

“Nesting Elsewhere: Understanding Australian Youths’ Work and Educational Patterns and Early Partnering”

Peter D. Brandon

Sociology and Anthropology Department

Carleton College

Northfield, MN

U.S.A.

Please direct correspondence to Peter D. Brandon, Broom Professor of Social Demography at Carleton College, Northfield, MN, USA. Email: pbrandon@carleton.edu. The author is indebted to Ms. Carole Heyworth for her excellent advice, support, and technical expertise. The views expressed in this paper are those of the author and do not necessarily represent the views of the Department of Families, Housing, Community Services and Indigenous Affairs. They cannot be taken, in any way, as expressions of government policy.

“Nesting Elsewhere: Understanding Australian Youths’ Work and Educational Patterns and Early Partnering”

Abstract

This study investigated the effects of educational-work activity combinations on youths’ exits from parental homes to form romantic unions in separate households. Forming a new household with a romantic partner would usually include assuming adult roles and responsibilities, including the maturity to sustain a romantic union. The study finds that certain educational-work activity combinations are associated with delaying this particular type of transition, while other socio-economic predictors accelerate this type of transition. The study also finds that family structure matters to transitions into separate households formed by romantic unions. The study utilized a rich source of Australian panel data and a competing risks framework, which incorporates other households living arrangements youth could chose rather than romantic unions. In the long-run, early decisions during the transition to adulthood about romantic relationships and living arrangements could affect youths’ economic mobility and well-being in later adulthood.

Key words: Youth transitions, romantic unions, leaving home, human capital investments.

“Nesting Elsewhere: Understanding Australian Youths’ Work and Educational Patterns and Early Household Formation”

INTRODUCTION

Australian youth today spend a much greater amount of their late adolescence and early adulthood living in their parents’ households. As opposed to thirty years ago, more youth now live with parents rather than leave to live with friends and relatives, or with a romantic partner, or to live alone. In early adulthood, for instance, nowadays about 52% of Australian young men and 39% of Australian young women reside in parents’ homes until well into their mid-twenties (Weston et al., 2001; Cobb-Clark, 2008). Interestingly, the largest increase among young adults residing with parents has been among young Australian women in their early twenties. Since the late 1970s, the increase among young women aged between 20 and 24 has been about 57%. For men aged between 20 and 24, the increase was about 14% over the same period of time.

The trend among Australian youth to live in parents’ homes is not unique to Australia (Whittington and Peters, 1996). Across many industrialized countries, such as, the United States, Canada, and the United Kingdom, residential patterns among youth are similar (Hartley, 1993). Indeed, in many industrialized countries protracted coresidence among youth and parents is the norm. Moreover, shared housing among youth and parents generally means that youth remain dependent on parents for food and shelter, help with educational and work-related expenses, and parental time to discuss youths’ careers and future plans (Schneider, 1999).

But not all Australian youth remain in parents’ homes for prolonged periods of time, or stay financially dependent. Likewise, in other industrialized countries sizable numbers of youth make surprisingly early transitions to adult roles, form their own households, finance their educations, and work towards economic independence. Overwhelmingly, youth who leave their parents’ homes either marry, cohabit, live with friends or relatives, or live alone. While parents

might still offer financial support to offspring who left for another type of household, those offspring must assume adult roles to varying degrees depending upon the type of household destination. Cohabiting, for example, requires adult roles and responsibilities that differ from living alone.

Given that the timing of youths' transitions into different household forms could affect their later adult relationships, productivity, educational achievement, use of welfare, family formation, and wealth attainment, understanding the factors that drive youths' early transitions into alternative types of households compared with other youths is critical. More specifically, given the potential economic and social consequences of early youth transitions into distinct types of households with each one's presumed adult roles and responsibilities, identifying which differences across parental households and among youth motivate some youth to leave parents' homes while others stay is important. The alternative types of households that youth can enter into upon leaving the parental household examined in this study are romantic unions, shared housing with friends or relatives, or living alone. This study posits that certain characteristics of parental households and specific work and educational patterns among youth will affect youths' transitions into the three alternative types of households.

