

An Examination of the Expected Timing of Transitions into Adulthood among Rural Men and Women

Charlotte A. Agger¹, Soo-yong Byun² & Judith L. Meece¹

¹ School of Education, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

² Department of Education Policy Studies, The Pennsylvania State University, State College, Pennsylvania, USA

Correspondence: Charlotte A. Agger, School of Education, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA. E-mail: agger@live.unc.edu

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Abstract

The timing of transitions into adulthood has critical implications for early adulthood development, yet few research studies on this topic exist, particularly involving rural youth. We utilized a nationwide sample of geographically diverse rural youth from 34 rural locations in the United States to investigate adolescents' expected transitions into adulthood. The vast majority of rural men and women planned to get married and become parents, however, women expected earlier transition times into adulthood. Results also indicated a number of individual, family, and community variables related to the expectation of marriage and parenthood and the expected timing of marriage and parenthood. Notably, we found that whereas women were generally more likely than men to plan to get married and become a parent, this observed gender gap decreased as educational aspirations increased.

Keywords: rural youth, expected transition times, gender, aspirations, adulthood

1. Introduction

In many societies, getting married and becoming a parent represent the key markers of entering adulthood (Carr & Kefalas, 2011; Shanahan, 2000). Yet the ages at which adolescents enter into these new roles widely vary and have changed significantly over time. Compared to adolescents in previous decades, individuals today get married and have children at later ages (Furstenberg, 2010; Settersten & Ray, 2010), in part due to changes in gender norms, rising home prices, and the pursuit of increased schooling (McLanahan, 2004; Waters, Carr, & Kefalas, 2011). Researchers have also found demographic characteristics, socioeconomic status, family structure, expectations, and school experiences play a role in the timing of transitions into adulthood (Carr & Kefalas, 2011; Oesterle, Hawkins, Hill, & Bailey, 2010).

Despite a significant body of work on transition times into adulthood, few studies include rural samples and existing work is quite dated, using cohorts that transitioned into adulthood during or before the 1980s (Marini, 1985; Oesterle et al., 2010; Rindfuss, Swicegood, & Rosenfeld, 1987). Because previous work is dated and limited in scope, these explorations do not take into account the drastic socioeconomic changes that many rural communities in the United States experienced over the past three decades (Brown & Schafft, 2011; Carr & Kefalas, 2009; Farmer et al., 2006). These social and economic changes (e.g., the elimination of many low skilled employment opportunities) have likely differentially affected the expectations and transition times into adulthood of rural men and women (Fussell & Furstenberg, 2005; United States Department of Agriculture [USDA], 2013).

In this paper, we addressed gaps in the literature by examining the ages and predictors of expected transitions into adulthood among contemporary rural adolescents. We used a recent national survey of rural high school students, and paid particular focus to (a) gender differences in expected transition times, and (b) how the educational aspirations of rural men and women shape their transition times into adulthood. We focused on gender because it plays a key role in understanding the future expectancies of adulthood among young adults in rural areas (Blackwell & McLaughlin, 1999; Crockett & Beal, 2012; Crockett, Shanahan, & Jackson-Newsom, 2000; Meece, Askew, Agger, Hutchins, & Byun, 2014). Women today hold increasingly significant roles in the

workforce, illustrating significant changes in cultural and social norms. These changes have likely contributed to the increases in rural youth, especially rural young women, who have significantly higher aspirations to attend postsecondary institutions compared to rural men (Meece et al., 2013, 2014). Given the high educational aspirations of rural women, we hypothesized that educational aspirations would differently shape the expected transition times for rural women and men.

It is important to note that the current study examines the *expected* transition times for adulthood among rural adolescents, rather than the *actual* transition times. We acknowledge a potential difference between the expected versus actual timing of transitions into adulthood, however literature suggests that aspirations (Beal & Crockett, 2010) and expectations for timing of transitions into adulthood (Crockett & Beal, 2012) are key factors in predicting the developmental trajectories of adolescents (Greene, 1990). Further, research suggests that aspirations and expectations affect long-term achievement and adaptation into adult roles (Mortimer & Johnson, 1998; Schoon, 2010; Shanahan, 2000).

2. Theoretical Framework

Adolescence is a key developmental period when individuals are able to think about their educational and occupational aspirations in increasingly complex ways and consider how their identities relate to these future plans (Eccles et al., 2003). The current study conceptualized adolescents' aspirations and expectations by drawing on two lines of developmental research. First, this study drew on work rooted in social cognitive theory centered on *aspirations*. According to Bandura (1986) aspirations are cognitive representations of a goal that help direct and organize behaviors and can include educational or occupational hopes or ambitions (Meece et al., 2013, 2014). Second, the current study was supported by literature focused on future-oriented beliefs. Nurmi (1991) describes future-oriented beliefs in terms of three psychological processes; motivation, planning, and evaluation. Adolescents' set goals based on their motives, plan and prepare for those goals, and finally, evaluate the likelihood of attaining those goals (Nurmi, 1991). A synthesis of research has found that the goals that adolescents set are tied to major developmental tasks and that changes in contextual opportunities are the foundation for future-oriented beliefs (Nurmi, 1991).

Collectively, aspirations and future-oriented beliefs are important to study because they shape outcomes in early adulthood and beyond, predicting educational (Ou & Reynolds, 2008) and occupational attainment (Armstrong & Crombie, 2000) and successful transitions into early adulthood (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Beal & Crockett, 2010; Eccles, Brown, & Templeton, 2008; Elder & Conger, 2000; Schneider & Stevenson, 1999). In turn, transitions into adult roles shape one's life trajectory and can even preclude other goals, for instance, entry into parenthood can delay pursuing higher education or professional goals (Schoon, Martin, & Ross, 2007; Upchurch, 1993). Using principles from two developmental lines of research, the current study investigated how individual, family, and community characteristics relate to transition times among rural youth. In the section that follows, we review the extant literature on the timing of adulthood transitions and their predictors, focusing on rural youth.

3. Background Literature

Both demographic characteristics (e.g., gender) and contextual factors (e.g., socioeconomic status and family structure) shape the developmental transitions of rural youth (Carr & Kefalas, 2011; Oesterle et al., 2010; Schoon, 2010).

3.1 Individual Characteristics

Rural young women tend to marry at a younger age compared to nonrural women (McLaughlin, Lichter, & Johnston, 1993) and tend to anticipate younger ages of school completion, marriage, and parenthood compared to young men (Crockett & Bingham, 2000). Work by Crockett and Bingham (2000) found that girls expected to get married at 22.75 and enter parenthood at 24.44. Another study from a nationwide sample of youth from the 1980s reported that the expected median ages for marriage were 23.3 for women and 26.5 for men; and for parenthood it was 23.6 for women only (Greene, 1990). Although research on rural youth has found that rural young women have significantly higher educational aspirations than rural young men (Chenoweth & Galliher, 2004; Elder & Conger, 2000; Meece et al., 2014), rural women continue to marry at younger ages than their male peers.

