

## Racial Differences in Transition to Adulthood in South Africa

Abstract (max 200)

## Racial Differences in Transition to Adulthood in South Africa

I use Demographic and Health Survey data from South Africa to examine racial differences in young women's transitions to adulthood. Drawing on role sequencing theory, I examine racial differences in the sequencing and overlap of roles within the productive sphere of work and school and the reproductive sphere of union formation and parenting. Using multinomial logit regression, I assess the extent to which race is associated with being in single role states versus overlapping states controlling for selected individual and household level characteristics. The results suggest that role overlap is low for school-work and parent-school combinations within all race groups. However, substantial differences across race exist for school-work, parent-union and parent-school configurations even after controlling for socioeconomic status. Black women are more likely to experience role overlap of schooling and parenting whereas white girls are more likely to overlap on schooling and employment as well as having been in union and parenting. These results have important implications for the design of intervention programs in South Africa aimed at helping young people make the successful transition to adulthood.

There is a large and well established literature on transitions to adulthood in the US context (Hogan and Astone 1986, Modell et al. 1976, Goldscheider and Goldscheider 1993, Rindfuss et al. 1988, Elder 1986). In the developing world, the topic has only recently been garnering attention thanks, in part, to the publication of the National Research Council volume, *Growing Up Global* (2005). The NRC volume provides an overview of how global trends such as increase in access to education, delay in marriage, and declines in fertility and mortality may affect the transition to adulthood in the developing world (2005). Indeed, secondary school attendance in much of the developing world has increased from 24 per 100 in 1970 to 54 per 100 by the early 1990s (Bongaarts and Cohen 1998); age at first marriage has increased in most developing countries (Westhoff et al. 1994); and the rate of childbearing before age 20 has declined in much of the developing world (Singh 1998). Against this background, the volume identifies two important questions for further research: 1) how do young people sequence various roles in the transition to adulthood and 2) how does role organization differ across sub-populations. In this paper, I address both these issues by examining racial differences in young women's transition to adulthood in South Africa in the aftermath of apartheid's collapse.

Young people in Africa, where the economic situation has actually worsened over time, are faced with enormous uncertainty about the value of education, their employment potential and their own physical well-being. How this plays out in childbearing is still debated. Casterline and Chalasani (2007) argue that the high rates of unwanted childbearing reported in several African DHS surveys is indicative of a continental

preference for later childbearing. Tambashe and Shapiro (1996) show that increases in education are likely to delay entrance into motherhood in Zaire. However, the picture is clearly more complicated as demonstrated in Johnson-Hanks's portrayal of how modern motherhood has been reconfigured in the context of high educational value in Cameroon (2006). Similarly, Smith has shown that even with education and greater choice in marriage partners among Igbo in Nigeria, fertility is still highly valued (2001). To what extent there is ambivalence about fully embracing demographic markers of modernity such as delayed childbearing and lower fertility is not yet clear. However, we do know that the movement into different adult roles varies within and across countries because of inequalities in labor market conditions, access to higher education, imbalances in the marriage market and cultural preferences in terms of marriage and fertility.

South Africa provides a particularly interesting context to examine variation in transition to adulthood because of its apartheid past which prevented the non white population<sup>1</sup> from accessing the opportunities available to the white population. Using data from the 1998 South African Demographic and Health Survey, I examine racial differences in young women's transition to adulthood in South Africa in the aftermath of apartheid's collapse. The value of this analysis can be seen in three ways. One, the late 90s in South Africa was marked by expectations of increased access to education and employment by the black and colored populations and so provides an interesting context to examine the role of particular historical moments in affecting the movement into adulthood. Two, by identifying possible pathways through which race affects transitions to adulthood in South Africa, I will make a contribution to the ongoing debate on the salience of race as

an explanatory variable in the transition to adulthood. Finally, this analysis is very relevant to policy initiatives in South Africa aimed at assisting young people make successful transitions to adulthood particularly in the areas of schooling, work and parenting.