By examining the effects of youths' patterns of work and educational investments and the sociodemographic characteristics of parental households on transitions into three alternative household destination types, the study adds to the literature on the living arrangements of youth during the transition to adulthood. Unlike other studies on youth-to-adult transitions, this study identifies three specific forms of household destinations that require different constellations of adult skills and responsibilities. And, this study differs from others by estimating the relative effects of different types of educational investments and work patterns among youth on leaving

the parental home. Ultimately, the types of households youth enter may ameliorate or exacerbate socioeconomic disadvantage across generations. To test hypotheses about youth work and educational patterns and parental household traits, the Household, Income, and Labour Dynamics in Australia (HILDA) survey is utilized. These HILDA data, described later, have strengths making the survey ideal for the study.

BACKGROUND

Like other industrialized countries, Australia has an array of social policy instruments, (e.g., minimum wages, unemployment benefits), aimed at supporting youths' investments in higher education and job training and entry into the labor market. Undoubtedly, these social policy instruments targeting Australian youth at the federal and state levels affect the nature, amount, and timing of parental support. Ultimately, the interaction between both governmental and parental forms of support could affect the timing of when youth leave parental homes to form or join other households.

For the purposes of this study, three major policy instruments that have been at the disposal of the Australian federal government are worth describing because each one could affect private forms of parental support and household formation decisions among youth. First, the introduction of the income-contingent Higher Education Contribution Scheme (HECS) in 1989 has affected families financing of higher education for their children. Through an income-contingent loan university education costs are paid, but parents still have to support the living expenses of their sons and daughters. Clearly, though, HECS expanded opportunities for youth to attend universities and invest in tertiary education. According to the Australian Bureau of Statistics (ABS), the percentage of young adults aged between 20 and 24 years who entered university over the 1990s increased by about 76% (ABS 2000).

Besides introducing HECS for university-level education, the federal government in the 1990s expanded vocational education and training in secondary schools. This large secondary school investment increased the numbers of apprentices in Australia holding vocational education and training certificates, thus increasing their earnings capacity due to job-specific skills and on-the-job training and younger persons' attachment to the labor force (OECD 2009).

Thirdly, the federal government has devised a (parental or youth means-tested) Youth Allowance program that offers monetary support to youth (ages 16 to 24) who had enrolled in fulltime study, or were actively seeking jobs (ages 16 to 20). The Youth Allowance has proved especially helpful because it has supported those youth finishing their education and seeking jobs. If a youth was over 18 years of age, the allowance went to them rather than to their parents. Importantly, the youth allowance could have potentially affected the likelihood of youths leaving parental households because eligibility rules of the Youth Allowance consider youth as independent of their parents if youth are married, in a long-term cohabiting relationships, or confronting severe family dysfunction.

These three federal policies, which affect patterns of educational investments and work among youth, also have implications for the timing of leaving parental households to form new households. Past international comparisons suggest that Australian youth did combined work and educational pursuits in a variety of ways rather than solely focus on one or the other, and that Australian youth had higher labor force participation rates than their peers in comparable countries (OECD 2002). For instance, labor force participation rates among Australian youth in late adolescence are relatively high with close to half of older teenagers having some attachment to the labor force (ABS, 2006).

Therefore, this study hypothesizes that the timing of leaving the parental home to live in the three alternative types of households already noted will depend upon the combinations of educational investments and work participation among youth,. These combinations reflect the influence of Australian policies and the stated position of the federal government that families must take primary responsibility for the post-secondary education of their children (Luteria and Bourne 2000; Welfare Rights Centre 2005).

After accounting for household and parental characteristics as well as other demographic characteristics of youth, the study should show that the timing of leaving the parental home among youth is associated with the relative mix of labor force attachment and post-secondary study organized by youth. Overall, the study using these HILDA data should indicate that household characteristics and parental attributes are important to youth leaving their parents' homes, but once accounted for that the combinations of human capital investment activities organized by youth themselves are also pivotal to leaving parents' households. Presumably those combinations should reflect growing independence among youth and the undertaking of adult roles and responsibilities. The potential exist, of course, that youth who leave their parents' households are in fact those who fail to invest in their own education and training and future economic mobility, and instead perpetuate their own disadvantage.