Another important individual-level influence is ethnicity. Currently, almost a third of rural students are children of color (Johnson, Showalter, Klein, & Lester, 2014) and the percentage of rural minority youth, particularly Latino youth, continues to increase (Donato, Tolbert, Nucci, & Kawano, 2007; Johnson, 2006; Johnson &

Strange, 2009; Lichter & Brown, 2011). Previous work has found that specific timing (Bynner, 2005) and expectations for future educational plans (Turcios-Cotto & Milan, 2013) can significantly vary across cultural, racial, and social groups (Settersten & Ray, 2010). Latino and black youth are more likely to make earlier transitions into parenthood and black youth are more likely to get married at earlier ages compared to their white and Asian Americans peers (Macmillan & Copher, 2005; Pew Latino Center Study, 2009; Schoen, Landale, Daniels, & Cheng, 2009). These findings may also apply to ethnic minority youth living in rural contexts; more systematic investigations are needed to confirm these relations.

3.2 Family Characteristics

Family characteristics are key in shaping the aspirations and expectations of rural youth. Rural youth are more likely than their urban peers to live in two-parent families and these youth report higher educational aspirations and attainment than youth from single parent or other types of non-traditional families (Byun, Irvin, & Meece, 2012a; Byun, Meece, & Irvin, 2012b). In addition, belonging to families in which many immediate and extended family members have attended college increases the likelihood that students will report plans to attend college themselves (Chenoweth & Galliher, 2004). One potential inhibiting factor related to rural families is their tendency to move locations often. Johnson et al. (2014) reported that one in eight rural students have changed residence in the previous 12 months. This issue of mobility can interfere with consistency in schooling and it is also associated with lower academic achievement (Johnson et al., 2014).

3.3 Community Characteristics

Existing research on transition times of rural youth has used geographically confined samples, which do not take into account geographic diversity within rural communities. However, geographic considerations, such as rural isolation, have important implications for the long-term aspirations of rural adolescents. Spohn, Crowther, and Lykins (1992) found that rural isolation affected the educational attainment of Appalachian youth largely through institutional barriers (e.g., lack of information about financial details). Other research has found that geographic proximity to college increases the likelihood that students will apply to college (Turley, 2009), highlighting the importance of geography in college pursuit.

4. Recent Socioeconomic Transformations in Rural Communities

Changes in economic conditions have created the need for more research on the contemporary transition times of rural youth (Brown & Schafft, 2011; Carr & Kefalas, 2009; Farmer et al., 2006). Manufacturing and agriculture in rural areas has steadily declined and a more service-oriented industry has arisen, offering fewer stable employment opportunities to rural residents (McLaughlin & Coleman-Jensen, 2008). These changes in the labor market have led to widespread poverty and challenges in gaining and sustaining employment in some rural communities. In fact, more than two in five young people in rural areas live in poverty (Johnson et al., 2014). Conditions of poverty directly and indirectly influence adolescent development and family planning and also disproportionately affect minority residents, often having intergenerational consequences (Lichter & Johnson, 2007; Provasnik et al., 2007).

For decades, rural economies were based on agricultural jobs that involved manual and service labor, and were primarily filled by men. Even recently, research has found that rural areas offered fewer employment opportunities for women compared to men (Johnson, Elder, & Stern, 2005). Today, temporary service industry jobs, often with unstandardized hours, comprise a large majority of employment options available to young adults in rural areas (Gibbs, Kusmin, & Cromartie, 2005; McLaughlin & Coleman-Jensen, 2008). These occupational opportunities may have contributed to the significant rise in rural youth, especially women, who aspire to attend postsecondary institutions outside of their home community (Meece et al., 2013; Snyder & Dillow, 2010).

Social conditions in the community also have the potential to either hinder or promote rural youths' aspirations for adulthood and expectations for transition times. Social conditions hinder aspirations and subsequent transition times when social and cultural attitudes and community investments do not promote the attainment of higher education (Elder & Conger, 2000; Roscigno & Crowley, 2001). When many community members do not hold advanced education, as is the case with many rural areas, there is high unemployment (Johnson et al., 2014) and lack of occupational role models for younger generations. On the other hand, strong connections between schools and parents can also promote rural adolescents' aspirations for educational or occupational attainment. Rural youth live in areas high in social capital with strong shared values and connections between families, schools, and religious institutions (Byun, Meece, Irvin, & Hutchins, 2012c; Crockett et al., 2000; Elder &

Conger, 2000). These connections are critical in shaping educational and residential aspirations for adulthood (Byun et al., 2012c; Crockett et al., 2000; Elder & Conger, 2000; Johnson et al., 2005; Meece et al., 2014; Petrin, Farmer, Meece, & Byun, 2011).

The preceding discussion highlights recent changes in the economic landscape, social attitudes, and educational aspirations of rural youth. We hypothesized that these shifts will play a prominent role in determining the timing of adulthood transitions among contemporary rural youth. Further, we hypothesized that educational aspirations will moderate the relation between gender and expected transition times. In other words, whereas women tended to marry earlier according to research conducted several decades ago (McLaughlin et al., 1993), this may not hold true today given the rising postsecondary aspirations of and the limited employment opportunities for women in rural locales.

5. Aims of the Current Study

The current study was guided by several goals. The first goal was to generate descriptive summaries of the expected timing of transition into adulthood among contemporary rural youth. The second goal was to explore how various individual, family, and community variables related to the expected timing of transition, with a particular focus on gender. The final goal was to examine how educational aspirations shape gender differences in the expected timing of transition into adulthood.

6. Data and Methods

6.1 Data and Sample

The current study is part of a broader national investigation to examine students' school adjustment and postsecondary aspirations in rural high schools in the United States. The original sampling frame was limited to public rural high schools in all 50 states that were currently in operation. Rural schools were identified using the metro-centric locale codes developed by the U.S. Census Bureau for the National Center for Education Statistics (NCES) with a basis on schools' geographic location or proximity to an urbanized area as well as on population size and density (NCES, 2011). The rural schools in the original sample were further classified into four subtypes based on locale code designations (i.e., small town, rural fringe, rural distant, and rural remote), Rural Education Achievement Program, Small Rural School Achievement (SRSL) Program, and Rural and Low-Income Schools (RLIS) Program with a special emphasis on SRSL and RLIS. The schools in this sample were also classified into four geographic regions (i.e., the Midwest, Northeast, South, and West) as established by the U.S. Census Bureau.