### **Background: Growing up in South Africa**

As the title of the book- *Growing Up in a Divided Society*- suggests, race played a prominent role in determining the quality of childhood and the process of attaining adult roles in apartheid South Africa (Burman and Reynolds 1986). As a result of racial segregation in residence, schooling, employment, and every aspect of social life, children grew up with starkly different perceptions about the value of education, life opportunities, physical security, and the role of the state. Chikane (1986) has described how the state of siege in townships forced black children to learn survival skills and adaptive behaviors at very early ages. Nasson has argued that the interaction of segregated educational systems reinforced notions of powerlessness and polarization among black children (1984). Black youth were also very mobilized in bringing about political change as witnessed in the Soweto riots of 1976. In describing the situation of a Zulu girl who becomes pregnant, Preston-Whyte and Louw (1986) highlight racial differences in the provision of institutional social security for coping with early childbearing, cultural responses to teenage pregnancies and the recurrence of particular household structures in the black community. They also draw attention to how delayed access to schooling, grade repetition and lack of job opportunities for black youth affected their attainment of adult status within their own communities. In reality, however, black youth were actually thrust

into adult roles earlier. Not only did they assume substantial household responsibility at younger ages than their white counterparts but they also became sexually mature at earlier ages and played an important role in the struggle against apartheid (Preston-Whyte and Louw 1986).

The collapse of apartheid brought with it optimism about the future and heightened expectations in terms of education and employment particularly for the young black population. A National Youth Commission was created whose charge was to address the challenges facing young people and develop policy to assist them in making successful transitions to adulthood. This task has been very difficult to carry out in light of high unemployment rates that continue to have the greatest impact in the black population particularly women. Black unemployment rose from 19.6% in 1995 to 36.8% in 2002, compared to 14.2% to 21.3% for coloreds and 3.3% to 6.2% for whites. More than half of the unemployed in the country are under the age of 30 (Altman and Woolard 2004). In terms of education, while efforts have been made to improve the quality of education for the formerly disadvantaged groups, they are still more likely to be in poorer areas with substandard education. This partly explains why enrollment rates are nearly universal for primary education but progression in high school varies substantially across racial groups (Lam, Carrington and Liebrandt 2006). The unemployment rate is also a disincentive for black and colored youth from successfully completing school in a timely manner.

Schooling and employment are also affected by and affect marriage and parenting decisions. Marriage rates continue to be low for black women attributable, in part, to a

shortage of marriageable men who bring the potential for economic advancement with them (Makiwane 2004). Low marriage rates are not, however, mirrored in low fertility. Caldwell and Caldwell have described fertility patterns in South Africa as bifurcated in that white pattern resemble European trends while black fertility is more similar to that of the rest of sub-Saharan Africa (1993). Indeed, premarital childbearing has always been a part of black family life (Caldwell 1993; Preston Whyte and Zondi 1992). Garenne et al. (2000) have even suggested that the intensity of premarital fertility combined with an unusually long first birth interval might produce a unique “double-humped” age specific fertility curve. Childbearing before marriage is sometimes even welcome as it is a demonstration of fertility potential though there is concern that young men are not accepting paternity and the obligations towards their children (Kaufmann, de Wet and Stadler 2001). Childbearing during the schooling years has been associated with higher drop-out rates (Lam et al. 2007) though it can be resumed if certain conditions in the household exist (Madhavan and Thomas 2005).

In sum, young people in South Africa are facing an enormous amount of uncertainty and insecurity despite the increase in opportunities that the new South Africa offers to all. The black population is still disproportionately poor and, therefore, is particularly vulnerable to social and economic crises including unsuccessful schooling, unemployment, and HIV/AIDS which is hovering around 20% nationally (UNAIDS 2006). This analysis will provide much needed insight into how these factors affect trajectories into adulthood across racial groups in South Africa.



## **Conceptual Framework**

### *Adulthood and Adult Roles*

According to the NRC volume, schooling, work, marriage, parenting, civic engagement are markers of transition to adulthood that are common to all contexts. In most cultures today, school completion signifies preparation for adult roles and labor force participation, union formation and parenting are markers of maturity and responsibility (NRC 2005). In the post-apartheid South African context, it is reasonable to assume that successful and timely completion of school are seen as prerequisites for entrance into higher education and/or the labor force across all groups. Whereas more variation is found in entry into sexual activity, union formation and parenting, it can be argued that across all groups, there is at least an idealized goal of delaying sexual activity, entrance into a union and bearing children until a certain level of maturity and stability are attained. A study by Kaufman et al. concluded that higher levels of education reduced the probability of having had sex in the past 12 months and average wages were positively associated with condom use (2004).

The age range 10-24 is the time in which such transitions usually take place in most places (NRC 2005). However, Ravenera et al. (2004) have found that the age band for school completion and entrance into the labor force for women has narrowed for Canadian youth whereas there has been a widening of the age band for union formation and parenting. Recognizing the complexities brought on by a multiracial society, the National Youth Commission defines youth very broadly to cover the ages 14-35. The

extension of the upper end to 35 is done to account for prolonged schooling that is so common in particular racial and socioeconomic strata.