DATA DESCRIPTION AND STATISICAL MODEL

The data for this study come from HILDA, which is a rich source of longitudinal data on a representative sample of Australian households. Since 2001, the HILDA survey has been collecting data on households and members of those households on an annual basis. Currently, there are eight waves of data available for analysis. The HILDA survey selected a large nationally representative sample of 7,682 Australian households, thereby yielding a total household response rate of 66 percent. Within the 7,682 sampled households, 19,917 persons were enumerated. Interviews were sought with every member of

these households who was over the age of 15 years (Watson and Wooden 2002). Of the 19,917 persons, 4,790 were under 15 years of age and ineligible for an interview in Wave 1. This left 15,127 persons eligible for a personal interview 13,969 of which completed the Person Questionnaire and then sought interviews with every member of those households who were over the age of 15 years. The HILDA panel is especially suitable because the survey follows youth as they move out of their parents' homes to establish households of their own. Possessing a representative sample of youth initially in parents' households and then followed annually to identify which ones left that household over the past year is an advantage of these longitudinal data over samples of youth that are generated from either cross-sectional surveys or selective samples.

From Wave 1 of HILDA, a representative sample of 1,897 Australian youth age between 15 and 21 years of age were selected from all possible households. From this group, an initial group of 456 youth were dropped because they either already lived: alone (N = 69); with a partner (N = 141); with friends or other relatives (N = 210); as a single parent (N = 30); or with foster parents (N = 6). Over the next seven waves, another five youth became single parents and another 11 moved in with grandparents; the latter 16 youth were also excluded from analyses. Thus, the study tested its theoretical hypotheses on a final sample of 1,425 youth. The HILDA data permitted identifying whether any of these 1,425 young Australians left a parental household for one of the three alternative households: (1) living alone, (2) cohabitation or marriage, or (3) living with friends and/or relatives. Those that did not move into one of these specified alternative households continued to live in parents' homes (i.e., they were right censored).

Furthermore, these data allowed precise measurement of the work and study patterns of youth over the eight waves of the HILDA panel. Each youth over the age of 15 years reported at each wave of data collection their labor force attachment, (including unemployment), hours of work, educational activities, and educational attainment. With this amount of wave-by-wave information, each youth in the 15 to 21 age bracket were classified in six categories according to whether they neither worked nor studied, or worked only, or studied only. (See the more detailed description that follows.) Thus,

investments among youth in human capital and acquired work experience are time-varying and classified over each of the waves of the eight-wave period.

Another benefit of the HILDA survey is that the survey can precisely measure a distinct alternative household destination that a youth can go to from the parental household. The HILDA survey collects detailed and precise information on *all* household relationships at each wave. Using these many measures of ongoing household relationships (stock and flows of people), the study can accurately depict youths housing destinations, including exact measurements for those who chose to live alone, or with a romantic partner, or with relatives and friends.

Keeping these measurement strengths of the HILDA survey in mind, if assumed that (a) youth can decide with whom they wish to live, and (b) the decision to live in one type of household competes with the decision to live in another, then an appropriate statistical approach is a competing risk survival model (Kalbfleisch and Prentice, 2002; Fine and Gray, 1999).

The competing risk survival model is a better modeling choice here than a simpler survival model, e.g., a Cox proportional hazards model. (Though, the Cox proportional hazards model is adaptable.) The reason is that a simpler survival model only measures the time from a starting point to an endpoint defined by the occurrence of one type of event. However, in the competing risks model more than one type of event may occur, which is more realistic when thinking about youth making decisions about leaving parents' households for alternatives.