Using this stratified sampling, 114 schools were randomly selected and contacted. Of these, 73 schools (11% from small town and 89% from rural locales) across 34 states agreed to participate in this study. At the time of data collection, 16,295 adolescents in grades 9-12 were enrolled at these 73 study schools, and 8,754 adolescents took part in the study by completing a survey. The overall participation rate was 53.8%. However, one school in the study had an extremely low participation rate (167/1,883). Removing this school from the calculation produces an overall participation rate of 59.6%. In addition, the study included 667 teachers (59.5% female and 40.5% male) who completed surveys about themselves and students in the study.

For the present investigation, we restricted our analyses to those adolescents who provided valid answers to the survey questions (see below) regarding expectations for marriage and parenthood and who attended schools where the Common Core of Data were available. In addition, we excluded Asian American adolescents due to small sample sizes (less than 1% of the total sample). The final sample consisted of 7,298 adolescents, including 53% female, 67% white, 7% black, 10% Latino/a, 4% Native American, and 12% multiracial (Note 1).

6.2 Measures

6.2.1 Dependent Variables

The dependent variables in the current study were expected timing of first marriage and parenthood. Data for these two gateway variables were gathered via questionnaire items. For example, respondents were prompted: "Do you plan to get married? If yes, at what age do you plan to do this?" Response options provided were: by age 16-18; by age 19-21; by age 22-24; by age 25-27; by age 28-30; after age 30. Based on this question, we created two indicators in terms of (a) whether adolescents planned to get married or not (no=0 versus yes=1) and (b) the expected age of first marriage only among those who planned to get married. Likewise, we created two indicators in terms of (a) whether a respondent planned to become a parent (no=0 versus yes=1) and (b) the expected age of parenthood only among those who planned to become a parent.

6.2.2 Independent Variables

Based on the literature reviewed above, we included a variety of individual, family, and community variables in the analysis of the predictors of the timing of transitions into adulthood of rural youth. For individual characteristic variables the following were included (a) gender, (b) race/ethnicity, (c) grade level, (d) educational aspirations (years of education), (e) academic achievement (a self-reported measure), (f) residential aspirations, and (g) residential stability (years in the current community). Gender and race/ethnicity were measured by asking respondents to indicate their gender (female=1, male=0) and racial/ethnic background (e.g., white, black, Latino, or Native American). Grade level was measured through asking respondents to report their grade level (1=9th, 2=10th, 3=11th, and 4=12th). Educational aspirations were measured through asking participants how far in school they would most like to go. Original response options included the following: 1=less than high school graduation; 2=high school graduation or GED only; 3=attend or complete a two-year school course in a community college, vocational, or trade school; 4=attend college but not complete a four-year degree; 5=graduate from college; 6=obtain a master's degree or equivalent; 7=obtain a Ph.D., M.D., or other advanced degree; and 8=don't know. This variable was transformed into years of schooling (e.g., 1=11, 7=22), with the exclusion of the "don't know" category. We treated the "don't know" category as missing data and replaced it using multiple imputations. Academic achievement was measured through asking adolescents to report their grades. Response options ranged from 1=below D's to 8=Mostly A's. Residential aspirations were measured through asking adolescents to report where they would like to live at age 30. Response options included: 1=home state, 2=another state, 3=have not thought about it or decided. Residential stability was measured through asking participants to report how long they had lived in their current community. Response options included: 1=less than 5 years, 2=5-10 years, 3=more than 10 years.

For family background variables the following were included (a) parental education, (b) family economic hardship, and (c) intact family. Parent education was measured through adolescents' reporting on the highest level of their parents' education. Original response options included the following: 1=less than high school graduation; 2=high school graduation or GED only; 3=attend or complete a two-year school course in a community college, vocational, or trade school; 4=attend college but not complete a four-year degree; 5=graduate from college; 6=obtain a master's degree or equivalent; 7=obtain a Ph.D., M.D., or other advanced degree; and 8=don't know. We examined both parents' education levels and included whichever parent had the highest level of education. We transformed this variable into years of schooling, with the exclusion of the "don't know" category. We treated the "don't know" category as missing data and replaced it using multiple imputations. Family economic hardship was measured through three items that asked adolescents about constraints that they felt related to family economic challenges. Questions included, "There is not enough money in my family to pay bills"; "We don't have enough money in my family for things that are important"; and "We don't have enough money to buy things my family needs or wants". The response options included five-point scales (never to all of the time). The reliability statistic was .879. Intact family was measured by participants' indication of whom they currently lived with (1=both mother and father, 0=other). Number of siblings was measured through participants' reporting the number of their brothers and sisters.

For variables that pertained to economic and geographic conditions in the rural community, the following were included (a) isolation of rural community (i.e., town/fringe or distant [reference category], town/remote, rural/fringe or distance, rural/remote), (b) percent of the population aged 25 or older with college degrees, and (c) poverty rate. Isolation was measured through locale codes. Original codes were 31=rural, fringe, 32=rural, distant, 33=rural remote, 41=town, fringe, 42=town, distant, and 43=town, remote. Categories were collapsed into 1=town, fringe or distant, 2=town, remote, 3=rural, fringe or distant, and 4=rural, remote. Both percent of the population aged 25 or older with a college degree and poverty rate were measured using information from 2004-2005 NCES Common Core of Data. Appendix Table A presents descriptive statistics for our independent variables.

6.3 Analytic Strategies

First, we performed descriptive statistics for the expectations for first marriage and parenthood as well as expected ages of first marriage and parenthood by the pooled sample and gender. Second, to examine the expectations for first marriage and parenthood, we conducted logistic regression analyses as these items were measured by dichotomous variables (Long & Freese, 2006). In analyzing the expected ages of first marriage and parenthood, we conducted interval regression analyses because the outcome variables contained both interval censoring and right-censoring (Long & Freese, 2006). When we ran these multivariate analyses, we estimated two models. The first model included all individual, family, and community variables to examine how these

variables related to the expectations for and expected times of first marriage and parenthood. The second model included the interaction term between gender and educational aspirations to examine whether gender differences in the expectations and expected times for first marriage and parenthood differed by educational aspirations.

We replaced missing data only for the independent variables using multiple imputations (Schafer & Graham, 2002) (see Appendix Table A). Following recommendations set forth by von Hippel (2007), all of the dependent and independent variables were included so that missing values for the independent variables were predicted using existing values from the other variables. Given literature suggesting that accurate results typically can be obtained from two to ten imputations (Rubin, 1987; von Hippel, 2005), we generated ten imputed datasets. In each imputed dataset, each missing value was replaced with a plausible random value drawn on the observed values of all of the variables (von Hippel, 2005). We used the Stata ICE module for multiple imputations and pooled estimates from the ten datasets with the MIM prefix in Stata. To address the nested nature of data (i.e., students nested within schools), we employed cluster robust standard errors, which downwardly adjust inflated standard errors resulting from violations of the independent errors assumption due to clustering thereby reducing the likelihood of making a Type I error (Rogers, 1993).

