

‘And immediately people were saying, we’re seeing a difference in what people are eating because they’re being given fresh fruit, fresh veg, fresh meat, it was certainly on the journey to a balanced diet.’

This provision of fresh food was contrasted to some food parcel initiatives:

‘So food parcels if you’re going just for the packets of food and the tins it can seem very miserly but of course if you can add in those fresh ingredients then it makes a big difference, it really seems to boost the value of the individual.’

It is important to note that this food redistribution work is associated with a wider, national food redistribution charity working across the UK.

Cookery classes

The decision to deliver cookery classes was based on feedback from experiences of the redistributed food:

‘Very early on we identified that also the client group that we were supporting, had, there was quite a lack of skills in terms of cookery and that’s what brought us on to setting up cookery classes because it is about having the right food, but if you don’t know what to do with it you can still have people having pot noodles’

The project now runs around 300 cooking classes a year, involving small groups (of 4 people) and teaching them ‘what to do with the food’. The classes are attended by a diverse range of people including older people and those who may be vulnerably housed. These classes involve other key elements, including also advice on nutrition, food shopping and budgeting. A key aspect of the classes was seen by the manager to be the impact they have on building confidence in cooking:

‘for me it’s skilling people up, but it’s giving people the confidence to cook’

The programme does track the impact of the courses, including the ways in which they affect shopping and eating habits:

‘we do an exercise where we track the people at the beginning of the classes and then at the end we were finding that people’s vegetable and fruit consumption was increasing because of the classes’

There is on-going development of this aspect of the project’s work and from May accredited cookery classes will be on offer.

Emergency food packs

The project also provides bespoke ‘emergency food packs’. These tailored food packs are provided through partner agencies to individuals or families in need. The referral process involves ascertaining how many people the pack will have to feed, whether there are any special dietary needs and what cooking and storage facilities they have in their home:

‘So we’re reacting exactly to what a family needs not one size fits all’

The ethos surrounding the importance of additional support beyond the provision of the food aid, which is central to the wider food redistribution, can also be found in the approach taken with the emergency food packs.

‘Because we’re delivering that then to the agency that’s supporting that person, they know that that person needs that but they also know what other support they need along with that, so it’s seen that working in a holistic way […] very much this is a hand up and not a hand out and let’s look at why this has happened and what we can do to see it doesn’t happen again’

Repeat referrals occur ‘occasionally’ but the other form of support on offer by the referral agency, for example help with claiming benefits or onward referrals to other forms of assistance are seen to minimise this.

‘you do occasionally get somebody who comes back again but most people are getting it coupled with some help’

One instance where a repeat referral had been discussed was described by one of the managers:

‘I was saying to them, well have they been working through the problem they’ve gone through, have they moved forward in anyway or has the food just enabled them to live a few days longer without solving any issues? And in the end we agreed that if she phoned me back she felt they needed it, it was really necessary and useful … but if she thought they were just playing us around she would say no because it wasn’t going to provide any help and in the end I didn’t get that phone call so I have to assume that person wasn’t moving forward, they weren’t engaging with any support, so to provide them with food wasn’t helping with any of the underlying issues …’

Importantly, the different elements of provision are interlinked, and people who have been given emergency food parcels are able to be sent by their referrer to participate in the cookery classes.

Partner organisation: Basics Bank, City Mission.

The case study research also engaged one of the charity’s partners, the local City Mission, and in particular learned of their ‘Basics Bank’ initiatives. The Basics Bank project is an inter-church initiative which ‘is essentially a food bank’ providing food to people who are referred to them for 6 to 8 weeks (although they have fed people for as long as 13 weeks). Food is not provided to rough sleepers but many who are given support are vulnerably housed or in temporary accommodation. The referral process is a key aspect of the way the project works:

‘I’ve got a list of 180, 200 people from both statutory and non-statutory agencies and the idea is that when they’re working with a client to resolve an issue […] Then we’ll step in and offer support’

The manager reported that people were referred for a range of reasons including just having lost a job and difficulties with debt. Anyone who visits the Bank is required to bring their referral letter with them (if they do not have it with them, whilst the project may provide something on the first visit, no further food support will be provided until the letter is shown). Project workers or volunteers undertake an initial five minute assessment to ascertain the reasons behind the visit and some of the underlying issues:

‘we tend to go a bit deeper because food is not the issue, it’s what is the underlying cause, is it addiction, debt, benefits…’

It is then decided how long they will be supported for, depending on their situations, so for example helping someone who has had their benefits sanctioned for a few weeks during the sanction.

