
Draft

Please do not cite or circulate.

An updated full paper is available from the authors.

The school-to-work transition in rural KwaZulu-Natal, South Africa.

Ben Pedley^{1*}, Victoria Hosegood^{1, 2}, Nuala McGrath^{1, 2}

¹*University of Southampton, United Kingdom*

²*Africa Centre for Health and Population Studies, University of KwaZulu-Natal, South Africa*

Introduction

The school-to-work transition has important socio-economic implications for young people and their subsequent life courses. In this study – using data from the Africa Centre Demographic Surveillance Area (DSA) – we aim to explore the school-to-work transition in rural KwaZulu-Natal, South Africa by following a cohort of 7808 individuals annually for up to five years after they left school between 2006 and 2010. An additional aim of this paper is to explore the relationships between the school-to-work transition and other demographic events that are associated with becoming an adult, and how these relationships differ by sex. These events are: departure from the parental residence, entry into a conjugal union, and becoming a parent.

Background

The pathways that lead to adulthood are context-specific and contested (see Arnett 2000, for example). The need for a greater understanding of the temporal sequence of the multiple events experienced by young people as they become adults has been established by life course research (Rindfuss *et al.* 1987, Elder 1998, Macmillan 2005). Goldberg (2013) identified several features by which the transition to adulthood in South Africa can be characterised. These features relate to education, unemployment, and family formation. Each feature is discussed in the following paragraphs.

Levels of educational attainment in South Africa are some of the best in sub-Saharan Africa and the differences between males and females are minimal (Anderson *et al.* 2001, Statistics South Africa 2005). Inequalities continue as a result of school fees and apartheid-era residential segregation, however (Lemon and Battersby-Lennard 2009, Lam *et al.* 2011). Racial

* Corresponding author: B.D.Pedley@soton.ac.uk.

Draft

Please do not cite or circulate.

An updated full paper is available from the authors.

differences remain in both the progress of children through education, and their attainment (Anderson *et al.* 2001, Lam *et al.* 2011).

Youth unemployment rates in South Africa are high, and vary between population groups. In 2001, for example, 29% of Coloured and 38% of African people aged between 20 and 24 years were unemployed, compared to 8% of White people (Statistics South Africa 2005). The relatively high secondary school enrolment of Africans can be explained, at least in part, by limited employment opportunities due to the spatial segregation that remains following apartheid (Lam *et al.* 2011).

Marriage rates in South Africa – especially for Africans – are low, and have been declining in recent decades (Hosegood *et al.* 2009, Posel *et al.* 2011). There is no evidence to suggest that non-marital cohabitation has increased to account for the declines in marriage (Hosegood *et al.* 2009, Posel *et al.* 2011). For those who do marry, the age at which they do so is late: the median age at first marriage of women in the Africa Centre Demographic Surveillance Area (DSA) was over 35 for all cohorts born between 1950 and 1979, and it is estimated to be higher for men (Marston *et al.* 2009).

Fertility among teenagers in South Africa is decreasing, but remains high (Branson *et al.* 2011). Data from the Africa Centre DSA, for example, show an overall decrease in teenage fertility rates from approximately 100 births per 1000 women in the early 1990s to 73 births per 1000 women in 2005 (Moultrie and McGrath 2007). Taking the late median age at first marriage into account, it can be concluded that the majority of these births are non-marital. Young South African women who become pregnant are allowed to return to school, and it is common for them to do so (Madhavan and Thomas 2005, Marteleto *et al.* 2008).

Data

The data used in this study come from the Africa Centre Demographic Information System (ACDIS). ACDIS began operation in 2000 and contains extensive longitudinal and multi-level socio-demographic data about the population of a 438 km² demographic surveillance area (DSA) in the Umkhanyakude District of northern KwaZulu-Natal, South Africa (Tanser *et al.* 2008). The population is largely Zulu-speaking. Prior to 2012, data were collected from the

Draft

Please do not cite or circulate.

An updated full paper is available from the authors.

90,000 members of the 11,000 households in the DSA twice annually (Tanser *et al.* 2008), which increased to three times in 2012 (Bennett *et al.* 2014).

Methodology

In order to account for the discrete time survey cycle, logistic (proportional odds) regression was chosen as the most appropriate modelling technique (Carlin *et al.* 1999, Kiely and Butterworth 2014). Survival analysis using logistic regression and time indicator variables allows for the investigation of how the probability of entering employment varies over time. The models specified in this study assess whether the markers of the transition to adulthood have a significant association with the probability of entering employment within the first five years after leaving secondary education.

Cross-sectional cohorts of individuals who reported no longer being in secondary education in 2006, 2007, 2009 or 2010 were followed until the survey date in 2011 – giving a maximum follow-up of five years. Survival analysis is used in order to allow censoring of those who did not enter employment or who returned to education during the observation period. The sample was restricted to individuals aged between 15 and 29 years.

Any household members who migrated out of the study area were censored at their first missing employment or education observation. The probability of migrating out of the study area was highest for those aged 5-19 years (Muhwava *et al.* 2010), and this is likely to have led to the underestimation of the overall probability of employment. By the survey date in 2011, approximately 43% of the 7808 individuals in the cohort had migrated (or otherwise had missing education and employment observations) prior to either becoming employed or returning to education, 7% had returned to education, 15% had entered employment, and 35% had completed follow up without migrating, returning to education, or entering employment.