### *Role Configurations and Race*

The role of race and other stratifiers in understanding variation in transitions to adulthood has yielded substantial complexity. On one hand, there is evidence that racial differences in the structure of the life course disappear once socioeconomic status is controlled for (Ahituv et al. 1997). However, this is not the whole picture. Therefore, there has been considerable effort in identifying possible mechanisms that underlie racial differences in the transitions into parenthood (Cherlin 1992) and employment (Wilson 1996). In this analysis, I draw on the idea of role sequencing which refers to the ordering of particular roles in the life course (Brim and Ryff 1980; Danish, Smyer and Nowak 1980). For example, research has shown that the normative order for white adults in the US is employment before parenting (Marini 1984). However, Cowan and Heatherington (1991) have questioned how applicable this ordering is for African-American communities where a large percentage of people have a child before marriage either by choice or because of high rates of male unemployment which undermine the economic value of marriage for women.

The same question can be asked in the South African context where race interacts with socioeconomic status and culture to produce variations in role sequencing including role *overlap*. Role overlap can happen when 1) idealized role ordering occurs, i.e. being in union followed by childbearing, 2) role ordering is reversed, i.e. childbearing before the

completion of school, 3) duration in one role is extended, i.e. schooling because of grade retention, and 4) entrance into a role is accelerated, i.e. employment while still in school. Race, directly or more likely, indirectly, influences role sequencing because it continues to condition the opportunity structures in education, employment, and the marriage market for young people in South Africa as it has always done. For example, black women who attend poor quality schools may be more likely than their white counterparts to have a baby while in school because of repeated grade retention, lack of encouragement to succeed in school and the availability of social support to care for the child. Alternatively, white women who attend good schools may be more likely than black women to take up employment while in school because they have the support needed to manage both school and work. In short, the role of social inequality in producing variation in life course transition can best be understood when we consider the combined effect of race, socioeconomic status, and other stratifiers (Shanahan 2000).

In order to examine role overlap, I categorize 1) schooling and employment into the “productive” sphere and 2) marriage and parenting into the “reproductive” sphere. This allows us to examine the overlap of roles within and across each sphere. The sequencing within and across each sphere is influenced by a host of factors including access to education, quality of education, youth labor markets, overall unemployment, labor needs within the family, gender norms and increasingly illness and death. By focusing on the convergence or overlapping within and across each sphere, we can better understand 1) what the normative order of roles looks like within and across race and 2) how race interacts with other factors to produce differences in the normative order.

## **Data and Measurement**

### *Data*

This study uses data from the DHS conducted in South Africa in 1998, the latest available data. The timing of the data is valuable in that it captures the socioeconomic climate in the immediate aftermath of the collapse of apartheid in 1993. All women aged 15-49 in the sample households were eligible for the women's questionnaire of the DHS. Weights were constructed to make the data nationally representative. The analysis sample is restricted to women aged 15-29 resulting in an N of 6270. I focus on the 15-29 age group because 1) there is very little variation in status configurations before age 15 and 2) prolonged schooling and the challenges of entering the labor force have, in turn, extended the length of time in which young people are dependent on others for their livelihoods.

Multinomial logit regression techniques are used to examine the relative risk of being in one role versus an overlap of roles in the productive and reproductive spheres and in a combination of both spheres controlling for demographic, socioeconomic characteristics of the individual and her household. This procedure makes it possible to identify the extent to which race is a determinant of particular configurations as an independent variable and in interaction with other control variables. In order to avoid problems associated with non independence, only one eligible woman per household was selected randomly bringing the N to 4743.

### *Dependent Variables*

*Productive Sphere:* The responses to currently in school and currently employed were combined into four school-work combinations: 1) currently in school and working (overlap), 2) in school only, 3) working only, and 4) neither in school nor working. Being in school and working is coded as 1, in school only is coded as 2, working only is coded as 3, and doing neither is coded as 4. The comparison category in the regressions is category 1.

*Reproductive Sphere:* The responses to children ever born and ever in union were combined into four parenting-union combinations: 1) parent and ever in union (overlap), 2) parent only, 3) ever in union only and 4) neither parent nor ever in union. In defining this variable, no attempt is made to link the child to the respective union. Being a parent and ever in union is coded as 1, being a parent only is coded as 2, ever in union only is coded as 3, having neither is coded as 4. The comparison category in the regressions is category 1.