Between December 2011 and December 2012 the project had over 423 referrals of people who came to the project for an average of just over 5 weeks and the project gave away 33,000 kilos of food. The food given away is donated. In the year 2011-2012 four Basics Banks were in operation and since then a further three projects have opened with another one due to open soon. The Basics Bank network has grown from two to seven projects in two years.

The aims of the project are at a holistic approach to meeting needs:

‘what we’re looking to do is to meet the practical, emotional and spiritual needs of people … practical is the food, emotional is the befriending, and if you’re in a crisis people tend to ask questions of life, what is it all about? And if we hear that conversation, we’ll engage in that as well’.

The manager spoke about ‘food’ not being the ‘issue’, but rather the symptom of wider problems that people were coping with:

‘It’s not the food that is the issue, these guys are struggling with all kinds of things, just the business of life.’

The manager placed an emphasis on how the project was ‘not just a food bank’ and they way in which it engaged with other local initiatives and the referral agencies:

‘for a guy just to pitch up, take food and go away it’s not really solving the problem, it really in the sticking plaster and we need major surgery and it’s not about policy and politics really it’s about the network to help that guy out [of] the ground’

There was also a sense of the way in which the Basics Bank worked as an access point; once people had come through the food bank side they could continue getting support by coming to the centre for a cup of coffee or accessing other projects available at the church(es):

‘it tells you that it’s not about the food, that’s just the warning light on the indicator, what’s the real issue? So we deal with that practical, emotional and spiritual.’

The manager gave a number of examples of instances where the project had had positive feedback regarding the impact it had on recipients, including where it had provided food for a man so he could afford the bus fare to visit his terminally ill mother in the hospital, a suicidal individual, and a widower who had just lost his wife and didn’t know how to cook. A further instance was re-told of a couple who had visited the project, who reportedly said:

‘we were ashamed an embarrassed to come, you made us feel so welcome, we just want to thank you and can’t express what you’ve done means to us as a couple’.

In terms of future trajectory the manager referred to the potential for exponential growth, but also that the establishment of Basics Banks was reactive rather than proactive and the fact that projects ‘go where we’re invited to go’.

4. Points of reflection from the findings from studies (1-5)

From the findings presented above, there may be three particularly important elements for the research as a whole to reflect upon. Firstly, the case study phase has highlighted the operational diversity which is present across different food aid types. This extends to project aims and ways of working as well as the type of impact they perceive themselves having. These findings would indicate the importance of utilising a typology for ‘food aid’ and maintaining a nuanced interpretation of the distinct types of work included within any broader definitions of ‘food aid’.

A second point for reflection is the emphasis placed by case studies on the importance of the non-food aspects of their work. The notion of ‘food plus’ is apparent throughout the case study findings and is something that each case highlighted.

Thirdly, the findings from these case studies suggest that for some food aid initiatives the notion of journeys ‘through’ and ‘out’ of food aid may be problematic. Whilst the food bank had a fairly structured approach (requirement of a formal referral letter and an understanding that someone will be helped once every two

weeks for up to 6 months) a sense of motion through the other initiatives was much less clear.

Points of reflection from the findings from study 6.

The findings presented above indicate that a number of key themes are particularly important in shaping the way this case study and their partner organisations operate.

In the first instance there is an underlying ethos and understanding that food distributed by them must eventually be provided alongside support for other issues with which a food insecure individuals or households are struggling (for example debt, addiction or benefit sanctions). In this way these findings relate closely to those of the other case studies which revealed a sense of 'food plus', where the other support on offer by these direct providers – reflected here also in the provision of the partner agency – worked to provide other formal or informal support alongside the food assistance.