In the competing risks model adopted here, one of the three transitions to a specific household destination is considered the transitional event of interest. Importantly, that event of interest is youth leaving parents' households to form households with romantic partners. The other two transitions to the other two household destinations are considered competing events. Thus, the competing events are living with friends and relatives, or living alone. (Relatives are those of the same generation, e.g., cousins, not older generations, e.g., uncles or aunts.) The advantage by exploiting the competing risks survival model is that the occurrence of a romantic union household destination event either precludes or changes the probability of occurrence of the other two household destinations, i.e., living with friends or relatives or

living alone (Gooley et al. 1999). The decision to model transitions into romantic unions elsewhere and treat the other two household destination transitions as competing events was made because the literature suggests that early romantic partnering can increase the likelihood of early family formation and later romantic dissolutions, decrease human capital investments, and lower wealth acquisition.

The competing risks model possesses interesting technical aspects (Latouche et al 2007), but for the purposes of this study and its readership only key model features are highlighted so that latter regression results are interpretable. First, assume that a youth leaving the parental home to live with friends or relatives or live alone “compete” with living with a romantic partner. Next, ask “What is the probability for a youth of a romantic union within the HILDA observation period?” This temporally ordered question (which is different from the standard way questions are asked in survival models) produces in the competing risk regression model a cumulative incidence function (CIF), which is the probability of a romantic union occurring before a given time (Fine and Gray, 1999). Simply put, the competing risk model of Fine and Gray (1999) produces a hazard (technically a subhazard) for the subdistribution for the event of interest: the occurrence of a romantic union. Predictors, such as, patterns of educational investment and work among youth, affect the hazard (subhazard) proportionally. Clearly, in this type of empirical research modeling assumptions are made, (e.g., distributional assumptions), that are judgment calls on the part of a researcher (Geskus 2000).

The statistical software used for all analyses is STATA 11.0. The competing risk regression routines in STATA are based on Fine and Gray’s (1999) competing risk model and permits comparisons with estimates based upon a Cox proportional hazards model. The STATA competing-risks regression is semiparametric in that the baseline “subhazard” of the event of interest is left unspecified, and the effects of the independent variables are assumed to be proportional. Importantly for the study, time-varying predictors and coefficients are allowed. (See Coviello and Boggess, 2004).

FINDINGS:

By Wave 8, among the original Wave 1 sample of 1,425 youth aged between 15 and 21 years, about 43.7% (N = 609) had left the parental household for one of the three household destinations while

approximately 57.3% remained in parental households. So, reflecting the coresidential trend described earlier, these HILDA data confirm that the majority of Australian youth live protracted periods of early adulthood in parents' households. Of those that left the parental household, 20.5% (N = 292) lived alone, 15.2% (N = 217) lived with a romantic partner, and 7.0% (N = 100) lived with other relatives and friends.

The question addressed in this study is whether these youth transitions to alternative household destinations revealed in these HILDA data are associated with patterns of educational investments and work effort among Australian youth and characteristics of their parental households, as well. HILDA data permit examining these work attachments and educational activities and using competing risk regression to analyze the effects of parental, youth, and household characteristics on the event of leaving the parental home for elsewhere.

Among the sample of youth, there is notable diversity of educational investments and labor force participation at Wave 1. As noted in the data description section, these data allow arraying the sample according to six work-educational activity categories: (1) "no study or work"; (2) "studying, but no work"; (3) "no studying, but part-time work"; (4) "studying and part-time work"; (5) "no studying, but full-time work"; and, (6) "studying and full-time work." (There is a seventh category for missing data since 196, (13.7%), of youth failed to complete the self-questionnaire. A forthcoming technical paper carefully scrutinizes these missing data, but here these missing responses are excluded.)

According to the six categories, at Wave 1 of the HILDA panel the distribution of work-educational activity categories in order is: (1) 7%, (2) 37.4%, (3) 7.2%, (4) 31.6%, (5) 10.7%, and, (6) 6.2%. If these percentages are aggregated by work or by educational investments, the aggregated numbers perfectly mirror ABS employment numbers for youth and OECD international analyses of Australian youths' employment and educational patterns. For instance, in this sample about 56% of youth worked and 75% studied. The HILDA survey at Wave 1, therefore, accurately estimated work-educational patterns among Australian youth and begs the question that these combinations might help explain the timing of youth transitions out of the parental home.

