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Children's Mobility in Ghana: An overview of methods and findings from the Ghana Research Study.

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Introduction

The papers in this special issue cover selected themes from a larger project on child mobility in Ghana, Malawi and South Africa. The themes are those which individual members of the Ghana research team identified as of particular interest and on which they have reflected, drawing on material collected and analysed by the team as a whole. In this paper we take a broader view, first presenting the background history and context of the three-country study in which the Ghana research is set (country selection, project design and methods), then focusing on the research process in Ghana. We follow this process from the preliminary selection of sites and refining of the project methods to suit local conditions, through to field collection of data in our two main research strands and its subsequent analysis.

The two research strands pursued in the study present different entry points through which we can explore children's mobility and access to services. One strand comprises relatively conventional academic research: the first part of this is qualitative (in-depth interviews with children, parents and other key informants; focus groups; life histories; accompanied walks), the second part consists of a large-scale quantitative questionnaire survey directed at children aged c. 9-18 years (N= 1000). Our second main research strand, less conventionally, is based in young people's own research, in which (following some preliminary training) they have selected their research methods and directly undertaken research with their peers. Findings from this second strand, which was undertaken at a relatively early stage in the project, by young people aged between about 11 and 20 years, also helped shape questions in the adult academic qualitative and quantitative elements.

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In the final sections of the paper some of the key findings emerging from the Ghana data are considered, with attention to the ways in which evidence from each of the research strands interrelates in building our conclusions. We also identify some practical interventions which might aid young people's mobility and service access in Ghana. Finally, we consider significant new questions which our mobilities research study has brought to the fore and reflect on the potential these offer for shaping a future research agenda.

Background history and context of the Ghana research study

The research reported in this special issue was conducted in Ghana as part of a larger ESRC/DFID-funded child mobility study in three countries, Ghana, Malawi and South Africa. The whole project, however, has its origins in a series of earlier research projects on mobility and transport conducted principally in southern Ghana from 1997 onwards. These focused at first on women, transport and market access, and included an action research project in which transport equipment was introduced into five villages to assist women farmer-traders and its impact on village life then assessed. The studies entailed detailed traffic surveys which first highlighted the need to look at transport issues associated with children's mobility, because children were found to be transporting substantial loads of water, wood and agricultural produce for their families. Previous transport studies in sub-Saharan Africa had tended to subsume children's transport under women's work but this research indicated the need to disaggregate mobility data not only by gender but also by age. When we introduced Intermediate Means of Transport into the villages to aid women in their transport of farm produce, it transpired that it was only women who had children available to help who took up the offer of transport equipment (made available on credit). This refocused our attention on children's mobility and we undertook a series of small studies on children's mobility and use of transport in the five villages and neighbouring small towns, with particular reference to access to health, education and work (Porter and Blaufuss 2003; Porter, Blaufuss and Acheampong 2007; Porter 2009; Porter, Abane, Blaufuss and Acheampong 2011).

Our literature searches during this early phase indicated how little work had been conducted on child mobility and encouraged us to plan a larger study across a number of African countries. We had conceived of a conventional academic study but at this point were put in contact with an Indian NGO which works on child labour issues and has developed experience of working with children as researchers on their own account. This led to our piloting a child-centred study in India, Ghana and South Africa in which young researchers were given some basic training in suitable research methods and simple analytical techniques for

exploring mobility, with assistance from the Indian NGO, and then made small studies of children's transport and mobility issues in the neighbourhood (Porter and Abane 2008). In Ghana the work was conducted by 12 young researchers aged 11-19 years, close to Cape Coast, with assistance from then Masters' students in the Geography Department at the university, some of whom are contributors to this special issue. We were impressed by the output from this pilot study, in terms of the quality of understanding of young people's mobility issues it produced.

Having completed the small child-centred pilot studies and developed some understanding of the scale of children's mobility and transport challenges in small areas of southern Ghana and Eastern Cape South Africa, we proceeded to plan a larger-scale children's transport and mobility study in Africa. Our concern now was to make policy makers aware of the scale of children's mobility constraints in accessing education, health and other services and the likely level of demand for regional and national-level interventions: we needed a substantial and spatially extensive basic data to support this. Consequently, we planned a programme of research which would enable us to build a comparative database covering diverse agro-ecological, cultural and socio-economic areas.

