

GEOGRAPHIC MOBILITY AND SCHOOL ATTAINMENT - THE RESEARCH  
IMPLICATIONS FOR EDUCATIONAL POLICY AND PLANNING

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*Geographic mobility has always been perceived by a large number of parents and teachers as a major difficulty for the children of military families but more recently it has also come to be seen increasingly as a problem relevant to many other sections of the community. In particular children from single parent families, those with unemployed fathers as well as those with successful fathers in professional and managerial occupations are now thought to be at risk from the effects of regular changes of home and school. There have been a number of studies which have investigated these effects together with their educational implications but the results have been conflicting and confusing. Recently a series of major studies have shown that it may be especially dangerous to draw conclusions based on ex post facto data in this field and that the differences observed after a change of school may in many cases have existed before it. During 1982 and 1983 a major investigation of school mobility and its effects was carried out in Britain using data collected longitudinally by the National Child Development Study on the progress since 1958 of a cohort of 18,000 children. This paper will discuss the research methodology adopted to overcome the deficiencies of earlier mobility projects together with the investigation's extensive findings and their implications for policy and planning at all levels of the educational service.*

Background

There is a widely held view among teachers and parents that changes of home and school result in detrimental effects for children, both educationally and emotionally. The topic of geographic mobility and its effects produces a great deal of unsupported opinion most clearly shown by Mackay and Spicer (1975) who found that the majority of parents, when asked to comment on the effects of mobility on the total population of servicemen's children in Australia considered they would be harmful. The research evidence, however, was more consistent with the perception of the majority of the same group of parents that their own children were relatively unaffected by mobility.

A review of the literature and previous research by Blane (1983) reveals a confusing picture of conflicting findings and suggestions on the effects arising from mobility of children from both civilian and Service families. It has been suggested that geographic mobility will cause underachievement in all curriculum subjects, particularly mathematics. Other research has suggested that there are no effects arising from geographic mobility and some have found positive beneficial effects for attainment. Despite the conflicting findings of the early research there have been quite definitive statements in several authoritative publications highlighted by Lacey and Blane (1979). In Britain the Plowden Report (1967) referred to "the deleterious effect on the young pupil of changes of school" and in a curriculum paper published by Her Majesty's Inspectors (HMI's) (1977) it was stated that if a boy or girl aged between 5 and 16 moves from one place to another and a change of school is involved, then this may have quite serious implications for the pupil. Within the context of the "Great Debate" in education in Britain during the late 1970's the topic was raised as a statement in support of the need for a core curriculum and many statements were made as part of the debate implying that the educational attainment of geographically mobile children was severely impaired and that solid research evidence existed to substantiate this claim.

These statements were challenged by Blane (1978) who pointed out the lack of evidence in the Plowden Report to support this position, but it is a powerful viewpoint and has been influential in schools. More recently the Cockcroft Report (1982), again a very influential document, was specific in suggesting that among the reasons for low attainment in mathematics was lack of continuity, especially from the results of changing school.

### A Summary of the Literature

From an analysis of the very early literature and research, particularly that provided by Phillips (1978), it can be shown that the early perceptions of mobility and its effects on children during the nineteenth century were of frequent family migration having "disastrous effects" on children and family life. The incidence of mobility in today's modern society is as high as it was in the late nineteenth century, although it arises from different causes and within different sections of the community and the perceptions of parents, teachers and educational administrators are still as pessimistic as they were then.

The literature on geographic mobility reveals a large body of research and opinion attributing both causes and effects to a wide range of factors associated with child development and attainment. It has been suggested that children's personality and general emotional development may be affected through anxiety and stress giving rise to problems in adjustment both to their peers as well as their own self concept. In particular it has been surmised that attainment is lowered, both generally and in a number of specific curriculum areas, at various ages and stages of children's school careers. The causes are often attributed variously to recency, frequency or distance of move of home or school and at least one study, Metzger et al. (1979), has found that even changing classrooms had a significant deleterious effect on students' attainment. More recent research, however, has come to recognise the sometimes confusing, but certainly interrelated, factors such as socioeconomic variables and reasons for mobility, within which are embedded other variables. It is now recognised that factors such as family break up and single family situations, which in themselves are sufficient causes of stress in children, add to the complicated effects of mobility which often accompanies these crises.