Before discussing the competing risk regression models for two- and single-parent families, the six work-educational activity categories are used to construct a contingency table that provides insights into differences among Australian youth and their parental households when living with parents at Wave 1. Table 1 again displays the variation among the sample of youth and the parental households.

[Table 1 about here]

Table 1 indicates that compared with other youth those who neither work nor study, (Category “1”), or study but with no work, (Category “2”), are the most likely to reside in rural areas. Overall, some rural areas of Australia might lack work or close-by educational opportunities for youth, or might be where more disadvantaged families live, including poor indigenous families, though HILDA has a very small sample of indigenous youth. The youth who neither worked nor studied were also the ones most likely to have: not completed high school; the most public transfer income; highest rating of socio-economic deprivation; a father who did not complete high school; a parent in poor health; a father with low occupational status; and regular cigarette smoking habits.

More starkly contrasting the youth who neither work nor study than any other group of youth are youth in category five who did not study, but worked full time. In Table 1, the youth in category five were those in the sample who most likely were the oldest, have the highest salaries, have the highest parental household incomes, and drink alcohol more heavily. They also had the second highest chances compared with youth in category one to have not completed high school, live with fathers with lower occupational ratings, and smoke regularly. Also, this group compared to most other groups lived with parents who had not completed high school. However, they also had the lowest receipt of public transfer income. If further data analyses were conducted, those analyses might reveal youth in category five lived with parents who, though possessing less post-secondary school education, worked in skilled trades that guaranteed high household income levels.

Other comparisons in Table 1 are less compelling, yet another group at least worth highlighting is youth in Category 2. Youth who study, but do not work are unsurprisingly the youngest among the

sample, consist of equal proportions of young men and women, are less likely to drink alcohol, and smoke less; but they are the second most likely group to receive public transfer income.

The contingency table results, though showing variation across the sample when youth are arrayed according to their educational investments and labor market attachment, are not meant to suggest an association between educational-work investment activities and leaving the parental household. Yet, variation in those educational-work investment activities may well mean that youth are already assuming adult roles and responsibilities, even though they still live with parents. Possibly, different educational-work mixes of these activities push some youth out of the parental household, while other mixes compel them to stay longer in the parental home. Moreover, educational-work investment activities, if correlated with independent living, might map better onto some household destinations than others. To investigate these issues more thoroughly, a competing risk regression is specified that controls for individual- and contextual-level characteristics; the latter were shown as important in Table 1.

Table 2 presents estimation results for youth living in two-parent households. The competing risk regression models were estimated by family structure, i.e., for two-parent and single-parent households. The decision to conduct separate analyses by family structure was made because factors pushing youth to leave parental households should differ based on household resources, and because preliminary analyses showed socio-economic characteristics of households in Wave 1 were associated with family structure. Thus, first estimation results for educational-work activity combinations and other independent variables are reported for youth who lived in two-parent households. Then, equivalent estimation results are reported for those who lived in single-parent households.

The comparison group in all regression models are youth neither studying nor working, which is Category one. Category one youth are an important group to compare against because they, by definition, live in parents' homes, do not work, nor invest in training or schooling activities; yet, according to Table 1, the youth in Category one are probably the ones most in need of either actively given they are relatively more socio-economically disadvantaged.

Controlling for individual- and contextual level variables, in the regressions in Table 2 that model the cumulative incidence of romantic unions among youth in two-parent households in the presence of two competing household destinations, i.e., living alone or with friends and relatives, the subhazard estimates for studying but not working, (Category two), are 35.6% and 33.3%, respectively, of the subhazards for youth not working or studying. In other words, youth who are studying, but not working have a reduced incidence of leaving parents' households to form romantic unions after accounting for their younger ages, (see Table 1), and other factors, (see Table 2). As well, the subhazard estimates for studying and part-time working, (Category four) in Table 2, are 28.2% and 22.0%, respectively, of the subhazard for youth not working or studying. Plainly, youth who are studying and working part-time, like their peers who are studying only, have a reduced incidence of leaving parents' households to form romantic unions after accounting for other household and individual characteristics. Except for one educational-work activity combination in one regression, (studying and full-time work, Category 6), where the competing risk was living alone, all four combinations suggested a lower cumulative incidence of leaving two-parent households for romantic unions when compared with youth who neither worked nor studied. Of course, since the estimated subhazard ratios were statistically insignificant, the suggested effects are conjecture only.