*Combined Spheres:* The responses to currently in school and children ever born were combined into four school-parent combinations: 1) in school and parent (overlap), 2) in school only, 3) parent only, and 4) neither in school nor parent. Being in school and a parent is coded as 1, in school only is coded as 2, parent only is coded as 3 and being neither is coded as 4. The comparison category in the regressions is category 1.

*Explanatory Variable*

The variable of interest in the analysis is *race*. The DHS uses self identification according to four racial/ethnic groups: Blacks, Coloreds, Asians and Whites. I have combined Asians with whites in this analysis because of small numbers and because they share socioeconomic similarities to whites. Even though the colored population is not a focus of interest in the analysis, it is not possible to collapse this category into either Black or White. Unfortunately, the DHS does not ask about ethnic identification within race groups which limits my ability to draw any conclusions about the role of culture beyond the most superficial notion of “black culture.”

*Control Variables* common to all models include:

*Age*: Continuous variable using single years

*Household Wealth Status*: Continuous variable based on an additive index of household items such as radio, bicycle, car, and phone, and household amenities such as electricity, flush toilet and finished flooring

*Type of Region*: Dichotomous variable for rural or urban area of residence

*Location*: Dichotomous variable for residing in Gauteng or not; Gauteng is the richest province with the most job opportunities

*Sex of Household Head*: Dichotomous variable for male or female

For the productive sphere model, I also include 1) a dichotomous variable measuring primary school completion, 2) a continuous variable measuring household size, 3) a continuous variable measuring number of children under the age of 5 in the household and 4) a dichotomous variable for parental status. For the reproductive and combined

spheres models, I include 1) a continuous variable measuring highest educational attainment and 2) a dichotomous variable for current employment status.

## **Results**

Table 1 shows the distribution of current educational status, educational attainment, current employment, sexually active, parenting and ever in union by age group and race.

Insert Table 1 here

There is a substantially significant association between race and each of the specified characteristics (based on Pearson's chi-square test). No one over the age of 24 in this sample is currently in school which suggests that there is probably substantial social stigma placed on girls continuing in school at this age. Racial differences in school enrollment, educational attainment and employment are significant across age groups. The higher rates of current enrollment for black women are most likely due to higher rates of grade repetition and slower progress towards completion. Racial difference in educational attainment underscore the difficulties that black students face in maintaining grade for age progress though this is more evident in the older cohorts. The percentage of white girls in the 20-24 age group who have completed some level of higher education is nearly 5 times that of black girls in the same age group and more than 3 fold in the 25-29 age group. In terms of employment, the racial difference is greatest in the youngest age group which is most likely attributable to the faster completion rates from secondary school of white students.

There are striking differences across race in sexually active for the youngest age group with black girls outnumbering their colored counterparts by 2 and white girls by 3.

Differences persist across age groups though less significant. Fifteen percent of black and colored girls aged 15-19 are parents compared to 3.4% of white girls. These differences remain in the 20-24 age group but even out in the oldest age group. The distribution is reversed for ever been in union with white percentages dominating in the 20-24 and 25-29 age groups. Table 2 shows the distribution of the dependent variables by race.

Insert Table 2 here

There is a substantially significant association between race and the distribution of roles within each of the three dependent variables (based on Pearson's chi-square test). In the productive sphere, overlap percentages are low for all three groups though white girls outnumber colored girls by 3 and black girls by 6. Only working is highest among white girls whereas being in school only is highest for black girls. Not being in either role is highest for the colored girls. These results reflect longer durations in school for black girls and easier access to the job market for white girls. Within the reproductive sphere, once again we find the highest percentages of overlap among white girls who also dominate the only union category. This is most likely a reflection of 1) greater choice in the marriage market for white women, 2) later entry into childbearing and 2) closer connection between union formation and childbearing in the white community.



Conversely we find the highest percentage of parenting without ever having been in a union among black girls. This disconnect could be a result of the lack of marriageable men and/or cultural norms that support out-of-wedlock childbearing in the black community. However, it is interesting that 48% and 46% of black and colored girls and 54% of white girls have never had a child nor been in union suggesting that shifting norms towards later entry into marriage and childbearing is happening across all categories. Finally, when we combine the productive and reproductive sphere, we find low overlap rates across race with the highest percentage among black girls. Whereas 9% of black girls are both in school and have had a child, only 1.7% and .8% of colored and white girls are in this situation. However, the fact that the single role categories of only school and only parent far outweigh the overlap category for all races underscores 1) the deterring effect of schooling on parenting and 2) termination of schooling as a result of childbearing. However, it is notable 13% of black girls compared to 26% and 37% of colored and white girls are in neither role. Whereas white and colored girls are likely delaying childbearing in favor of employment after finishing school and delaying childbearing, black girls are following a different strategy that includes early childbearing.