We decided on three contrasting countries for the research: Ghana and South Africa (where we had undertaken the child-centred pilots), plus Malawi, one of Africa's poorest countries. Within each country we planned to work across at least two distinctive agro-ecological zones: in Ghana these would be the coastal savanna zone around Cape Coast and the forest zone around Sunyani. Within each agro-ecological zone, we needed to work in four contrasting types of site to pick up the diversity of children's transport and mobility needs and constraints: urban (a poor high density neighbourhood), peri-urban, rural with services (at least a primary school) and remote rural without services: thus, 8 sites per country, 24 sites in total.

In order to achieve a strong understanding of children's mobility issues, a child-centred approach was essential. However, given the large scale of the project, we decided that it would be necessary to build a two-strand approach in each of our study countries: one strand in which child researchers uncovered key questions (along the lines of our previous pilot), and a second academic researcher strand which drew on these findings to explore issues more widely across the 8 country sites. Within the child researcher strand we recruited and trained 70 researchers across the three countries, all in-school children between 11 and 19 years when they started the study: 33 girls, 37 boys (see Porter, Hampshire, et al. 2010 for full details of this strand).

Within the second (academic research) strand, the research collaborators met in Malawi for an inception workshop and drafted guidelines for intensive qualitative research (in-depth interviews, life histories, focus group discussions, accompanied walks) with young people, their parents, teachers and other key informants such as health workers and transport operators. The checklists were based on four separate key themes: education, health, activities (work and play) and transport and migration. Each checklist subsequently went through a series of drafts in response to the findings of the young researcher teams and academic researcher pilot studies which took place in each country.

Following the completion of a majority of the qualitative research, the academic team designed a substantial questionnaire survey, to test key hypotheses from the qualitative work. This was administered to approximately 1,000 children aged approximately 9-18 years per country and entailed obtaining a sample of about 125 respondents per settlement (through accessing households along transects, and randomly selecting one child per household for interview). The questionnaire first involved collection of some basic information from a parent or guardian, followed by the questionnaire completed with children (within sight of the parent but out of ear-shot).

The research process in Ghana

In Ghana, following preliminary work (the inception meeting in Malawi, which included young Ghanaian researchers from the pilot child researcher study in addition to the academic research team; preliminary site selection; grey literature review etc.) the main research process commenced early in January 2007 with the field pilot in Abura Asebu Kwamankese district, north of Cape Coast (an area transitional between the two agro-ecological zones where we would focus subsequently). During the pilot the UK project leader (Gina Porter) and lead Ghana country collaborator (Albert Abane) were able to train the seven field research assistants, explore potential research questions with the RAs, field test the draft qualitative checklists and survey questionnaire (which had already been tested in Malawi), and devise a broad programme/pattern of research for application in each field site. Final site selections for the academic-strand field studies in Central Region and the Sunyani area were also made at this time. We had hoped to include young researchers in the pilot but they had yet to start their first training workshop, due to school schedules which had to take precedence.

During the pilot we made the decision that, although interviews would be conducted in the appropriate local language, checklists were best prepared in English because of the emphasis on flexibility – developing a conversation. Each research assistant had selected one of the four themes on which to focus;

these were themes on which they subsequently worked in the main research phase and for these special issue papers.

After the pilot, the research study proceeded to the main phase. Sixteen young researchers were trained by Cape Coast staff at two regional workshops, one in the coastal region, one in Sunyani (eight children per region; 5 boys, 3 girls in each): they then undertook their own field investigations and their findings (such as the harassment of girls by taxi drivers and the work burden many children face before school) fed into the academic researchers' questions. In the academic strand the main phase commenced with detailed qualitative field studies, followed by a brief characterisation review of each research site (population size, distribution, principal economic activities, ethnicity, road access and transport services, other characteristics), prior to the application of the questionnaire survey which commenced in October 2007 (at the time of the UK monitoring review, when the young researchers were also interviewed on a one-to-one basis by Gina Porter about their experiences of the research process). The survey data (approximately 125 questionnaires per site) was subsequently brought to UK for input into SPSS by Durham research assistants because of difficulties with intermittent electricity supply at Cape Coast. The SPSS data was then shared by the UK and Cape Coast research teams.

The final project workshop for collaborators from all three countries took place at Mankessim, Ghana, in October 2008, and included representatives of the young researcher teams from each country. Preparations for a booklet written by the young researchers' about their findings started at this meeting; it is available on our project website at www.dur.ac.uk/child.mobility Two thousand copies of the booklet were printed in Ghana and have been distributed to schools, ministries, communities, libraries and child-focused NGOs.