[Table 2 about here]

Several other estimated subhazards for the sample of youth in two-parent households indicate that the cumulative incidence of romantic unions, when there are competing household destinations, is associated with other factors, as well. For example, gender, locale, and familial resources matter. The subhazard estimates for males (male=1) in Table 2, controlling for individual- and contextual level variables, are 54% and 53%, respectively, of the subhazards for females (male=0). In other words, males have a reduced incidence of leaving parents' households to form romantic unions. After accounting for gender and the other covariates, however, subhazards for living in rural areas are 49% for living alone and nearly 54% for living with friends and relatives, respectively, above subhazards for youth living with parents in urban areas. That means youth in rural Australia have a higher incidence of leaving parental

households to form romantic unions. The subhazard for a youth's age shown in Table 2 also indicates, unsurprisingly, that for each year a youth grows older, *ceteris paribus*, the cumulative incidence of leaving home to form a romantic union rises in the presence of the two alternatives. On the other hand, as parental income increases, holding other factors constant, the cumulative incidence of leaving the parental home to form a romantic union falls significantly. (Again, given there are two household destination alternatives.) Interestingly, the two measures of health risk behaviors, drinking alcohol and cigarette smoking, were uncorrelated with leaving the parental household to form romantic unions.

Separate analyzes of these data by family structure more closely approximates reality. Still, a downside of separate analyses is having smaller sample sizes of youth and hence less reliable subhazard ratio estimates. Notwithstanding this cautionary remark, results for youth living in single-parent households, who on average face greater economic disadvantage, poverty in later adulthood, and fewer opportunities than youth in two-parent households, offer insights into transitions from single-parent households to romantic unions.

In the regressions in Table 3 that model the cumulative incidence of romantic unions among youth in single-parent households while knowing there the two competing household destinations the subhazard estimates for studying but not working, (Category two), are 8.4% and 8.3%, respectively, of the subhazards for youth not working or studying. So, youth who are studying, but not working and live in single-parent households have a greatly reduced incidence of leaving single-parents households to form romantic unions after accounting for other factors. As well, the only statistically significant subhazard estimate for studying and part-time working, (Category four) in Table 3, is 21.1% of the subhazard for youth not working or studying. Youth in single-parent households who are studying and working part-time in the presence of living with friends and relatives, like their peers who are studying only, have a reduced incidence of leaving single-parents households to form romantic unions. Similar to the results for youth in two-parent households, all other combinations suggested a lower cumulative incidence of leaving single-parent households for romantic unions when compared with youth who neither worked nor studied in the presence of living alone or living with friends and relatives, but the estimated subhazard

ratios are statistically insignificant and probably reflect the smaller sample sizes as noted in the previous paragraph.

[Table 3 about here]

Other estimated subhazards for the single-parent, youth sample indicate that the cumulative incidence of romantic unions, when there are competing household destinations, is associated with other factors, a few of which are not shared by youth in two-parent households. Yet, again, gender and locale matter to household transitions. The subhazard estimates for males in Table 3, *ceteris paribus*, are 59.4% and 53%, respectively, of the subhazards for females. Hence, somewhat less so than males in two-parent households, males in single-parent households have a reduced incidence of leaving parents' households to form romantic unions. Geographic place of residence seems less important compared with youth in two-parent households. However, one subhazard for living in a remote area is three times greater than the subhazard for youth living with single parents in urban areas for leaving in the presence of living alone. Contrasting the subhazards for youth in two-parent households, the subhazards for a youth's age and the income of his or her single parent are insignificant as shown in Table 3. Yet, three other factors appear important to youth who leave single-parent households that were unimportant to youth in two-parent households. Those three factors are: public transfer income, parental health and occupational status.