7. Results

7.1 Expectations for and Expected Timing of Transitions

Table 1. Distribution of expectation of first marriage and parenthood by gender and race/ethnicity

	Total	Gender	
		Female	Male
<i>Marriage</i>			
Whether a student planned to get married or not (N=7,298)	0.94	0.95	0.93
If planned, at what age? (N=6,707)			
By age 16-18	0.02	0.03	0.01
By age 19-21	0.12	0.14	0.09
By age 22-24	0.38	0.42	0.34
By age 25-27	0.34	0.31	0.37
By age 28-30	0.11	0.08	0.14
After age 30	0.03	0.02	0.05
<i>Parenthood</i>			
Whether a student planned to become a parent (N=7,298)	0.91	0.91	0.90
If planned, at what age? (N=6,445)			
By age 16-18	0.03	0.03	0.02
By age 19-21	0.05	0.05	0.05
By age 22-24	0.21	0.25	0.18
By age 25-27	0.42	0.44	0.40
By age 28-30	0.21	0.19	0.24
After age 30	0.08	0.04	0.11

Note. Numbers are proportions.

Table 1 presents the distribution of expectations for and expected timing of transitions into adulthood in terms of first marriage and parenthood by gender. Given the interval scale of the variables for expected timing of transitions into adulthood, we also present both lower and upper bounds for expected ages of first marriage and parenthood by gender in Table 2. Ninety-four percent of adolescents indicated that they planned to get married. Ninety-five percent of female participants and 93% of male participants indicated that they planned to get married. Among participants who indicated that they planned to get married, 38% indicated that they planned to

get married by age 22-24. Among female participants, 42% indicated that they planned to get married by age 22-24. Thirty-seven percent of male participants, on the other hand, indicated that they planned to get married by age 25-27. With respect to parenthood, 91% of the participants indicated that they planned to become a parent. Ninety-one percent of female participants and 90% of male participants indicated that they planned to become a parent. Among those participants who indicated that they planned to become a parent, 42% indicated that they planned to become a parent by age 25-27. Among women, 44% indicated that they planned to become a parent by age 25-27. The corresponding percentage among men was 40%.

When it came to expected ages of first marriage, the lower bound for expected age was 23.96 for men and 22.97 for women, while the upper bound for expected age was 25.65 for men and 24.85 for women. For expected ages of parenthood, the lower bound for expected age was 25.31 for men and 24.45 for women, while the upper bound for expected age was 26.70 for men and 26.20 for women. In sum, generally speaking, while the majority of rural youth planned to get married and become a parent, expected timing of transitions tended to be earlier among women compared to their male counterparts. In the section that follows, we examine predictors of the expectations of transition into adulthood before examining predictors of expected transition times into adulthood.

Table 2. Expected ages of first marriage and parenthood by gender

	Expected Age			
	Lower interval age		Upper interval age	
	M	SD	M	SD
Marriage (N=6,707)				
Male	23.96	2.98	25.65	2.71
Female	22.97	2.84	24.85	2.70
Total	23.44	2.94	25.22	2.74
Parenthood (N=6,445)				
Male	25.31	3.13	26.70	2.81
Female	24.45	3.01	26.20	2.83
Total	24.85	3.10	26.43	2.83

Note. Only those students who indicated that they had planned to get married or to become a parent are included.

7.2 Predictors of the Expectation of Transition into Adulthood

7.2.1 Expectation of Marriage

Table 3 presents results from the logistic regression model predicting the likelihood of a student planning to get married. Recall that Model 1 included all individual, family, and community variables and Model 2 additionally included the interaction term between gender and educational aspirations.

Model 1 showed that there were no significant gender differences in the likelihood of the expectation for marriage, yet there were significant ethnic differences, as black participants were less likely than white participants to expect to get married. Grade level was also a significant predictor: 10th, 11th, 12th graders were less likely than 9th graders to expect to get married. Higher educational aspirations, higher academic achievement, and growing up in an intact family were associated with the increased likelihood of planning to get married. On the other hand, participants who hoped to live in another state when they were 30 years old were less likely to plan to get married compared to participants who wanted to live in their home state. Also, a higher level of family economic hardship and living in a community with a relatively higher poverty rate was associated with the decreased likelihood of planning to get married. In Model 2, the interaction term between gender and educational aspirations was negative and significant, suggesting that while overall female participants were more likely than male participants to plan to get married, this gender gap reduced as educational aspirations increased.

Table 3. Logistic regression model predicating the likelihood of planning to get married

Variable	1			2		
	Coef.	SE	OR	Coef.	SE	OR
<i>Individual characteristics</i>						
Female (vs. male)	0.149	0.113	1.160	2.814 **	0.859	16.677
Race/ethnicity (White omitted)						
Black	-0.564 *	0.262	0.569	-0.598 *	0.267	0.550
Hispanic	-0.168	0.160	0.846	-0.195	0.162	0.823
Native	-0.138	0.357	0.871	-0.135	0.361	0.874
Multiracial	-0.073	0.130	0.929	-0.068	0.130	0.934
Grade (9th grade omitted)						
10th	-0.388 **	0.138	0.679	-0.379 **	0.140	0.684
11th	-0.422 **	0.131	0.656	-0.416 **	0.131	0.660
12th	-0.447 **	0.150	0.640	-0.446 **	0.152	0.640
Educational aspirations	0.096 **	0.031	1.100	0.180 ***	0.046	1.197
Academic achievement	0.126 **	0.041	1.134	0.119 **	0.041	1.126
Residential aspirations (home state omitted)						
Another state	-0.525 ***	0.147	0.591	-0.547 ***	0.148	0.579
Have not thought or decided	-0.189	0.144	0.828	-0.208	0.145	0.812
Residential stability (Less than 5 years omitted)						
5-10 years	0.173	0.152	1.188	0.176	0.151	1.192
More than 10 years	0.321 *	0.143	1.379	0.340 *	0.142	1.405
<i>Family characteristics</i>						
Parental education	0.020	0.027	1.020	0.019	0.027	1.019
Family economic hardship	-0.100 *	0.049	0.905	-0.101 *	0.049	0.904
Intact family	0.608 ***	0.117	1.837	0.597 ***	0.118	1.817
<i>Community characteristics</i>						
Isolation (Town, fringe or distant omitted)						
Town, remote	-0.355	0.332	0.701	-0.364	0.319	0.695
Rural, fringe or distant	-0.185	0.338	0.831	-0.201	0.324	0.818
Rural, remote	-0.219	0.321	0.803	-0.226	0.308	0.797
% of population aged 25 or older with college degrees	-0.014	0.012	0.987	-0.013	0.012	0.987
Poverty rate	-0.033 ***	0.010	0.968	-0.032 **	0.010	0.969
Female X Educational aspirations				-0.165 **	0.053	0.848
Constant	1.384 *	0.656	—	0.134	0.832	—
Pseudo (McFadden's) R-squared ^a		0.022			0.072	
N		7,298			7,298	

Note. Standard errors are corrected for clustering within schools.

a. Pseudo R-squared is based on one complete and imputed data set.