In this case there also appears to be a way in which this particular interpretation of 'food plus' brings it together explicitly with concerns for 'root causes' of food insecurity and addressing 'underlying issues'. It seems that this is sought to be realised in particular through the building of relationships only with agencies who are 'coupling food provision with other forms of support'.

As with some of the other case studies, in terms of broader outcomes and informal support both this case study and the partner food bank alluded to having holistic approaches, conceptualised as working towards a whole range of issues including emotional and spiritual support and building the confidence of users. The idea of the provision of food as an access point also came through in these findings that food provision can lead to attendance in cookery classes which build skills or provide more job-focussed training, or that receipt of food aid then leads on to active participation in other projects or initiatives on offer at the church.

In the case of both the provision of emergency food boxes by the case study organisation and through the food bank provision of the project partner, there were clear senses of process. In both cases formal referrals had to be made and an

emphasis was placed on the work of the referral agency to be helping the household or individual to address other, wider issues. In the similar way there was also a reasonably clear sense that the provision was temporary; in the case of the emergency food boxes it was reported that repeat packs were only requested on occasion and the food bank worked on the general principle of providing assistance for up to 8 weeks. As with the food bank case study then, in these instances of emergency provision there was a sense for process through and out of food aid for the users.

As part of the interviews wider commentary and critique was offered by interviewees, who reflected on other methods of food aid provision and the growth of food aid more generally. The Head of Enterprise at the case study organisation talked about the importance of evidencing need for food aid provision and maintaining a focus on wider solutions.

‘I am really concerned when I hear organisations say we are going to start a food bank in every city […] are you doing an exercise to see if the need is there in that area?’

‘we should be working for that project not to exist, so if this project closes in three years because there isn’t a need that to me is success’

The manager of the partner food bank organisation also talked about the importance of relationships between food bank providers as more projects set up in proximity to each other.

‘so when it comes to food banks, if you’ve got multiple food banks working in any area what will happen is these guys will come to one and get some food – enough for a week – they’ll then visit another one, maybe on Friday which they will not eat and they will trade. […] And my question to a different food bank working in an area I was – how are we going to make sure this isn’t going to happen? And the answer I got was, our internal systems are robust. I know that but I’m talking about your external systems … and they’re not interested and that’s the problem’

This quote provides an interesting insight into the question of ‘abusing the system’ in areas with multiple food bank provision. However it does so in the context of other research findings, that households in food insecurity who turn to food aid are likely to

seek out as much assistance as they can obtain and also findings from the food bank case study, whose manager said, when asked if they minded people getting food from both them at the other food bank in the area said:

‘Not in the least; if I was hungry I would do anything I could to get food so I don’t mind, I’d rather give extra than miss them out.’

The themes which emerge from this case study, which looks at other dimensions to food aid, therefore complement and further the themes identified in the cases of direct food aid providers. The findings around formal support in addition to food provision and the way in which this could be seen to bring together notions of ‘food plus’ and ‘addressing root causes’ is particularly insightful for the research.

Appendix 4: Research questions evidence base

Questions (abridged)	Evidence Base (Y/N)
Question 1	
How do people become food aid users, what is their journey through the food aid system and what are the socio-economic implications for these individuals?	
Q1 (i) How are people being referred to or finding out about food aid?	Y
Q1 (ii) Is it possible to define broad categories of food aid users, which reflects the circumstances which lead to the use of food aid?	N
Q1 (iii) Do any patterns emerge regarding how different household types fit into the broad categories of food aid users?	N
Q1 (iv) Are some combinations of household types and food aid user categories more cause for concern than others – e.g. families with children – due to longer term negative impacts on the children?	N
Q1 (v) For the different categories of food aid users, what are the recent trends or factors triggering food aid use?	N
Q1 (vi) Are there any trends in the types of food aid provision accessed by the different segments? Is one group more likely to access food banks for instance?	N
Q1 (vii) What are the outcomes for individuals in the food aid system and what evidence is there about the range of factors that affect this outcome?	Y
Q1 (viii) What other socio-economic implications are there for individuals who use food aid?	N
Q1 (ix) Is there any evidence about the impact of food aid provision on the wider community?	N
Q1 (x) What role, if any, can or do food aid providers play in reducing the number of people seeking food aid? This could be in terms of support that helps individuals seek further help for example.	Y
Q1 (xi) What can we learn about trends in food aid users from other countries?	Y
Question 2	
What are the current trends in provision of food aid, what are the different models available and what are the socio-economic drivers behind certain models emerging over others?	
Q2 (xii) What are the different types of food aid provision in the UK and in other countries? A mapping exercise to reveal trends in the evolution of food aid provision in the UK and abroad.	Y
Q2 (xiii) What can we learn about the recent (up to 10 years) developments in food aid provision in the UK?	N
Q2 (xiv) What kind of aid is growing/static/in decline and what are the socio economic drivers for these changes?	N
Q2 (xv) Linked to above, are there any clear drivers of peaks or increases in particular	Y