The subhazard ratio for youth public transfer income in the presence of living with relatives and friends indicates that for every percentage increase in transfer income, the cumulative incidence of leaving home to form a romantic union rises. Thus, public transfer income appears to encourage youth in single-parent homes to leave to form their own romantic unions in other households. This effect might be unintended, but is certainly well-documented in the literature on the disincentive effects of public transfer programs (Moffitt, 1993). In addition, a subhazard estimate for coresiding with a single parent in poor health displayed in Table 3 and in the presence of the competing alternative of living with friends and relatives is 55% of the subhazard for youth living with a single parent who is not in poor health. Hence, youth living with single parents in poor health have a reduced incidence of leaving them for romantic unions elsewhere. Finally, whereas the occupation status of a father in two-parent household was not

associated with a youth leaving that household, the occupational status of a single parent mattered to transitions to romantic unions (when one also considers living alone or with friends and relatives). As the occupational prestige of single parent increased by a unit, so too did the subhazard of leaving that single-parent household for a romantic union elsewhere. That subhazard rose by about 2%, on average.

DISCUSSION AND CONCLUSIONS

Several conclusions arising from this study are worth noting. First, findings emphasize the need for research on the transition to adulthood to include behavioral measures of youths' combinations of work and study. Though these educational-work activity combinations only indirectly measure study and work habits during the transition to early adulthood, the time-varying nature of the measures still directly measure youths' efforts over time to simultaneously work and study, behavior reflecting adult life and responsibilities and growing independence.

Second, findings suggest that the transition to adulthood requires a better understanding of the decision making process youth make between investing in human capital activities rather than romantic unions in separate households. Findings suggest that concentrated study or combining work and study activities override early romantic union formation. Time spent multitasking work and study activities either constrain the time youth have for investing in romantic relationships, or reflects their decisions to delay searching for romantic partners and focusing instead on human capital accumulation and work experience. Ironically, the youth more likely to transition into early romantic unions are those least prepared for the labor market: that is youth who neither studied nor worked.

Third, these findings remind researchers studying the transition to adulthood among youth living with single parents that educational investments and work activities matter to youths' living arrangements in early adulthood. After accounting for levels of socio-economic deprivation and income among single-parent households, findings show that youth in single-

parent households have even less incentive compared with youth in two-parent families (see tables 2 and 3), to make transitions into romantic unions, even in the presence of competing alternatives, when they are studying or studying and working. Hence, government policy should provide the mix of incentives to encourage youth to stay in single-parent households to invest in educational-work activities. Indeed, findings suggest that government transfers that accelerate youth moving away from the single-parent home to live with romantic parents in the presence of friends and relative might be unwise. Policymakers might wish to reexamine the residency requirements for the Youth Allowance so that the subsidy is more closely tied to with whom youth live, or at least is not inducing premature romantic partnerships.

Negotiating the transition to independent adulthood is difficult, but that transition is potentially even harder if youth are trying to invest in romantic relationships. This study provides knowledge about potential predictors of this important type of transition in early adulthood. Notwithstanding the caveats, the study shows that educational and work opportunities matter to forming alternative household types among Australian youth, especially independent romantic unions. The new information provide in this study for Australian youth would have been difficult to undercover without these HILDA panel data. The HILDA survey, with its sophisticated panel measures of household composition, income sources, labor force participation, and educational activities permitted mapping those factors onto youth early transitions into three forms of alternative household formation. Fending off the perpetuation of intergeneration poverty could well be linked to better understanding the connections between education and work activities while living in parental households and early independent household formation among youth.

Finally, this study has exploited the HILDA survey to examine the effects of emerging educational and work behaviors among youth on their formation of independent households. Parental resources are critical to their sons and daughters transitions to adulthood; and, poor parents are disadvantaged when resources are needed to support their sons and daughters. Economic uncertainty, family dysfunction, and unwelcome migration for jobs among poor families to name only a few social pressures put additional stress on co-residing youth who are entering adulthood. This study recognizes that economic deprivation in the family is a large factor in youth transitions into adulthood, but the this study also underscores the fact that even when confronting poverty, the work and study opportunities that youth acting upon themselves while living at home can advance their long-term economic prospects.