Subsequently, Kate Hampshire spent a term at Cape Coast during which she interviewed some of the young researchers once again about their experiences (which were still largely positive, see Hampshire et al. forthcoming) and ran writing workshops to help the project research assistants work on the data themes in which they had particular interest, resulting in this special issue.

Findings from the field research in Ghana

The three research elements pursued in the study– the young researchers' work, the academic qualitative studies and the academic survey research - present different entry points through which we can explore children's mobility and access to services.

The young researchers' studies took place over a number of weeks in school and in their home communities. They took place within the same regions as the adult academic research studies, but mostly in different sites. They usually worked with children of the same gender and age or those a little younger than themselves and followed diverse routes to understanding the mobility and access problems of their peers, from load weighing and accompanied walks to photography (using disposable cameras). Their investigations drew particular attention to the family contexts and associated workloads which help shape children's mobile lives. Their vignettes document not only the daily grind of domestic chores but also children's widespread required participation in family enterprises, whether trading, farming, fishing or sand-winning. The accounts of the adverse impacts this work has on children's lives - from load-carrying pain, exhaustion and fear of snakes when walking on the farm, to school punishments for late attendance, fear of getting lost on trading expeditions or meeting ghosts when going to collect water – not only have a particular poignancy but also provided a valuable base from which to develop questions that could be explored across diverse sites in the qualitative and survey research which followed.

The academic qualitative research also presents some very rich accounts of children's mobility and access constraints, again set within the broader context of their daily lives. We found the accompanied walks with children particularly valuable in this respect (in all three countries), because they allowed children to talk to adult researchers as they walked in companionable conversation, while avoiding embarrassing eye-to-eye contact and difficult silences. Interviews with parents and other key informants such as health workers and teachers and life histories with young adults in their 20s add to the texture of the work, offering an adult perspective which often confirms children's narratives but also contributes a longer view regarding impacts of current mobility constraints on future lives and life chances.

Our survey data, which covers over 300 variables, provides important complementary quantitative information on diverse mobility-related issues and the broader context within which they are set. With 1000 questionnaires per country, extensive statistical testing is also viable. This is especially important for convincing policy makers, for whom numbers are still often key to action, and for transport engineers who mostly have little regard for qualitative data. Very occasionally, however, the numbers seem to contradict our qualitative data, suggesting the need for a closer examination of the divergent patterns emerging. For instance, qualitative interviews in Ghana suggest that commercial portage is substantially more important than our survey data indicates (Porter et al. forthcoming). Hampshire et al. (forthcoming) show a similar pattern with

respect to fostering, which is highly significant for affected individuals (in terms of workloads and other negative outcomes reported in qualitative interviews) but seemingly insignificant insofar as statistical correlation between fostering and workload is concerned.

Some key findings from the project data for Ghana are as follows:

1. Access to education and livelihoods:

Mobility constraints interacting with heavy work demands place a particularly strong constraint on rural girls' education. Distance from school, when coupled with a heavy workload at home, affects school attendance, punctuality and performance: a long journey can be the tipping point in the decision to withdraw from formal education in a context where school attendance is a constant process of inter-generational negotiation. This has inevitable impact on livelihoods and life chances since girls' mobility constraints not only limit their educational achievement but also limit their potential to build the social networks needed to obtain work (Porter et al. in press). The richest evidence for these findings comes from qualitative interviews with children (including walking interviews) and their teachers but is supported by survey data such as that indicating the (high) proportion of children walking daily to school, required work tasks, reasons for lateness, reasons for withdrawal from education etc.

2. Surveillance, sexuality and inter-generational tensions

Inter-generational frictions around access to resources, youth sexuality, mobility and adult surveillance are widely in evidence in our qualitative data, though the way these play out varies with family and local context. In urban neighborhoods the greater potential for mobility and escape from surveillance can exacerbate inter-generational tensions. Although perhaps not as overt as in the South African study sites (Hampshire et al, 2011), the construction of girls' bodies as sexual objects makes their lives particularly difficult. However, harassment is not merely perpetrated by peers and in travel contexts: male teachers at both primary and secondary schools, for instance, seem to regard sexual access to young girl pupils as their right, as a few of our life histories with young women in their twenties attest (but is only rarely reported in interviews or in the survey question about reasons for leaving school; Porter et al, 2010 and in press).