Table 3 shows the results of multinomial logit models predicting the relative risks of being in one of four *productive* states with overlap treated as the reference category.

Insert Table 3 here

Age has the expected negative effect on being only in school but a positive effect on only working and doing neither. High socioeconomic status is associated with lower risk of being only in school and doing neither. Having completed primary schooling lowers the risk of only working and doing neither compared to doing both. In terms of race, we find colored and white associated with lower risk of being only in school compared to doing both. Whereas being in Gauteng has no effect on any comparison, rural residence has a marginal negative effect for all three comparisons. In terms of household factors, there is a marginally negative effect of household size on the risk of only working and a slight positive effect of number of children in the household on the risks of doing neither. Table 4 presents relative risk ratios disaggregated by race in order to see differences in effects across race.

Insert Table 4 here

Age behaves in a similar pattern as in Table 3 across race. The negative effect of socioeconomic status in the nothing comparison is more significant for whites than for blacks. Primary school completion has a negative effect for 1) blacks in the only work category because they are likely to want to complete their schooling but may be better positioned to get employment at the same time and 2) for blacks and whites in the nothing category though the coefficient for white is 20 times that of blacks. This reflects both the very low drop out rates for white girls who have completed primary education and their easier access to the labor market. In terms of household characteristics, the only finding of note is the negative effect of parenting for colored girls. Being a parent reduces

the risk of being only in school compared to the overlap category suggesting that the pressure to get a job after having a child is particularly pronounced in the colored community.

Table 5 shows the results of multinomial regression results predicting the relative risks of being in one of four reproductive states. The overlap category is treated as the reference.

Insert Table 5 here

Not surprisingly, age is associated with lower risks of being in all three categories compared to the overlap category. In other words, with age, a girl is likely to have been in a union and had a child. Interestingly, higher socioeconomic status is associated with higher risks of only being a parent and having experienced neither. In the same way, the higher the educational attainment, the higher the risks of only being a parent and having done neither. White women have significantly lower risks of being a parent only compared to black women but also have much lower risks of having done neither. These results are suggestive of delayed entrance into marriage and childbearing and a stronger connection between union formation and childbearing in the white community. Living in a rural area is associated with lower risks of having a child only and having done neither compared to the overlap category. Female headship is associated with higher risks of being a parent only and having neither. Finally, currently employed is strongly associated with higher risks of having ever been in union compared to the overlap suggesting that

employed women are desirable in the marriage market but are in no rush to have a child. We now turn to the results disaggregated by race in Table 6.

Insert Table 6 here

Age behaves in a similar pattern as in Table 5 across race. Socioeconomic status has a positive effect on the risk of never been in union and not being a parent for all three groups suggesting a preference for delayed union formation and delayed childbearing among wealthier girls. The positive effect of educational attainment on childbearing only and nothing is only apparent for black women underscoring the role of educational success in delaying union formation but not necessarily childbearing. Rural residence is significantly associated with decreased risk of having experienced neither childbearing nor union formation for black women. Having a female head of household is strongly associated with higher risks of childbearing without having been in a union for all race groups though the strength of the effect varies. However, it is also associated with a lower risk of having experienced neither for black girls. Finally, being currently employed is associated with a strong positive effect on the risks of having been in a union only for black and white girls though the strength of the effects varies substantially.

The final set of analyses examines the extent of overlap of schooling and parenting which has, in light of increased time spent in school and delays in marriage, become increasingly common and, therefore, a cause of concern in terms of policy (Singh 1998). Indeed, the most common reason for stopping school for black girls in the 15-24 age

group in our sample is pregnancy whereas for colored and white girls, the reasons are insufficient money and not liking school. Table 7 shows the relative risks of being in one of four school/parenting states. The overlap category is treated as the reference.