***p<.001, **p<.01, *p<.05 (two-tailed tests).

7.2.2 Expectation of Parenthood

Table 4 presents results from the logistic regression model predicting the likelihood of a student planning to become a parent. Model 1 showed, unlike for the expectation of marriage, only a few variables were significant predictors of the expectation of parenthood. Rural youth who wanted to live in another state or had not thought

about it/decided were significantly less likely to plan to become a parent, compared to their counterparts who wanted to live in home state. Adolescents from intact families were significantly more likely to plan to become a parent than adolescents from non-intact families. Of interest, when we included the interaction term between gender and educational aspirations in Model 2, both gender and educational aspirations became positive and significant, while the interaction term was negative and significant. This suggests that although female participants were generally more likely than male participants to plan to become a parent, this observed gender gap reduced as educational aspirations increased. This result was consistent with results for the expectation of marriage.

Table 4. Logistic regression model predicating the likelihood of planning to become a parent

Variable	1			2		
	Coef.	SE	OR	Coef.	SE	OR
<i>Individual characteristics</i>						
Female (vs. male)	0.161	0.084	1.175	2.726 ***	0.684	15.272
Race/ethnicity (White omitted)						
Black	0.048	0.226	1.049	0.025	0.229	1.026
Hispanic	0.149	0.223	1.161	0.127	0.225	1.136
Native	-0.067	0.138	0.936	-0.061	0.139	0.941
Multiracial	-0.086	0.141	0.918	-0.080	0.140	0.923
Grade (9th grade omitted)						
10th	-0.116	0.119	0.891	-0.107	0.121	0.899
11th	-0.103	0.103	0.902	-0.099	0.103	0.905
12th	-0.103	0.157	0.902	-0.102	0.158	0.903
Educational aspirations	0.034	0.022	1.035	0.114 ***	0.032	1.120
Academic achievement	0.069	0.036	1.071	0.061	0.036	1.063
Residential aspirations (home state omitted)						
Another state	-0.494 ***	0.094	0.610	-0.513 ***	0.096	0.599
Have not thought or decided	-0.295 **	0.107	0.745	-0.312 **	0.108	0.732
Residential stability (Less than 5 years omitted)						
5-10 years	-0.095	0.133	0.909	-0.097	0.131	0.907
More than 10 years	0.196	0.122	1.216	0.210	0.121	1.233
<i>Family characteristics</i>						
Parental education	0.028	0.019	1.029	0.028	0.019	1.028
Family economic hardship	-0.051	0.041	0.951	-0.052	0.041	0.950
Intact family	0.242 **	0.082	1.274	0.230 **	0.080	1.258
<i>Community characteristics</i>						
Isolation (Town, fringe or distant omitted)						
Town, remote	0.126	0.115	1.134	0.119	0.115	1.127
Rural, fringe or distant	0.201	0.139	1.223	0.185	0.140	1.203
Rural, remote	0.236	0.130	1.266	0.228	0.132	1.256
% of population aged 25 or older with college degrees	-0.009	0.009	0.991	-0.009	0.009	0.991
Poverty rate	-0.018	0.009	0.982	-0.018	0.009	0.982
Female X Educational aspirations				-0.155 ***	0.041	0.856

Constant	1.300 *	0.523	—	0.107	0.567	—
Pseudo (McFadden's) R-squared ^a		0.022			0.027	
N		7,298			7,298	

Note. Standard errors are corrected for clustering within schools.

a. Pseudo R-squared is based on one complete and imputed data set.

***p<.001, **p<.01, *p<.05 (two-tailed tests).

7.3 Predictors of Expected Times of Transition into Adulthood

Analyses that focused on the expected transition times into adulthood were restricted to those adolescents who planned to get married and to become a parent. Model 1 included all individual, family, and community variables and Model 2 additionally included the interaction term between gender and educational aspirations.

7.3.1 Expected Times of Marriage

Table 5 presents results from the interval regression model predicting expected ages of first marriage. Model 1 showed that there were significant gender differences in expected ages of first marriage, even after controlling for other variables.

Table 5. Interval regression model predicating the expected timing of marriage

Variable	1		2	
	Coef.	SE	Coef.	SE
<i>Individual characteristics</i>				
Female (vs. male)	-1.193 ***	0.086	-2.382 ***	0.572
Race/ethnicity (White omitted)				
Black	1.530 ***	0.192	1.535 ***	0.191
Hispanic	-0.175	0.218	-0.165	0.218
Native	-0.320	0.183	-0.323	0.183
Multiracial	0.327 *	0.153	0.325 *	0.154
Grade (9th grade omitted)				
10th	0.172	0.097	0.169	0.097
11th	-0.029	0.090	-0.030	0.089
12th	0.090	0.123	0.091	0.122
Educational aspirations	0.181 ***	0.017	0.143 ***	0.025
Academic achievement	0.086 **	0.030	0.090 **	0.030
Residential aspirations (home state omitted)				
Another state	0.333 **	0.102	0.341 **	0.102
Have not thought or decided	0.298 **	0.090	0.305 **	0.091
Residential stability (Less than 5 years omitted)				
5-10 years	0.040	0.137	0.044	0.136
More than 10 years	0.012	0.128	0.008	0.129
<i>Family characteristics</i>				
Parental education	0.015	0.015	0.016	0.015
Family economic hardship	-0.135 ***	0.038	-0.134 ***	0.038
Intact family	-0.222 *	0.098	-0.217 *	0.098

<i>Community characteristics</i>				
Isolation (Town, fringe or distant omitted)				
Town, remote	-0.417	0.268	-0.415	0.264
Rural, fringe or distant	-0.353	0.277	-0.345	0.272
Rural, remote	-0.306	0.234	-0.302	0.229
% of population aged 25 or older with college degrees	0.025	0.014	0.025	0.014
Poverty rate	0.005	0.015	0.004	0.015
Female X Educational aspirations			0.071 *	0.034
Constant	21.048 ***	0.619	21.635 ***	0.674
Pseudo (McFadden's) R-squared ^a	0.025		0.025	
N	6,707		6,707	

Note. Standard errors are corrected for clustering within schools.

a. Pseudo R-squared is based on one complete and imputed data set.