As a number of researchers and writers have become more aware of the confused findings from mobility studies there has been increasing reference to the possibility of this having stemmed from poor and inadequate research design. Blane (1980) suggested that some of the more carefully carried out objective research has shown that geographic mobility may have very little direct effect on educational achievement and that most of the apparent effects found by some writers could be attributed to other causes which have remained comparatively undetected owing to poorly designed research. This view was also suggested by Turner and McClatchey (1978) who considered that confusion appears to arise mainly from studies lacking adequate control over all possible factors. Benson et al. (1979) showed in their study that while all the correlates were statistically significant, their practicality was questionable because they accounted for only 2 to 9 per cent of the shared variance. This implied that while mobility is a factor in children's achievement and adjustment, there are potentially many other factors involved. Blane (1983) demonstrated from a review of the literature that, although the findings have been inconsistent, the most sensible and clearest results have come from studies which have employed multivariate analyses. He recommended that future investigations should employ the same techniques using as many as possible of the interdependent variables identified from previous studies to establish the strength of the relationships between the ingredients of mobility and their possible consequences.

Some of the more recent studies, particularly those carried out in Sweden by Schaller, have revealed some new aspects and promising avenues of research on this topic. Schaller (1972) concluded that research on mobility and adjustment should concentrate effort on the three phases of mobility; the pre-mobile situation of the child, factors intimately related to moving and moving decisions, and the child's situation after moving. In a subsequent study Schaller (1976) tested his hypothesis that difference in academic performance between children who had never moved and children who had moved several times before, to a great extent stem from the fact that they performed differently prior to mobility. This was a key piece of research in this field, although it seems to have gone largely unnoticed by many subsequent studies, and Schaller's results served as a warning against drawing hasty conclusions from research based on *ex post facto* data. He considered that without controlling for this "before and after" factor it is impossible to decide how much of the difference after a move can be attributed to factors related to change of school and how much to differences between groups before the move.

Lacey and Blane (1979) also noted a similar possibility and suggested that the effects of mobility might be an exacerbation of differences that already existed prior to a move and recommended that future research should take account of the Schaller (1976) findings. Blane (1982) used the same argument to press for mobility research using data collected longitudinally rather than from cross-sectional analyses and reiterated the earlier arguments of Lacey and Blane (1979) and Blane (1979) that use should be made of the longitudinal data collected by the National Child Development Study since 1958. It was suggested that the use of this data would make possible a very careful study of the effects of geographic mobility along the lines suggested by Schaller (1976) but with a very large data base. This data it was suggested could also be used to carry out the multivariate analyses which had also been advocated.

A review of the literature also reveals that many of the situations affecting individual children may go unnoticed in statistical analyses and that future research should also focus on individual case studies to identify and assess those critical variables affecting the ease of adjusting to changing schools. This was suggested by Benson and Weigel (1980) and also Turner and McClatchey (1978) and would appear to have a great deal of merit, particularly among a large sample of children where the overall statistical associations and trends may not throw a great deal of light on particular problems. The distinction between children affected by the consequences of geographic mobility and those affected by learning and other disabilities or a combination of both is difficult to establish and the use of case studies is long overdue in studies of geographic mobility.

In summary it can be concluded from a number of studies throughout the world that there are many confounding factors which must be taken into account if the effects of changes of home and school are to be assessed realistically. Families move home for a variety of reasons and studies have shown that the two most mobile groups of children, in addition to those from military families, come from either single parent families or from two parent families with fathers in professional or managerial occupations. Recent studies have also revealed that, although particularly mobile children do have apparently lower attainment standards than their more static peers, these differences often existed before any school changes had been made for many of the children. Other investigations carried out with the most mobile children, those from military families, have shown that they should be treated as a special group if sensible conclusions are to be reached. It is clear from a survey of the research that any attempts to isolate the effects of changing school must take into account a whole range of academic as well as family and social circumstances, preferably before and after the move, and submit them to rigorous and careful analysis within a well structured research design.