Insert Table 7 here

Age has the expected negative effect on being in school only and positive effects on being a parent only or doing neither all compared to the overlap category. Socioeconomic status is associated with slightly increased risks of being in school only and slightly decreased risks of being a parent only. Educational attainment has a pronounced negative effect on the risks of only being a parent and the risks of doing neither compared to the overlap suggesting that success in schooling is an incentive to stay in school and not have a child. In terms of race, colored and white girls have substantially higher risks of being a parent only reflecting either 1) difficulty in continuing with school after having a child or 2) having a child following the completion of school. However, both these groups also have higher risks of doing neither compared to black girls. This suggests that there may be less stigma attached to young mothers continuing in school in the black community. Rural residence has a strong negative effect on being in school only and not doing either schooling reflecting both earlier entrance into parenting and higher drop out rates in rural areas. Current employment has a positive effect on the risks of being a parent only and doing nothing compared to the overlap. Table 8 presents the same results disaggregated by race.

Insert Table 8 here

All the explanatory variables behave in the same way as in Table 7 but not for all groups in all comparisons. It is notable that socioeconomic status has a strong positive effect for colored girls in the only schooling category and a negative effect for black girls in the only child category. Educational attainment reduces the risk of being only a parent and for doing neither for black and colored girls. For the first time, living in Gauteng has a large positive effect on the risks of being only in school and doing neither only for white girls reflecting a pattern of sequencing in which childbearing follows schooling but not immediately. As in Table 7, rural residence is strongly associated with lower risks of being only school and doing neither but is only apparent for black girls. Currently employed has a negative effect on the risks of only being in school and only having a child compared to overlap for colored girls. For black girls, currently employed has a negative effect on only having a child but a positive effect on doing neither.

### **Summary and Conclusions**

This analysis used 1998 DHS data from South Africa to examine racial differences in girls' transition to adulthood in the productive sphere of school and work and the reproductive sphere of childbearing and union formation. In addition, I also examined differences in the configuration of schooling and parenting. The results suggest that role overlap in the productive sphere and the combination of spheres is low for all race groups. This may be a reflection of a preference to sequence schooling before work and parenting but it is also indicative of the difficulty of gaining access to the labor market.

Role overlap in the reproductive sphere is more common in all groups because the measures capture events that occurred at any point in the girl's life. Nonetheless, substantial differences across race exist for school-work, parent-union and parent-school configurations even after controlling for socioeconomic status. Black women are more likely to experience role overlap of schooling and parenting whereas white girls are more likely to overlap on schooling and employment as well as having been in union and parenting. Furthermore, educational attainment and socioeconomic status do not have the same effects across race in terms of entry into the labor force, parenting or union formation.

What do these results tell us about the normative order in these groups and how race conditions the overlap of schooling and work, union formation and parenting, and schooling and parenting? Whereas nearly all girls have primary school and some secondary school as a common starting point, they have very different realms of possibility when entering other roles. When black girls are faced with the risk of childbearing while in school, they might consider the poor quality of their education, their risk of grade retention and early termination, difficulties in accessing the labor and marriage markets and the availability of social support, none of which render childbearing as a necessarily disastrous event. However, having a job changes the calculus and is associated with delayed childbearing. Furthermore, employment may also make black girls more attractive on the marriage market. When white girls are faced with a similar situation, they may think about the high quality education they have received, their relative advantage in finishing school, continuing to college or securing a good job,

all of which are threatened by childbearing. Furthermore, childbearing could also hamper their efforts in entering a union later in life. The main point is that race continues to be an important determinant of the movement into different roles for young girls in South Africa either directly in the form of racial discrimination or indirectly through its effect on labor market and educational opportunities.

The analysis presented here is a very important first step in understanding how young girls in South Africa navigate the challenging transition to adulthood and how this differs across race. Whereas multinomial logit modeling is an effective method to compare single role and overlapping states, more analysis needs to follow. The use of event history models would address some of the limitations of this analysis, namely, absence of information on timing of events, and the use of measures in the present to predict events that took place in the past. There is also a need to conduct qualitative research in order to fully understand how young people in South Africa actually think about adulthood and what the process of transition looks like to them. Finally, it might be useful to repeat these analyses with the most recent wave of DHS in order to examine change and to assess the role of policies and interventions that have been developed since 1998. This body of research should contribute to the development of policies aimed at increasing opportunities in secondary schools, higher education, and the labor market for all young women (and men) in South Africa. This, in turn, would enable young women to have greater control over their sexuality, choice of partner and childbearing.