Preliminary Conclusions

Overall, males were found to be almost twice as likely as females to enter employment. Mothers who were not in a partnership were the least likely group to enter employment, but no difference was evident between single and partnered non-parents of either sex. Not living in a household that was headed by the individual's parent or a grandparent was associated with an increased probability of entering employment. This relationship became insignificant when

Draft

Please do not cite or circulate.

An updated full paper is available from the authors.

the age upon leaving full-time education was included as a covariate, however, and was found not to vary between men and women.

Individuals who successfully completed at least Grade 12 were found to have a higher probability of entering employment, as were members of households with a higher socio-economic status. Leaving full-time education at older ages was associated with an increased probability of entering employment, and this relationship remains when the level of education attained is taken into account.

References

- Anderson, K.G., Case, A., and Lam, D., 2001. Causes and consequences of schooling outcomes in South Africa: evidence from survey data. *Social Dynamics*, 27 (1), 37–59.
- Arnett, J.J., 2000. Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55 (5), 469–480.
- Bennett, R., Hosegood, V., Newell, M.-L., and McGrath, N., 2014. An approach to measuring dispersed families with a particular focus on children ‘left behind’ by migrant parents: findings from rural South Africa. *Population, Space and Place*, psp.1843.
- Branson, N., Ardington, C., and Leibbrandt, M., 2011. Health outcomes for children born to teen mothers in Cape Town, South Africa. SALDRU working paper, no. 55.
- Carlin, J.B., Wolfe, R., Coffey, C., and Patton, G.C., 1999. Tutorial in biostatistics: analysis of binary outcomes in longitudinal studies using weighted estimating equations and discrete-time survival methods: prevalence and incidence of smoking in an adolescent cohort. *Statistics in Medicine*, 18, 2655–2679.
- Elder, G.H., 1998. The life course as developmental theory. *Child Development*, 69 (1), 1–12.
- Hosegood, V., McGrath, N., and Moultrie, T.A., 2009. Dispensing with marriage: marital and partnership trends in rural KwaZulu-Natal, South Africa 2000-2006. *Demographic Research*, 20, 279–312.
- Kiely, K.M. and Butterworth, P., 2014. Mental health selection and income support dynamics: multiple spell discrete-time survival analyses of welfare receipt. *Journal of Epidemiology and Community Health*, 68 (4), 349–355.
- Lam, D., Ardington, C., and Leibbrandt, M., 2011. Schooling as a lottery: racial differences in school advancement in urban South Africa. *Journal of Development Economics*, 95 (2), 121–136.
- Lemon, A. and Battersby-Lennard, J., 2009. Overcoming the apartheid legacy in Cape Town schools. *Geographical Review*, 99 (4), 517–538.
- Macmillan, R., 2005. The structure of the life course: classic issues and current controversies.

Draft

Please do not cite or circulate.

An updated full paper is available from the authors.

Advances in Life Course Research, 9, 3–24.

Madhavan, S. and Thomas, K., 2005. Early childbearing and schooling: new evidence from South Africa. *Comparative Education Review*, 49 (4), 452–467.

Marston, M., Slaymaker, E., Cremin, I., Floyd, S., McGrath, N., Kasamba, I., Lutalo, T., Nyirenda, M., Ndyanabo, A., Mupambireyi, Z., and Zaba, B., 2009. Trends in marriage and time spent single in sub-Saharan Africa: a comparative analysis of six population-based cohort studies and nine Demographic and Health Surveys. *Sexually Transmitted Infections*, 85 (Suppl I), i64–i71.

Marteletto, L., Lam, D., and Ranchhod, V., 2008. Sexual behavior, pregnancy, and schooling among young people in urban South Africa. *Studies in Family Planning*, 39 (4), 351–368.

Moultrie, T.A. and McGrath, N., 2007. Teenage fertility rates falling in South Africa. *South African Medical Journal*, 97 (6), 442–443.

Muhwava, W., Hosegood, V., Nyirenda, M., Herbst, K., and Newell, M.-L., 2010. Levels and determinants of population migration in rural KwaZulu-Natal, South Africa, 24 (3), 259–280.

Posel, D., Rudwick, S., and Casale, D., 2011. Is marriage a dying institution in South Africa? Exploring changes in marriage in the context of ilobolo payments. *Agenda: Empowering Women for Gender Equity*, 25 (1), 102–111.

Rindfuss, R.R., Gray Swicegood, C., and Rosenfeld, R.A., 1987. Disorder in the life course: how common and does it matter? *American Sociological Review*, 52 (6), 785–801.

Statistics South Africa, 2005. Stages in the life cycle of Southern Africans [online]. Available from: <http://www.statssa.gov.za/publications/C2001Stages/C2001Stages.pdf> [Accessed 27 Apr 2015].

Tanser, F., Hosegood, V., Bärnighausen, T., Herbst, K., Nyirenda, M., Muhwava, W., Newell, C., Viljoen, J., Mutevedzi, T., and Newell, M.-L., 2008. Cohort Profile: Africa Centre Demographic Information System (ACDIS) and population-based HIV survey. *International Journal of Epidemiology*, 37 (5), 956–962.