#### A Recent Study

Having been involved in a number of major studies in this field the writer reached the conclusion that the effects of school mobility could only be adequately assessed using longitudinal data and as a result of recommendations by Lacey and Blane (1979) and Blane (1980) the British Department of Education and Science (DES) funded a major study in 1982 using the data contained in the National Child Development Study (NCDS). This cohort was started as a perinatal survey of all the children born in one week in March 1958 in England, Wales and Scotland numbering approximately 18,000. Since then there have been four major follow-up data collections on the physical, social and educational development of these children. Roughly 4,000 variables are now available for each case, and a number of books and papers have been written about these children which have been influential in shaping British educational, medical and social policies.

The DES funded investigation of "School Mobility and Attainment", was carried out in London by a team from the National Children's Bureau (1983), with the writer acting as research consultant, and has resulted in a 440 page report submitted to the DES in September 1983. The study used data from the NCDS collected when the children were aged 7, 11 and 16, together with their public examination results. The first aim of the study was to provide descriptive comparisons of children who had and had not changed school and two separate investigations were made of those who changed during the primary school period and those who changed secondary

schools. The different school mobility groups were compared in terms of their family and social characteristics and attainment at 11, before their secondary school experiences started. Background characteristics investigated included the father's social class and socio-economic status, ethnic group, the family situations, family size, their financial and housing situation, and the parents' aspirations for and interest in their child's education. Changes in social class, socio-economic status, home, region, family situation and home circumstances were also examined. The school mobility groups were then compared in terms of their school attainment at 16, their public examination performance and other characteristics, such as school attendance, aspirations, self-ratings and behaviour, which might be relevant to their educational achievement and a detailed account of these analyses are in the Report. Similar analyses of attainment at 11 of children who attended differing numbers of schools during their primary school years were also reported.

The descriptive picture of how mobile children differ from non-mobile children in background characteristics and in attainment, both at the end of and before the start of the period of schooling under consideration was of interest in itself. However, its main purpose was to provide some guide to the differences in background factors between mobile and non-mobile groups which would need to be allowed for in the subsequent multivariate analyses designed to isolate the independent effect of school mobility on various measures of attainment and behaviour. In brief this preliminary descriptive work seemed to confirm Schaller's (1976) findings that for the most part the attainment scores of the more mobile children were lower than those of the non-mobile children, but usually these differences existed before the period of schooling under consideration and before the changes of school had occurred. Not unexpectedly the descriptive analyses failed to provide a clear-cut answer to the question of whether mobility does adversely affect attainment and confirmed the need to carry out analyses using multivariate techniques to attempt to isolate the effects.

Three sets of multivariate analyses were carried out concerned with school progress between 7 and 11, 11 and 16+ and 7 and 16+ and the children's school behaviour at the ends of these periods. The dependent variables used to assess school progress included aspects of behaviour as well as reading and mathematics test scores together with public examination results, details of which can be found in the Report. Overall the findings of the multivariate analyses confirmed the results of other research in so far as this has found the effects of school mobility on children's attainment to be only small or marginal. The analyses also went some way towards showing why the results of previous research were conflicting and indecisive. The effects of school changes appear not only to be small but different at different stages of the child's school career, both for different school subjects and for different sub-groups of children.

During the descriptive study of mobile children it was found that those attending 4 or more schools during the secondary period often appeared not to show the same differences from non-mobile children as those attending 2 or 3 schools in this period. As a result the questionnaires belonging to this group of children were examined in depth and compared with similar sized groups of children attending 1 or 2 schools as well as those from a non-mobile group. This study of the case histories of children attending 4 or more schools between 11 and 16 revealed that the vast majority of them had a number of home, family and/or individual problems, often of a very severe nature. Even when the child's school change was, on the surface, attributable to family mobility because of the father's career or job changes, a number of other problems were often associated with the move and were often the reason for the family move. For the most part it appeared to be the family and other problems of the children attending four or more schools that were the causes of educational behaviour problems, rather than the actual changes of school. The case studies highlighted the fact that school changes took place because of a wide variety of circumstances and that family mobility was only one of these.