Appendix Table A: Age by Grade Attainment in South African Education System

Age	Grade
3-5	Pre-primary
6	1
7	2
8	3
9	4
10	5
11	6
12	7
13	8
14	9*
15	10
16	11
17	12**

\* end of compulsory education

\*\* matric exam which is compulsory for entrance to university is taken at the end of 12<sup>th</sup> grade

Source: Department of Education, South Africa

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Table 1: Selected Characteristics of Sampled Women by Race and Age Group, SADHS 1998

	15-19			20-24			25-29		
	Black	Col	White	Black	Col	White	Black	Col	White
Currently in school***	84.1	63.7	68.8	39.1	9.0	9.3	0	0	0
Highest Grade Completed									
No	.7	0	.6	1.8	3.4	.7	5.0	5.9	.6
Primary***	25.2	23.2	.6	16.7	17.7	.7	22.8	28.5	2.6
Secondary	72.7	73.6	88.8	73.9	73.1	67.4	62.3	60.7	67.1
Higher***	1.3	3.3	10.1	7.6	5.9	31.1	9.9	4.8	29.6
Currently Working***	2.9	10.1	27.4	12.5	39.5	60.7	28.2	46.3	60.5
Sexually Active***	51.6	29.5	16.2	93.0	76.5	56.4	98.7	90.6	92.1
With Children***	15.1	15.2	3.4	60.9	60.5	24.4	84.5	77.0	73.0
Ever Been in Union***	4.5	3.3	2.8	22.4	26.1	39.3	49.4	49.6	86.2
N	1627	234	154	1218	167	108	1012	201	136

Note. 21 observations are missing race categorization

\*\*\*p<.001 (Pearson's chi-square for significance of mean difference within each age group)



Table 2: Distribution of Dependent Variables by Race, SADHS 1998

	Black	Colored	White
Productive Sphere <sup>a</sup>			
School/Work	1.1	2.2	6.3
School/No Work	47.1	25.3	23.0
No School/Work	11.7	27.0	40.0
No School/No Work	40.2	45.6	30.8
N	3810	597	396
Reproductive Sphere <sup>a</sup>			
Parent and Union	21.2	25.4	32.9
Parent and No Union	26.8	23.1	1.5
No Parent and Union	3.7	5.2	11.1
No Parent and No Union	48.3	46.4	54.5
N	3857	602	398
Both Spheres <sup>a</sup>			
School and Parent	9.1	1.7	.8
School and No Parent	39.1	25.8	28.5
No School and Parent	38.9	46.8	33.8
No School and No Parent	13.0	25.8	36.9
N	3828	598	396

Note: Differences in sample sizes reflect missing information on the dependent variables

<sup>a\*\*\*</sup>p<.001 (Pearson's chi-square for significant association between race and categories within each sphere)

Table 3: Relative Risk Ratios from Multinomial Regressions for Productive Sphere, SADHS 1998

	Only School vs. overlap	Only Work vs. overlap	Nothing vs. overlap
Age	-.21***	.42***	.31***
SES	-.55*	ns	-1.04***
Completed Primary Education	ns	-1.43***	-1.30***
Race			
Black (ref)	---	---	---
Coloured	-1.67***	ns	ns
White	-2.55***	ns	ns
Gauteng Region	ns	ns	ns
Rural	-.72*	-.73*	-.75*
Parent	ns	ns	ns
HH Size	ns	-.15*	ns
Num Kids in HH	ns	ns	.49*
Female HH Head	ns	ns	ns
Pseudo R <sup>2</sup>	.3703	.3703	.3703
N	4743	4743	4743

\*p<.05; \*\*p<.005; \*\*\*p<.001

Table 4: Relative Risk Ratios from Multinomial Regressions Disaggregated by Race for Productive Sphere, SADHS 1998

	Only School vs. Overlap			Only Work vs. Overlap			Nothing vs. Overlap		
	B	C	W	B	C	W	B	C	W
Age	-.22***	-.57***	ns	.38***	.36***	.83***	.27***	.26*	.66***
SES	ns	ns	ns	ns	ns	-1.76*	-1.03***	ns	-2.54**
Completed Primary Education	ns	ns	ns	-1.56***	ns	ns	-1.22*	ns	-20.78***
Gauteng Region	ns	ns	ns	ns	ns	ns	ns	ns	ns
Rural	ns	ns	ns	ns	ns	ns	ns	ns	-1.91*
Parent	ns	-3.57***	ns	ns	ns	ns	ns	ns	ns
HH Size	ns	ns	ns	-.18*	ns	ns	ns	ns	ns
Num Kids in HH	ns	1.55*	ns	ns	1.51*	ns	ns	1.67*	ns
Female HH Head	ns	ns	ns	ns	ns	ns	ns	ns	ns
Pseudo R <sup>2</sup>	.3606	.3471	.3858	.3606	.3471	.3858	.3606	.3471	.3858
N	3755	595	393	3755	595	393	3755	595	393