***p<.001, **p<.01, *p<.05 (two-tailed tests).

On average, female participants planned to get married at earlier ages than male participants by 1.2 years. There were also significant racial/ethnic differences with black and multiracial adolescents reporting much later ages for first marriage than their white peers. Higher educational aspirations were significantly related to later ages for first marriage; a one year increase in the year of education that participants wanted to pursue was associated with .181 years of delay for first marriage. Higher academic achievement was also significantly related to later ages for first marriage. Adolescents who wanted to live in another state or had not thought about it/decided reported significantly later ages for first marriage than those who wanted to live in their home state. A higher level of family economic hardship was associated with earlier ages for first marriage. Adolescents from intact families reported significantly earlier ages for first marriage than those from non-intact families. No community variables were significant predictors. In Model 2, the interaction term between gender and educational aspirations was positive and significant. This result suggests that while overall female participants tended to report significantly earlier ages for first marriage than male participants, this gender gap was significantly smaller among those adolescents who had higher educational aspirations than those who had lower educational aspirations. Figure 1 depicts this varying relationship between gender and expected ages of first marriage, depending on the level of educational aspirations. For this figure, we calculated expected ages of first marriage as predicted by Model 2, and set all other variables to zero. As shown in Figure 1, the gender gap in expected age of first marriage was much smaller among participants who reported higher educational aspirations, compared participants who reported lower educational aspirations.

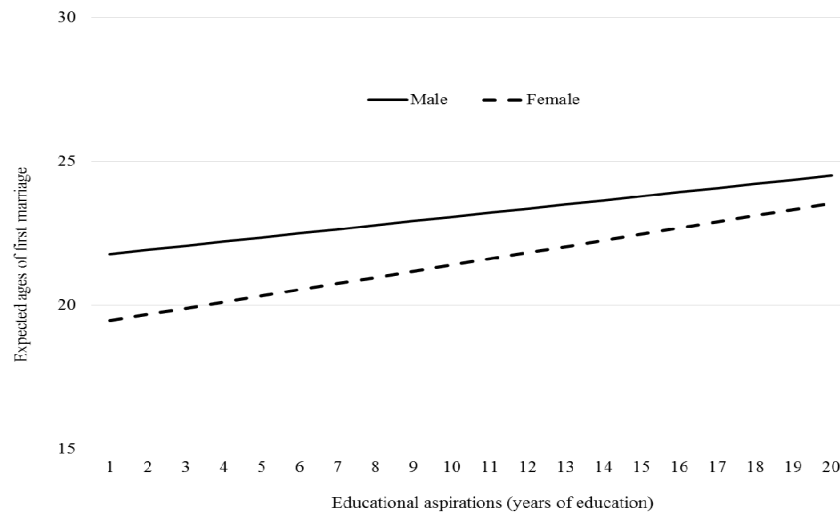


Figure 1. The Varying relationship between gender and expected ages of first marriage

Note. Predicted expected ages of first married were based on Model 2 in Table 4. We set zero for all other variables.

7.3.2 Expectation of Parenthood

Table 6 presents results from the interval regression model predicting expected ages of parenthood. Model 1 showed that there were significant gender differences in expected ages of parenthood, even after controlling for other variables. Specifically, female participants planned to become a parent at earlier ages than their male peers by approximately 1.2 years. There were significant ethnic differences with Hispanic participants reporting much earlier ages for parenthood than white participants. Similar to results for first marriage, higher educational aspirations were significantly related to later ages for parenthood. That is, a one-year increase in the year of education that participants wanted to pursue was associated with 2.35 years of delay for parenthood. Higher academic achievement was also significantly related to later ages for parenthood and higher level of family economic hardship was associated with earlier ages for parenthood. Again, no community variables were significant predictors. Unlike for first marriage, in Model 2, the interaction term between gender and educational aspirations was not statistically significant.

Table 6. Interval regression model predicating the expected timing of parenthood

Variable	1		2	
	Coef.	SE	Coef.	SE
<i>Individual characteristics</i>				
Female (vs. male)	-1.180 ***	0.103	-2.323 **	0.693
Race/ethnicity (White omitted)				
Black	-0.473	0.365	-0.466	0.365
Hispanic	-1.058 ***	0.179	-1.049 ***	0.180
Native	-0.322	0.229	-0.326	0.227
Multiracial	0.149	0.126	0.148	0.127
Grade (9th grade omitted)				
10th	-0.003	0.113	-0.006	0.114
11th	-0.023	0.105	-0.023	0.105
12th	-0.028	0.134	-0.027	0.133
Educational aspirations	0.235 ***	0.022	0.198 ***	0.031

Academic achievement	0.161 ***	0.034	0.165 ***	0.034
Residential aspirations (home state omitted)				
Another state	0.320 **	0.099	0.328 **	0.099
Have not thought or decided	0.378 **	0.110	0.385 ***	0.109
Residential stability (Less than 5 years omitted)				
5-10 years	0.163	0.135	0.168	0.135
More than 10 years	-0.015	0.125	-0.017	0.125
<i>Family characteristics</i>				
Parental education	0.001	0.017	0.001	0.017
Family economic hardship	-0.106 *	0.046	-0.104 *	0.046
Intact family	0.070	0.099	0.074	0.099
<i>Community characteristics</i>				
Isolation (Town, fringe or distant omitted)				
Town, remote	-0.456	0.261	-0.455	0.258
Rural, fringe or distant	-0.222	0.220	-0.215	0.214
Rural, remote	-0.006	0.179	-0.003	0.173
% of population aged 25 or older with college degrees	0.017	0.010	0.017	0.010
Poverty rate	-0.015	0.010	-0.016	0.010
Female X Educational aspirations			0.068	0.042
Constant	21.705 ***	0.578	22.273 ***	0.710
Pseudo (McFadden's) R-squared ^a	0.027		0.027	
N	6,445		6,445	

Note. Standard errors are corrected for clustering within schools.

a. Pseudo R-squared is based on one complete and imputed data set.

***p<.001, **p<.01, *p<.05 (two-tailed tests).

8. Discussion

The timing of major adulthood transitions has critical developmental implications, yet few research studies on this topic specifically focus on rural youth. The current study addressed this gap in the literature and contributes to the growing research on transition times of rural adolescents in several ways. First, the sample of this study included a large, diverse, and contemporary pool of rural men and women. Second, this paper examined both gender- and ethnicity-related differences in the expected timing of transitions into adulthood. Third, the study included community predictors unique to rural areas, which are largely absent from previous studies on transition times of rural youth. Below we highlight several key findings.