food aid activities and how do these drivers interlink?	
Q2 (xvi)	N
How will trends in food aid provision impact on how individuals respond to poverty, such as; reduction in income, personal financial crisis or rising food prices?	
Q2 (xvii)	Y
How will trends in food aid provision influence the development and effectiveness of future types of interventions?	
Question 3	
Reflecting on the analysis from questions 1 and 2 and drawing on evidence from other countries, what are the benefits and drawbacks of different models of food aid provision in the UK?	
Q3 (xviii)	Y
Who are the different types of interventions delivered by and at what level (national, regional, local) and how do they link together if at all?	
Q3 (xix)	N
What are the wide ranging impacts of interventions?	
Q3 (xx)	Y
To what extent can we draw lessons from other countries to apply to the UK?	
Q3 (xxi)	N
Drawing on wider evidence, how, when and where are food aid initiatives likely to be both effective and resilient in terms of: providing effective support to those in need; being part of approaches to deliver change in the numbers seeking food aid?	

Commentary

For sub-questions relating to food aid users the lack of a comprehensive data set detailing food aid uptake in the UK, or any pre-existing representative research of this kind, has meant that it has not been possible to present findings relating to the notion of categorising food aid users (1.ii – 1.vi). Similarly, given the lack of UK evidence domestic experiences of food aid outcomes (1.vii – 1.ix) are difficult to quantify. Having said this, findings relating to reasons for food aid uptake, the relationship to household food insecurity and food security outcomes which are relevant to these questions have been presented, drawing on the REA and other sources.

The research has been able to speak to the remaining sub-questions, regarding what can be learned from trends in food aid from other countries and to an extent what role food aid providers can play in reducing the numbers seeking assistance (in terms of additional support they provide). The writing up of the case study research will also provide insights into how people are being referred to food aid (1.i).

Similar challenges relating to a lack of pre-existing evidence and data were faced in responding to sub-questions regarding trends in food aid provision. The limited time and resources of the project meant that only a very small, light touch data collection

(mapping) exercise was possible. Whilst pre-existing data from key national organisations (Trussell Trust Foodbank Network and FareShare) and relevant research (Lambie-Mumford 2013) was engaged with, such data necessarily excludes the huge variety of independent and smaller scale initiatives which can be very difficult to capture. This is demonstrated by the fact that the mapping exercise only identified 60 independent projects. However, this report has been able to speak to some extent to many of the sub-questions relating to peaks in food aid uptake (Q2.xv), what types of food aid are available (Q2.xii) and some of the implications (particularly for food security policy interventions) of increasing growth in provision (Q2.xvii).

As outlined in the findings chapter, the research particularly struggled to engage with the third question, around benefits and drawbacks of different types of food aid provision. Whilst it has been unable to address questions relating to lessons about design, delivery, impact or effectiveness of interventions, it has to some extent discussed the question of who the interventions are delivered by. Importantly, however, this question did enable a discussion around key aspects such as the co-ordination of food aid initiatives, their vulnerability and the views of key experts from the UK.

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Appendix 6: Research Steering Groups

The steering group for the research included the Department for the Environment, Food and Rural Affairs, the Department for Work and Pensions, the Department of Health and FareShare. In addition to comments from the steering group this report underwent a cross-Whitehall review and academic peer-review.