3. Load-carrying

There has been remarkably little recognition of children's contributions to filling Africa's transport gap. Our qualitative data emphasizes the scale of children's

load carrying in Ghana and suggests the particularly important role of girls as load carriers. However, especially in Ghana's coastal savanna zone, the gender distinctions are considerably smaller than those we found in Malawi and also less than those in South Africa (where children's load-carrying overall is much more limited in scale): our survey data shows that both boys and girls carry a heavy water burden in Ghana. Fuelwood loads present an even heavier burden for children in remote rural sites. Perhaps unsurprisingly, at least 50% of both girls and boys in all our Ghana survey sites complained of pain associated with headloading (and 70% girls, 72% of boys for the country as a whole). This is higher than in comparable sites in our other study countries.

4. Access to health services and related issues

Physical access presents a major barrier to health service use for children. In Ghana over one-third reported that travel costs/difficulties had prevented them seeking healthcare in the preceding year. Other factors, such as high costs of treatment and perceived low quality of care also limit health service access but, like school attendance, physical access can be a tipping point. While rural children bear the brunt of these difficulties (reflected in extremely low rates of service use), urban-dwelling children fear negotiating busy roads/public transport when unwell (Hampshire et al. forthcoming).

5. Mobile phones and virtual mobility

Mobile phone use among young people expanded dramatically during the course of our project, primarily for social/family interaction: the survey data is particularly valuable in illustrating the scale of usage. In our urban sites in Ghana over 35% of children had used a phone in the previous week (mostly mobile phones). Boys make more use of phones than girls in sites with low phone usage (remote rural sites and rural sites with services) but girls make more use of phones than boys in (urban and peri-urban) sites with usage over 25%. Complex impacts reported in qualitative interviews include increased rural-urban linkages through virtual mobility for stretched families, but also some concerns regarding girls' acquisition of phones (Porter et al. forthcoming).

Review and prospect

The findings outlined above (discussed in detail in a number of publications), in conjunction with the ensuing papers, indicate the scale of young people's mobility constraints in Ghana and the diversity and complexity of the associated problems they face. In this concluding section we firstly review some suggestions for practical interventions which might improve conditions for the

children we interviewed and then reflect more broadly on our findings and their implications for shaping a future research agenda.

A number of suggestions can be made for follow-up activities to improve children's mobility and service access:

Walking buses: In contexts where children are threatened by traffic dangers or human attack en-route to school, the introduction of walking buses [travel groups utilising a register, supervised by adults and with 'bus stops' where children join the group] may be a valuable route to improved safety. There is no history of walking bus application outside Western contexts but we suggest the application has substantial potential to improve safety from attack or traffic [as opposed to a common Western focus on improving health/obesity reduction].

Mentoring for girl 'self-boarders': many girls from rural areas have to travel long distances to school each day or must board. Boarding facilities are often limited at secondary schools and absent at primary/JSS. Consequently many girls have to stay with relatives in town, or rent a room [termed self-boarding] in order to attend school. Girls who are self-boarding are vulnerable to advances from predatory men, especially when they have insufficient funds for personal upkeep. Child respondents and parents reported various cases of girls who become involved with boyfriends to help support them in town, but as a consequence return home pregnant and drop out of school. Although schools now officially allow girls to return to class after their babies are born, there are often insufficient family funds/support for the mother and child to make this feasible and they face stigma. One low-cost scheme to support girl self-boarders may be to introduce a mentoring scheme whereby older women [preferably those who have themselves been self-boarders, such as university staff in university towns] provide advice and emotional support within an organized structure of regular meetings. In Cape Coast this mentoring system could draw on university education department staff.

Teacher sensitization to lateness contexts: many children –especially girls – face punishment for late arrival at classes due to pre-school household work demands or travel distance constraints, especially from remote rural areas in the wet season. Teacher punishment – which is widespread and ranges from work tasks such as lavatory cleaning and compound sweeping to beatings and being excluded from class - encourages pupil truancy (because it may be safer not to attend that day if the child is late) and early drop-out. The teachers who provided support at our child researcher training workshops expressed considerable surprise about the extent of this problem for children and its repercussions and said this would change their own practices: with long periods

of urban residence they had inadequate appreciation of the constraints children face and the impact of punishments. One low-cost intervention we have suggested would be to design and provide teacher sensitization programmes in conjunction with the Ministry of Education for a number of teachers within the region. Schools would be helped to design and implement contextualized lateness policies. A preliminary workshop was held at the University of Cape Coast with the Education Directorate of Ghana's Central Region, plus head-teachers and other staff from both state and private schools in the Cape Coast area and organizations overseeing church-run schools. This resulted in a set of guidelines for addressing pupil lateness to be implemented by participating schools, drawing on and extending existing good practice.