8.1 Individual Characteristics and Adulthood Transitions

8.1.1 Gender

Study results are consistent with previous research on gender and timing of transitions into adulthood (Crockett & Beal, 2012; Crockett & Bingham, 2000; Greene, 1990; Marini, 1985; Schoon, 2010), which has found that women expect earlier ages of transition into marriage and parenthood roles. Compared to extant work that used both rural and national samples (Greene, 1990; Crockett & Bingham, 2000), results of the current paper find relatively similar expected ages of marriage and parenthood. However, compared to previous studies, women in our sample expected slightly older ages of entering parenthood, which aligns with current trends concerning the postponement of marriage and parenthood (Furstenberg, 2010; Settersten & Ray, 2010).

8.1.2 Educational Aspirations

In line with research on educational aspirations (e.g., Byun et al., 2012a), and as exemplified by the results of the current paper, educational aspirations were key in guiding the pathways into adulthood of rural youth. Despite the fact that most rural men and women expected to get married and enter parenthood, their expectations were also heavily shaped by educational aspirations. We found that while women were generally more likely than men to plan to get married and become a parent, this observed gender gap reduced as educational aspirations increased. This interaction was consistent throughout all analyses except in predicting expected timing of parenthood. The strong influence of educational aspirations especially among rural women demonstrates the powerful role of human agency in shaping developmental outcomes (Eccles, 2008; Elder, 1998). In addition, the moderating influence of educational aspirations may reflect how rural women perceive relatively few occupational options in their home communities (Johnson et al., 2005), prompting them to make decisions about pursuing educational and professional goals in relation to marriage and parenthood goals. The perception of few career options, along with increases in the postsecondary aspirations of rural women in recent years (Meece et al., 2013), align with our findings and suggest that educational aspirations play an important role in adulthood transitions such as the expectations for and timing of marriage and parenthood. These findings may also reflect broader changes in the social attitudes and norms surrounding gender and employment among rural community members.

8.1.3 Ethnicity

Results of this study align with previous work that shows how specific timing and expectations for future educational plans fluctuate depending on culture, gender, and ethnicity (Bynner, 2005; Settersten & Ray, 2010; Turcios-Cotto & Milan, 2013). The current study extends this existing work by exploring the predictors of expected transition times into adulthood of a diverse subsample of rural youth. Key findings showed that black participants were less likely than white participants to expect to get married and black youth reported much later ages for first marriage than white youth. These findings suggest nuanced differences in the expectation of adulthood transitions across adolescents of different ethnicities; however, more research is needed to confirm ethnicity-related differences in the expected transition times of rural youth.

8.1.4 Residential Aspirations

Our results also showed that the aspiration to live away from home was closely linked to expected adulthood transitions. Adolescents who wanted to live in another state when they were 30 years old were less likely to plan to get married and expected later ages for their first marriage. Additionally, rural youth who wanted to live in another state or had not thought about it/decided were significantly less likely to plan to become a parent and expected later ages for becoming a parent. These findings might reflect the desire to delay marriage and family in pursuit of higher education outside of one's home communality (Furstenberg, 2010; Hektner, 1995; Settersten & Ray, 2010). These results could also be tied to feelings of rural residential attachment, which would align with work by Johnson et al. (2005), who found that rural youth who are less residentially attached tend to hold higher educational expectations. Our findings extend work by Johnson et al. (2005) in exploring how residential aspirations are linked to other development markers (i.e., expectations of marriage and parenthood).

8.2 Family Characteristics and Adulthood Transitions

Our study also highlights how family contributions, in addition to individual influences, relate to the developmental outcomes of rural youth. Rural youth who perceived higher levels of family economic hardship reported significantly earlier ages for marriage and parenthood (thus obfuscating educational pursuits), compared to their counterparts who perceived lower levels of family economic hardship. These findings may reflect how conditions of poverty can have long-term negative consequences on development (McLoyd, 1998) and can result in lower earnings and less educational attainment into adulthood (Corcoran, 1995; Heflin & Pattillo, 2006). Our study highlights the important role of family background in the transition times of rural youth, and underscore how family background can serve as a barrier and facilitator for transitions into adulthood in rural settings.

8.3 Community Characteristics and Adulthood Transitions

Our study found limited evidence suggesting that community characteristics are associated with the transition times of rural youth. Only the poverty level of the community was significantly associated with the likelihood of planning to marry, as youth living in communities with a higher poverty rate were less likely to plan to get married. However, the role of community characteristics in shaping the transition times of rural youth should not be underestimated for several reasons. First, the current study considered only a limited number of community

variables. Second, although we conceptualized residential aspirations as individual influences in the current study, these beliefs may be reflective of community influences as well, such as the availability of employment opportunities. More research is needed to determine how these residential aspirations are tied to community influences.

9. Study Limitations, Future Research, and Implications

Despite using a nationwide and diverse sample of rural sample, the current study could not include an exhaustive list of ethnicity, family, or economic variables. Many of the variables in the current study were previously linked to transition times among white rural youth, but not enough information exists about some of the important within-group predictors of transition times among ethnic-minority rural youth. Future studies should examine group differences across rural youth of various ethnic backgrounds and include culturally appropriate, school-, and community-oriented variables.

Another study limitation was the cross-sectional nature of the study and the absence of follow-up data on actual transition times. Although the current paper did not include follow-up data, research has shown the expectations for the timing of transitions predict the actual timing of transitions (Beal & Crockett, 2010; Crockett & Beal, 2012; Mello, 2008). However, without longitudinal data, causality and directionality cannot be determined. Future research using rural samples should use longitudinal data and more sophisticated analysis techniques, (e.g., Oesterle et al., 2010) in studying developmental pathways of rural youth. Another possible limitation was the usage of timing of marriage and parenthood of markers as the transition into adulthood. Extant research has suggested that adolescents' current conceptions of adulthood involve more psychological, individualistic, and relational processes, and do not necessarily include markers such as entry into parenthood, marriage, first job, or the finishing of education (Horowitz & Bromnick, 2007). Future work on the transition times into adulthood among rural youth should include these contemporary conceptions of adulthood that emphasize responsibility, autonomy, and decision-making (Arnett, 2003).

Finally, although we highlighted recent socioeconomic transformations that have taken place in rural communities and their potential impact on the developmental trajectories of rural youth, our analyses did not directly test this issue. To better address this issue, future research should investigate whether and how socioeconomic transformations in rural communities shape rural youth's transitions to adulthood by using data for different age cohorts. Future research also should use comparative data that include urban and suburban youth to examine the role of rurality in shaping transitions to adulthood.