The findings are too detailed to describe in detail in this paper but in summary those on attainment suggest that school mobility is not a matter that needs to be a major educational concern. Nevertheless, they do suggest that more standardised school syllabuses would

probably be of benefit to mobile children. This would appear to be particularly the case in mathematics, especially in the primary school years when children are acquiring basic skills and concepts and again in the period prior to examinations, especially in mathematics and science subjects. The findings on behaviour were more consistent with slightly adverse effects increasing with mobility. For many mobile children, however, the analyses suggested that the major need would appear to be to tackle the problems - such as the financial problems of the 'one parent' family or the family in which the father is sick or unemployed - which lead to mobility, rather than the effects of school mobility *per se*.

#### Implications for Policy and Planning

Throughout this paper it has been suggested that not only have the research findings on geographic mobility been inconsistent and inconclusive but that those responsible for the education and welfare of children from mobile families have been quite firm in their resolve that geographic mobility must be harmful in all ways. Even when results from well constituted research projects have produced results which conclusively demonstrate that mobility may have only limited or quite specific results they have been virtually ignored. The educational provision for children from military families has demonstrated this most clearly with the military authorities in all the major nations allocating large sums of money to combat their perceived effects of mobility despite a number of well founded research projects which have demonstrated that this money could be more effectively spent on quite specific aspects of military families' problems rather than the all embracing attempt to counter possible educational effects for all of their children. The extensive survey carried out by Mackay and Spicer (1975) of Australian military families found that taking the population of servicemen's children as a total group, there was no evidence that geographic mobility and changes of school produced any lasting or consistent effects of either a beneficial or harmful kind on any of the aspects examined, including attainment in various curricula areas. Blane (1979) in a Defence Fellowship Study examined the problems of British military families and produced the same broad general conclusions. In both cases the military authorities were loathe to accept the findings which were not in support of existing policies which were based on pre-conceived notions and which had been operating for many years with important budgetary implications at stake.

Reference has also been made to the number of educational reports which have attributed a range of educational implications to geographic mobility and for which there was no evidence or research support. Many of these have been used to underwrite subsequent policy decisions and financial decisions based on very little substance. The proposals being floated by the Government of the day for a Core Curriculum in Britain as part of the "Great Debate" illustrate this point where an attempt was made to influence political decisions, which would have far reaching implications for education, based on statements which pre-supposed research evidence which did not exist. To be fair to the DES their (1980) Report on Boarding Education, in which they were examining their obligations under the 1944 Education Act "to the expediency of securing the provision of boarding accommodation....., for pupils for whom education as boarders is considered by their parents and by the authority to be desirable" did examine the question of geographic mobility. Having started with the premise that geographic mobility might be one of the considerations for which boarding accommodation should be provided, they modified their view in the light of evidence on the effects of mobility submitted by Blane (1980) and from which the recent project arose.

There is no doubt that the scepticism which has always accompanied findings in this field, particularly where they have failed to fit with pre-conceived notions, will be hard to dispel. This latest DES Report, with its wealth of detail and carefully designed longitudinal research framework, will it is hoped dispel many of the general myths surrounding this topic and concentrate the minds of the decision and policy makers on those aspects which are relevant and important for the improvement of educational opportunity for mobile children. At the time of writing this paper the Report had only just been presented to the DES and it is hoped by the time of the AARE 1983 Conference that their reactions will be known and in particular whether

the findings will be used to support compensatory measures which are a joint responsibility of social and welfare programmes as well as the purely educational. What is needed is a programme of assistance devised to ensure that geographically mobile children are at no disadvantage from the limited, but nevertheless serious results which can arise from the wider causes and effects of moving home and school. It is certain that parents, teachers and decision makers must be convinced of where the problems and solutions lie, which in general are interrelated with the causes rather than the results of moves. Problems arising from both aspects can be improved through careful planning and policies.

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