\*p<.05; \*\*p<.005; \*\*\*p<.001

Table 5: Relative Risk Ratios from Multinomial Regressions for Reproductive Sphere, SADHS 1998

	Only child vs. Overlap	Only union vs. Overlap	Nothing vs. Overlap
Age	-.23***	-.23***	-.62***
SES	.28***	ns	.80***
Educational Attainment	.37***	.36*	.75***
Race			
Black (ref)	---	---	---
Coloured	ns	ns	-.37*
White	-3.47***	ns	-1.20***
Gauteng Region	ns	ns	ns
Rural	-.40***	ns	-.75***
Female HH Head	1.38***	ns	1.05***
Currently Working	ns	.98***	ns
Pseudo R <sup>2</sup>	.3059	.3059	.3059
N	4774	4774	4774

\*p<.05; \*\*p<.005; \*\*\*p<.001

Table 6: Relative Risk Ratios from Multinomial Regressions Disaggregated by Race for Reproductive Sphere, SADHS 1998

	Only child vs. overlap			Only union vs. overlap			Nothing vs. overlap		
	B	C	W	B	C	W	B	C	W
Age	-.24***	-.20***	-.29*	-.27***	-.18**	-.16*	-.63***	-.56***	-.71***
SES	.26*	ns	ns	ns	ns	ns	.74***	.69**	1.37***
Educational Attainment	.39***	ns	ns	ns	ns	ns	.82***	ns	.93*
Gauteng Region	-.40*	ns	ns	ns	ns	ns	ns	ns	ns
Rural	-.47*	ns	ns	-.51*	ns	ns	-.83***	-.81*	ns
Female HH Head	1.31***	2.06***	1.80*	Ns	1.01*	Ns	.97***	ns	ns
Currently Working	ns	ns	ns	.89***	ns	1.67***	ns	ns	.96*
Pseudo R <sup>2</sup>	.2839	.2977	.4374	.2826	.2977	.4374	.2826	.2977	.4374
N	3781	598	395	3781	598	395	3781	598	395

\*p<.05; \*\*p<.005; \*\*\*p<.001

Table 7: Relative Risk Ratios from Multinomial Regressions for Overlap of Spheres, SADHS 1998

	Only school vs. Overlap	Only child vs. Overlap	Nothing vs. Overlap
Age	-.51***	.40***	.12***
SES	.31*	-.46***	ns
Educational Attainment	.24*	-1.13***	-.76***
Race			
Black (ref)	---	---	---
Colored	ns	2.10***	2.17***
White	ns	2.78***	3.13***
Gauteng Region	ns	ns	ns
Rural	-.58***	ns	-.62***
Female HH Head	ns	ns	ns
Currently Working	ns	1.06***	1.47***
Pseudo R <sup>2</sup>	.3754	.3754	.3754
N	4743	4743	4743

\*p<.05; \*\*p<.005; \*\*\*p<.001

Table 8: Relative Risk Ratios from Multinomial Regressions Disaggregated by Race for Overlap of Spheres, SADHS 1998

	Only school vs. overlap			Only child vs. overlap			Nothing vs. Overlap		
	B	C	W	B	C	W	B	C	W
Age	-.49***	-.68***	-.80***	.39***	.36***	.47*	.13***	ns	ns
SES	ns	1.55**	ns	-.54***	ns	ns	ns	ns	ns
Educational Attainment	.41**	ns	ns	-1.16***	-1.96*	ns	-.83***	-1.76*	ns
Gauteng Region	ns	Ns	19.42***	ns	ns	ns	ns	ns	19.12***
Rural	-.60***	Ns	ns	ns	ns	ns	-.65***	ns	ns
Female HH Head	ns	ns	ns	ns	ns	ns	ns	ns	ns
Currently Working	ns	-2.65**	ns	1.56***	-1.53*	ns	1.82***	ns	ns
Pseudo R <sup>2</sup>	.3564	.3832	.4789	.3564	.3832	.4789	.3564	.3832	.4789
N	3755	595	393	3755	595	393	3755	595	393

\*p<.05; \*\*p<.005; \*\*\*p<.001

## Racial Differences in Transition to Adulthood in South Africa

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