References

- Australian Bureau of Statistics (ABS), 2000. Australian Social Trends, 2000. Catalogue No. 4102.0, Australian Bureau of Statistics, Canberra.
- (2006) Australian Social Trends, 2006. Catalogue No. 4102.0, Australian Bureau of Statistics, Canberra.
- Organization for Economic Co-operation and Development OECD (2009) Jobs for Youth Australia, OECD Publishing, available at: www.oecd.org/publishing/corrigenda.
- (2002) Employment Outlook, OECD Publishing, available at: www.oecd.org/publishing/corrigenda.
- Cobb-Clark, Deborah A. 2008. "Leaving Home: What Economics Has to Say about the Living Arrangements of Young Australians", *Australian Economic Review*, Vol. 41(2), June, pp. 160-176.
- Coviello V. and Boggess, M. 2004. "Cumulative incidence estimation in the presence of competing risks." *The Stata Journal*, 4, Number 2, pp. 103-112.
- Fine, J.P and Gray, R.J. (1999). A proportional hazards model for the subdistribution of a competing risk. *Journal of the American Statistical Association*, 94: 495-509.
- Geskus, R. B. 2000. On the inclusion of prevalent cases in HIV/AIDS natural history studies through a marker-based estimate of time since seroconversion. *Statistics in Medicine*. 19: 1753–1769.
- Gooley, T.A., Leinsering, W., Crowley, J and Storer, B.E. (1999). Estimation of failure probabilities in the presence of competing risks: new representations of old estimators. *Statistics in Medicine*, 18, 695-706.
- Hartley, Robyn, 1993. 'Young Adults Living at Home', *Family Matters*, no. 36, pp. 35-37.
- Kalbfleisch J.D., and Prentice, R.L (2002). *The Statistical Analysis of Failure Time Data* (2nd Ed). Wiley: New York.
- Latouche A, Beyersmann J, Fine J.P. (2007). Letter to the editor: Comments on 'Analysing and interpreting competing risk data'. *Statistics in Medicine*, 26:3676–3680.

- Luteria, Maria and Jenny Bourne, 2000. "Financial Independence and Youth Allowance: Young People's and Parents' Views", paper presented at Family and Futures: Issues in Research 30 and Policy, 7th Australian Institute of Family Studies Conference, Sydney, 24 – 26, July 2000.
- Moffitt, R. 1992. "The Incentive Effects of the U.S. Welfare System: A Review" *Journal of Economic Literature* Vol. 30 (March), pp. 1-61.
- Schneider, Judy, 1999. 'The Increasing Financial Dependency of Young People on Their Parents', SPRC Discussion Paper No. 96, February.
- Watson, N. & Wooden, M. 2002. Assessing the Quality of the HILDA Survey: Wave 1 Data. HILDA Project Technical Paper Series No. 4 /02, Melbourne Institute of Applied Economic and Social Research, University of Melbourne.
- Welfare Rights Centre, 2005. "'A Dog's Breakfast' – Income Support for Families and Young People", unpublished report by the Welfare Rights Centre, Sydney for the National Welfare Rights Network, March 2005.
- Weston, Ruth, Stanton, David, Qu, Lixia and Grace Soriano, 2001. 'Australian Families in Transition', *Family Matters*, No. 60, Spring/Summer, pp. 12-23.
- Whittington, Leslie A. and H. Elizabeth Peters, 1996. 'Economic Incentives for Financial and Residential Independence', *Demography*, vol. 33(1), February, pp. 82-97.
- Wooden, M., Freidin, S. and Watson, N., 'The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1', *Australian Economic Review*, vol. 35, September, pp. 339–348.
- Yeung, W. Jean, and Sandra L. Hofferth. 1998. Family Adaptations to Income and Job Loss in the U.S." *Journal of Family and Economic Issues*. Vol. 19, No. 3.