A study analyzed data from a series of five household socioeconomic surveys carried out in Kinshasa, Congo, over the period from 1955 to 1990. Results indicated that schooling and educational attainment of both females and males increased substantially over this period, and particularly so for young women. Research analysis provides a detailed overview of changes over time in young women's access to education, as well as multivariate analyses of determinants of access to schooling. Several key consequences of young women's increased educational attainment are also analyzed, including post-school employment activity, fertility, and children's schooling. (BT)
Determinants and Consequences of Young Women's Access to Education in Kinshasa, Congo

Final Report to the Spencer Foundation
Small Grants Program
September 1998

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Determinants and Consequences of Young Women's Access to Education in Kinshasa, Congo

Summary

Funding from the Spencer Foundation was used to provide partial support for research carried out during my 1997-98 sabbatical leave from the Pennsylvania State University. The research analyzed data from a series of five household socioeconomic surveys carried out in Kinshasa, Congo over the period from 1955 to 1990. Schooling and educational attainment of both females and males increased substantially over this period, and particularly so for young women. The research provides a detailed overview of changes over time in young women's access to education, as well as multivariate analyses of determinants of access to schooling. Several key consequences of young women's increased educational attainment are also analyzed, including post-school employment activity, fertility, and children's schooling.

Specific outputs of the research include a descriptive monograph of approximately 80 pages in length ("Women's Education, Employment, and Fertility in Kinshasa, Congo, 1955-1990: A Descriptive Overview"), a paper on "Ethnicity, Education, and Fertility Transition in Kinshasa, Congo" that will be presented at a Seminar on Reproductive Change in Sub-Saharan Africa sponsored by the International Union for the Scientific Study of Population, to be held in Nairobi, Kenya in early November, 1998, and a partially-completed book manuscript.
Focus of the research

The research carried out under this project seeks to provide both description and analysis of determinants and consequences of changes in young women's access to education in Kinshasa, Congo over the course of the second half of the 20th century. The initial focus was to document in detail changes in women's education over this period, and related changes in employment activity and fertility behavior.

Beyond this descriptive focus, we also sought to analyze these factors in a multivariate context. This entailed looking at gender differences in access to schooling and the role of other factors (such as economic well-being, parental educational attainment, age, ethnicity, etc.) in determining the school enrollment of youth. Similarly, multivariate analyses were used to examine consequences of women's schooling for employment activity and fertility behavior. Data from a series of five household socioeconomic surveys undertaken in Kinshasa over the period from 1955 to 1990 were analyzed extensively to address these research issues.

Findings

Schooling and educational attainment of both females and males increased substantially over the course of the period from 1955 to 1990, and particularly so for young women. In the mid-1950s, very few adult women in Kinshasa had ever been to school, although a fairly high proportion of 10-14 year-old girls were enrolled in school. By the mid-1970s, most adult women had been to school, although a few years of primary schooling was the norm. School enrollment rates of girls (and boys) were sharply higher than they had been 20 years earlier. By 1990, enrollment rates of girls showed continued increases, well over 90 percent of women had at least
some schooling, the median level corresponded to lower-level secondary education, and growing proportions of women had achieved upper-level secondary or university-level schooling.

Multivariate analyses of school enrollment document that both economic well-being of the household and parental educational attainment are important influences on children’s access to education. At the lowest levels of economic well-being (poorest of the poor), enrollment rates tend to be relatively low for both girls and boys, especially beyond age 15. Improvements in the household’s economic well-being appear to translate first into a greater likelihood of school enrollment for boys, and only later (i.e., with further increases in well-being) to greater enrollment of girls. Hence, as household economic well-being rises, gender differences in enrollment first widen before eventually narrowing. Greater parental schooling clearly contributes to a greater likelihood of children’s school enrollment.

Associated with the growth of women’s schooling and educational attainment have been increased labor force activity and (eventually) reduced fertility. Women’s participation in the market economy grew over time, and was substantially greater by 1990 than it had been in the 1950s. Some portion of this increase reflects the deterioration in Kinshasa’s economy that took place beginning in the mid-1970s, and may be seen by sharply increased participation in the informal sector of the economy. At the same time, women with upper-level secondary and university education show increased propensities to be involved in the modern sector of the economy; and indeed, these higher levels of schooling appear to be a prerequisite for access to modern-sector employment.

Fertility was very high in Kinshasa in 1955 (the estimated total fertility rate was 7.5 children per woman), and despite the massive exposure of women to schooling over the
subsequent 20 years fertility remained essentially unchanged as of 1975. In contrast, by 1990 the estimated total fertility rate had fallen by almost 25 percent to under 5.7. Our analyses document clearly that this decline in fertility is closely linked to the growth in the proportion of women who had been exposed to secondary education. In addition, we show that ethnicity -- which was a major correlate of fertility differences in the 1950s -- has been steadily waning in influence, while educational attainment has supplanted ethnicity as a key determinant of fertility differences.

These findings are important in several respects. With regard to Kinshasa specifically, the growing school enrollment rates and educational attainment levels persisting through a period of chronic economic difficulty (mid-1970s to 1990) bear witness to the strong demand for education on the part of Congolese parents. Further, the descriptive overview of changes in school enrollment, educational attainment, employment, and fertility provides an excellent baseline against which subsequent changes in these variables may be assessed. Beginning in the early 1990s, the Congo experienced an acute economic and political crisis from which it has not yet fully recovered. The wealth of historical data that we have pulled together and presented will permit one to address the consequences of this crisis for education, employment, and fertility in Kinshasa.

