

Where do I come from and where am I going? Socio-cultural capital and young women's educational transitions in South Africa.

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Since the demise of apartheid in South Africa, progress has been made in developing a democratic and equitable education system. One of the goals of this system has been to improve educational productivity (Badat 2010). To achieve this policy makers have pushed for wider access especially for the previously disadvantaged groups. Consequently gains in enrolment have been observed. However, there is growing recognition that mere physical access to an educational institution is a poor indicator of participation or equality (Modisaotsile 2012). This is borne out by the high dropout rates that seem to scourge the South African education system (Murray 2014). For instance, South Africa still exhibits low mean years of schooling (9.9 years, Unesco Institute of Statistics, UIS 2013) with a significant proportion of female students at each age cohort not making the transition from one educational level to another. The implication is that some learners remain out of school and by default are systematically and silently excluded (Lewin and Little 2011).

Education has been hypothesised to have a protective effect against poverty (Cutler 2015). Research evidence has also shown positive correlations between education and health outcomes as well as general wellbeing (Warner Malhotra and McGonagle 2012; Grout-Smith 2012, Cutler et al. 2015). Further, education gradients have also been associated with a range of outcomes. For instance, an estimated 66% of South Africans with no schooling were living in poverty in 2011, as compared to 60% of those with some primary education, and 55% who had completed primary, 44% some secondary and 23.6% who had completed matric (Stats SA 2014). Only 5 % (one in 20) of those with a tertiary education lived in poverty during the same period (Ibid). Cast in this way, education has the potential to move people out of poverty as there is a direct link between education attainment and wage earnings.

If education is this important, then an exploration of how it is distributed is certainly worth studying (Buis 2010). Sen (2003) citing HG Wells captures this well when he says “human history becomes more and more a race between education and catastrophe”. He further contends that “if we continue to leave vast sections of the people of the world outside the orbit of education, we make the world not only less just but also less secure.” Yet, the existing evidence continues to point to inequalities in educational attainment by gender, race

and socio-economic status (Warner et al. 2012; UNAIDS, The GAP Report 2014). The purpose of this study is to contribute to the body of knowledge on educational inequalities by exploring inequality across educational trajectories and the cumulative effect on the educational outcome. Further, the exploration focuses on the gendered nature of these inequalities.

Using three waves of the National Income Dynamics Study (South Africa), this study models the influence of social capital on the probability of making the following educational transitions: primary school completion, high school completion and post-secondary education completion. A retrospective methodology is adopted to disentangle the effect of events occurring in one trajectory on those in another. In particular, the study applies a *sequential logit model* to estimate transition probabilities of passing through key educational transitions.

The premise of a sequential logit model is that progression through the educational system occurs in a sequence of cumulative stages which are also time dependant (Mare 2011; Buis 2010). Further, progression to the subsequent stage is contingent upon the successful completion of the preceding stage. An individual has to be at the risk of passing a transition in order to be able to ‘make the decision’ of progressing. The purpose is to test the hypothesis (that is the effect of explanatory variables) at each of these stages (Inoue, di Gropelo, Taylor and Gresham 2015). In the context of this study, it is argued that an understanding of the influence of the explanatory variables on the educational transitions is essential in that it provides a finer grained and complete picture of how inequalities in opportunities to attain education come about (Inoue et al. 2015).

In its simplest form, a seqlogit model can be implemented by running separate logistic regressions for each transition (Buis 2010) as shown in equation 1.

$$\hat{p}_{1i} = \frac{\exp(\alpha_1 + \lambda_1 SES_i + \beta_1 x_i)}{1 + \exp(\alpha_1 + \lambda_1 SES_i + \beta_1 x_i)}$$

$$\hat{p}_{2i} = \frac{\exp(\alpha_2 + \lambda_2 SES_i + \beta_2 x_i)}{1 + \exp(\alpha_2 + \lambda_2 SES_i + \beta_2 x_i)} \text{ if } pass_{1i}=1$$

$$\hat{p}_{3i} = \frac{\exp(\alpha_3 + \lambda_3 SES_i + \beta_3 x_i)}{1 + \exp(\alpha_3 + \lambda_3 SES_i + \beta_3 x_i)} \text{ if } pass_{2i}=1$$