Dedicated health counseling for young people: our data shows that it is extremely difficult for young people to obtain counseling and treatment at health centres unless they attend with an adult. Attendance with an adult can be particularly difficult in remote rural areas where health services are distantly located, or where adults are severely time-constrained by livelihood and other responsibilities. In Ghana the fact that the National Health Insurance Scheme only covers children whose parents are paid-up scheme members is an additional constraint. Children commonly resort to treatment on their own account simply by purchasing drugs (which may or may not be appropriate to their health problem) from drug and grocery stores (Hampshire et al, forthcoming). A set of guidelines could be developed, in conjunction with the Ministry of Health and a local health NGO for use by pharmacists and grocery stores when dealing with health-seeking children regarding where they can obtain appropriate advice and/or treatment for specific needs (including contraception) and illnesses. A training scheme using the guidelines would then be implemented with drug-store pharmacists and attendants, run by a local health NGO. This would need to be an accredited programme with the Ministry of Health and would require appropriate ethical approvals.

Traffic road safety training for out-of-school children working around busy roads: our data show that in-school children generally receive some basic road safety training (through their national curriculum requirements). Out-of-school children, however, receive no training yet are probably most in need of guidance. Traffic accident rates in Ghana are already high and set to rise as urbanization and vehicle numbers increase. Trading along busy roadsides is a common cause of traffic injury and death among young people. A road safety training programme is needed which is explicitly designed for work with illiterate young people. This could then be implemented with local NGOs specially focused on road-safety.

These are potential practical interventions, but our mobilities research with young people has also brought to the fore many new research questions: for instance, about the expanding role of mobile phones for young lives and their potential to substitute for physical mobility; the significance of fostering patterns for young people's livelihood trajectories and life chances; the growing dangers associated with children's independent pedestrian mobility as road traffic expands exponentially and how to address them; the potential to expand (safe) bicycle use among young people for improved access to school and work; and a broader question regarding the usage of qualitative and survey research findings in mixed-methods studies. However, there are two particular questions which merit priority in a future research agenda and which we hope to pursue.

Firstly, there is a clear need to explore the health impacts of headloading on children (and their mothers). Our research emphasises the pain which a large proportion of children report suffering as a direct consequence of pedestrian load carrying but we do not know its short and longer term impacts on health. The majority of information on health impacts of headloading (usually related to women and men) to date is anecdotal and comes as a by-product of transport-related research rather than studies made with/by health professionals. Research on bio-mechanical and reproductive health impacts is very limited and largely based on retrospective studies and, crucially, has not been adequately related to the socio-cultural context. The potential to reduce women's and children's pedestrian carrying burden may be limited, but, by addressing a series of significant knowledge gaps, intensive research in this field would enable appropriate health interventions and policy changes to minimise the risks involved.

Another important issue raised by our research is the intergenerational linkage in mobility patterns: in particular, the linkages between children's mobility and that of older carers. The relationality between children and older people's lives has been considered in general terms (e.g. Whyte and Whyte, 2004), but needs analysis in a mobility context (see Turner and Kwakye 1996 for a rare study re Accra, also Abane 2010). In Ghana 9% of the children we surveyed live with grandparents (usually a grandmother alone): a total of 15% of children live with someone other than their biological parent(s) in the coastal savanna and 20% in the forest zone. Many older carers whom we interviewed lack financial support from the child's parents and struggle to provide for children in their care. Poverty is a common characteristic of older people since government does not provide social security for the elderly (Apt 1997; van der Geest 1998; Aboderin 2004): family support for them is assumed. Ill-health and infirmity may introduce further problems, in a walking world where pedestrian transport dominates among all ages. The mobility and access constraints experienced by

older people may impact negatively not only on their own lives but on the educational, health and livelihood opportunities of children and young people in their care and thus reduce overall long-term potential for poverty eradication. However, the scale and nature of impact is unknown. We need an evidence base to elucidate the circumstances in which this is likely to occur (and what measures might be introduced to ameliorate it).

To conclude, the child mobility project in Ghana has proved extremely demanding in terms of the research process and the labour inputs entailed. However, it has also been an exciting and rewarding enterprise – hopefully, not just for the authors of the papers in this special issue, but ultimately for the young people who participated in the study and the wider constituency on whom our research is focused. Inevitably, perhaps, it has answered some questions but raised many more!

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