More broadly, the research findings for Kinshasa constitute a detailed case study of changing education and related variables in sub-Saharan Africa. The fact that greater parental schooling translates into higher school enrollment of children means that the secular increases that have taken place in schooling in many countries of sub-Saharan Africa will generate a distinct momentum in the form of continued increases in demand for schooling of children. Similarly,
the analyses of fertility decline and the key role of secondary education in contributing to that
decline provide insights into the emerging African fertility transition.

**Narrative and changes in plans**

As described in my initial proposal, the output of this research project was to be a book
exploring the issues discussed above. My plan was to first spend four months in Belgium, doing
data analyses and carrying out archival research. During the period from July through October
of 1997, I pursued these activities primarily at the Catholic University of Louvain in Belgium and
produced two documents. The first of these was a descriptive monograph of approximately 80
pages in length, entitled "Women's Education, Employment, and Fertility in Kinshasa, Congo,
1955-1990: A Descriptive Overview." My intention was that the monograph would eventually
serve as the basis for the beginning substantive chapters of the book. At the same time, I thought
it would be desirable to have a nontechnical stand-alone output that would be accessible to
interested scholars from a wide variety of disciplines.

In addition, while in Belgium I also wrote (actually, revised) a paper on "Ethnicity,
Education, and Fertility Transition in Kinshasa, Congo" that Dr. Basile Oleko Tambashe (my
collaborator) and I had earlier presented at the 1997 Annual Meeting of the Population Association
of America. This paper dealt with issues that I knew would be included in the book, but I chose
initially to revise the earlier paper as a stand-alone product. That revised paper will be presented
at a Seminar on Reproductive Change in Sub-Saharan Africa sponsored by the International Union
for the Scientific Study of Population (IUSSP), to be held in Nairobi, Kenya in early November,
1998.
Following a two-month hiatus (during which time I taught economics in Moscow, Russia so as to secure additional resources to make the remainder of the sabbatical feasible financially), I traveled to Nairobi, Kenya and spent January and February there, as a Visiting Scholar at the Population Council's African Population Policy Research Center. Once in Nairobi I began work on the book per se. This entailed drafting an outline of the book (tentatively entitled *Education, Employment, and Fertility: Kinshasa in Transition*) and beginning work on drafting various chapters. The outline spelled out 11 chapters, and I managed to complete first drafts of four of those chapters while in Nairobi.

I also initiated correspondence about our book with Professor Richard A. Easterlin of the University of Southern California. Professor Easterlin is a world-renowned demographer and economist who is editing a series in demography for the University of Chicago Press. He expressed interest in our book for possible inclusion in the series, and asked for a detailed outline of the book.

During the months of March and April, I was in Yaoundé, Cameroon as a visitor at the Institut de Formation et de Recherche Démographiques (IFORD). In conjunction with Dr. Tambashe, I prepared a detailed outline of the book for Professor Easterlin and sent it to him. He in turn replied with some questions and suggestions for additional material. Although the lack of Internet access while at IFORD limited my ability to pursue additional new research, I was able to produce rough drafts of four additional chapters.

At the beginning of May I traveled to Abidjan, Côte d'Ivoire, and spent the following three months there, working with Dr. Tambashe. We had additional correspondence with Professor Easterlin, and also finalized our paper for the Nairobi seminar in November. I drafted and
revised the drafts of the first two chapters of the book (based on the descriptive monograph I'd done in Belgium), and did work resulting in second drafts of five additional chapters. Dr. Tambashe provided me with detailed comments on the first four chapters of the book.

While in Abidjan I also attended a three-day seminar sponsored by a research network of Francophone African scholars examining children's access to schooling and family determinants of children's schooling in sub-Saharan Africa. The network operates under the auspices of the Union for African Population Studies. As an outgrowth of my seminar participation, I have been asked to co-author a chapter on the economic approach to examining children's schooling for a research volume that the network is preparing.

In early August I left Côte d'Ivoire and returned to Belgium, where I did some additional "mopping up" work pertaining to our research. I returned to the United States later in August to resume my regular duties at Penn State.

To summarize, then, during the grant period I produced a descriptive monograph and (in collaboration with Dr. Tambashe) a paper for the IUSSP seminar and a partially-completed book manuscript. Out of the 11 chapters in our initial outline, 10 have been drafted, 7 of these chapters have been through a revised draft, and 4 chapters have been extensively reviewed by us both and are close to completion. This represents a shortfall from my optimistic assumption in the initial proposal that the manuscript would be completed by now. In addition, we have some further work to do in response to Professor Easterlin's suggestions.

Our intention at this point is to work on the various chapters of the book over the course of the current academic year, and to finalize our manuscript next summer in Côte d'Ivoire. We will then send our manuscript to Professor Easterlin, who in turn will send it out for review.
Conclusion

I am mildly disappointed that I did not achieve the goal of completing the book manuscript during my sabbatical leave. However, I am quite pleased with what we have accomplished to date. Further, Professor Easterlin's enthusiasm for our project and the prospect of having our book published by the University of Chicago Press are most encouraging.
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Author(s): David Shapiro

Corporate Source: Publication Date: September 1998

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