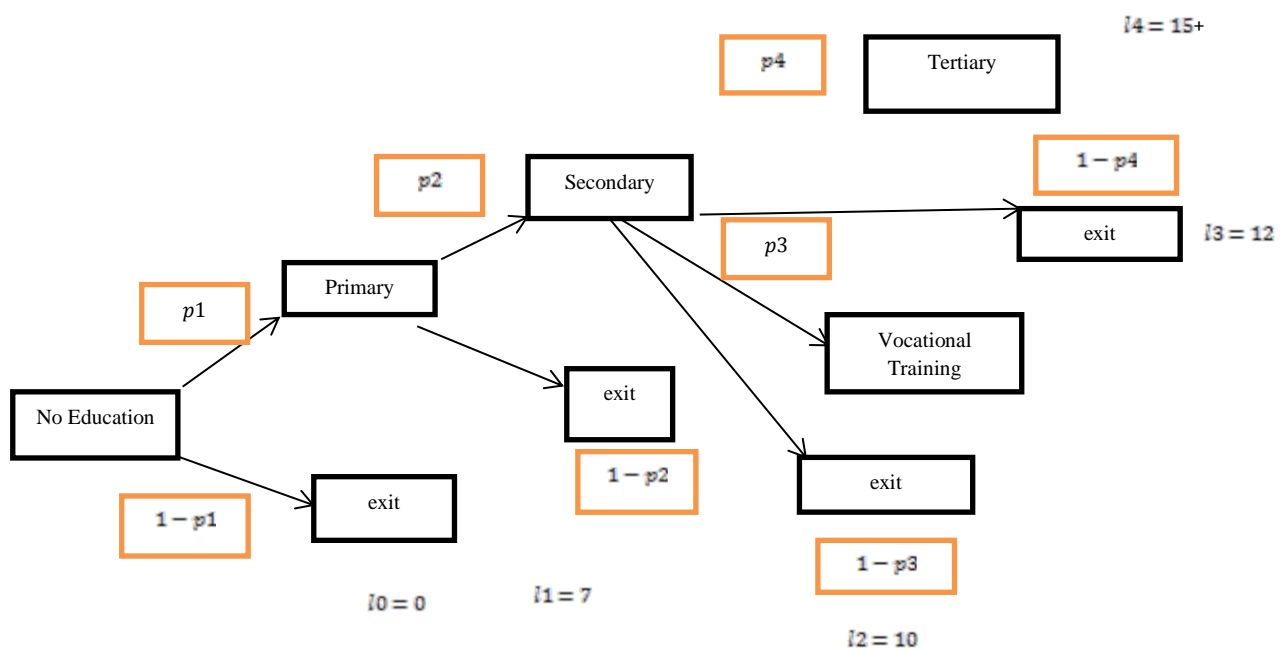
equation 1

Where:

p_{ki} is a measure of the probability of passing transition k and the inequality of opportunity (IOPP, SES, race, gender, and fertility) related to each transition is λ_k . The effect of the control x_i is β_k while the constant for each transition is α_k . The variable $pass_k - 1_i$ is an indicator of successfully passing a transition.

A schematic representation of the model in the South African Education system is shown in figure 1.

Figure 1: Visualisation of the model



There are advantages of using a non-linear model derived from the sequential logit model. First, such a model takes into account the relationship between inequalities of opportunity at each transition and the inequality of cumulative outcome. Second, it also takes into account the bounded nature of the depended variable and can therefore never lead to predictions below the lowest level of education achieved or the highest level achieved.

Key words: educational attainment, sequential logit, transition probabilities, South Africa

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