Despite these limitations, the results of this study hold two major implications for the developmental trajectories of rural youth. First, the powerful impact of educational aspirations on shaping the critical life transitions of rural men and women shows how malleable aspirations and cognitive beliefs have the ability to shape development pathways. Even when rural youth face changing and sometimes limiting economic and social environments, holding high educational aspirations can help steer adolescents toward their goals. The malleable aspirations of rural youth could be a target for future school-based intervention work that could potentially help guide rural youth through the often-difficult transition from high school into adulthood. Second, this study illustrates how family and community forces unique to rural areas shape the developmental transitions and trajectories of rural men and women. Future intervention efforts should harness the promotive, or buffering, roles that families and communities play in helping rural youth navigate their transitions to adulthood.

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References

- Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American ethnic groups. *New Directions for Child and Adolescent Development*, 100, 63-76. <https://dx.doi.org/10.1002/cd.75/10.1002/cd.75>
- Beal, S. J., & Crockett, L. J. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology*, 46(1), 258. <https://dx.doi.org/10.1002/cd.75/10.1037/a0017416>

- Blackwell, D. L., & McLaughlin, D. K. (1999). Do rural youth attain their educational goals? *Rural Development Perspectives*, 13, 37-44.
- Brown, D. L., & Schafft, K. A. (2011). *Rural people and communities in the 21st century: Resilience and transformation*. Cambridge, UK: Polity Press.
- Byun, S., Irvin, M. J., & Meece, J. L. (2012a). Predictors of bachelor's degree completion among rural students at four-year institutions. *The Review of Higher Education*, 35(3), 463-484. <https://dx.doi.org/10.1002/cd.75/10.1353/rhe.2012.0023>
- Byun, S., Meece, J. L., & Irvin, M. J. (2012b). Rural-nonrural disparities in postsecondary educational attainment revisited. *American Educational Research Journal*, 49(3), 412-437. <https://dx.doi.org/10.1002/cd.75/10.3102/0002831211416344>
- Byun, S., Meece, J. L., Irvin, M. J., & Hutchins, B. C. (2012c). The role of social capital in educational aspirations of rural youth. *Rural Sociology*, 77(3), 355-379. <https://dx.doi.org/10.1002/cd.75/10.1111/j.1549-0831.2012.00086.x>
- Bynner, J. (2005). Rethinking the youth phase of the life course: The case for emerging adulthood? *Journal of Youth Studies*, 9, 367-384. <https://dx.doi.org/10.1002/cd.75/10.1080/13676260500431628>
- Carr, P. J., & Kefalas, M. J. (2009). *Hollowing out the middle: The rural brain drain and what it means for America*. Boston, MA: Beacon Press.
- Carr, P. J., & Kefalas, M. J. (2011). Straight from the heartland: Coming of age in Ellis, Iowa. In M. Waters, P. Carr, M. Kefalas, & J. Holdaway (Eds.), *Coming of age in America: The transition to adulthood in the twenty-first century* (pp. 28-58). Berkeley, CA: University of California Press. <https://dx.doi.org/10.1002/cd.75/10.1525/california/9780520270923.003.0002>
- Chenoweth, E., & Galliher, R. V. (2004). Factors influencing college aspirations of rural West Virginia high school students. *Journal of Research in Rural Education*, 19(2), 1-14.
- Corcoran, M. (1995). Rags to rags: Poverty and mobility in the United States. *Annual Review of Sociology*, 21, 237-267. <https://dx.doi.org/10.1002/cd.75/10.1146/annurev.so.21.080195.001321>
- Crockett, L. J., & Beal, S. J. (2012). The life course in the making: Gender and the development of adolescents' expected timing of adult role transitions. *Developmental Psychology*, 48(6), 1727-1738. <https://dx.doi.org/10.1002/cd.75/10.1037/a0027538>
- Crockett, L. J., & Bingham, C. R. (2000). Anticipating adulthood: Expected timing of work and family transitions among rural youth. *Journal of Research on Adolescence*, 10(2), 151-172. https://dx.doi.org/10.1002/cd.75/10.1207/SJRA1002_2
- Crockett, L. J., Shanahan, M. J., & Jackson-Newsom, J. (2000). Rural youth: Ecological and life course perspectives. In R. Montemayor, G. Adams, & T. Gullotta (Eds.), *Adolescent diversity in ethnic, economic, and cultural contexts* (pp. 43-74). Thousand Oaks, CA: Sage Publications. <https://dx.doi.org/10.1002/cd.75/10.4135/9781452225647.n3>
- Donato, K. M., Tolbert, C. M., Nucci, A., & Kawano, Y. (2007). Recent immigrant settlement in the nonmetropolitan United States: Evidence from internal census data. *Rural Sociology*, 72, 537-559. <https://dx.doi.org/10.1002/cd.75/10.1526/003601107782638666>
- Eccles, J. S. (2008). Agency and structure in human development. *Research in Human Development*, 5(4), 231-243. <https://dx.doi.org/10.1002/cd.75/10.1080/15427600802493973>
- Elder Jr., G. H. (1998). The life course as developmental theory. *Child Development*, 69, 1-12. <https://dx.doi.org/10.1002/cd.75/10.1111/j.1467-8624.1998.tb06128.x>
- Elder Jr., G. H., & Conger, R. D. (2000). *Children of the land: Adversity and success in rural America*. Chicago: University of Chicago Press.
- Farmer, T. W., Dadisman, D., Latendresse, S. J., Thompson, J., Irvin, M. J., & Zhang, L. (2006). Educating out and giving back: Adults' conceptions of successful outcomes of African American high school students from impoverished rural communities. *Journal of Research in Rural Education*, 21(10), 1-12.
- Furstenberg Jr., F. F. (2010). On a new schedule: Transitions to adulthood and family change. *The Future of Children*, 20(1), 67-87. <https://dx.doi.org/10.1002/cd.75/10.1353/foc.0.0038>

- Fussell, E., & Furstenberg, F. F. (2005). The transition to adulthood during the twentieth century: Race, nativity, and gender. In R. A. Settersten, F. F. Furstenberg, & R. G. Rumbaut (Eds.), *On the frontier of adulthood: Theory, research, and public policy* (pp. 29-75). Chicago, IL: University of Chicago Press. <https://dx.doi.org/10.1002/cd.75/10.7208/chicago/9780226748924.003.0002>
- Gibbs, R. M., Kusmin, L., & Cromartie, J. (2005). *Low skill employment and the changing economy of rural America*. USDA Economic Research Report No. 10. Washington, DC: USDA.
- Greene, A. L. (1990). Great expectations: Constructions of the life course during adolescence. *Journal of Youth and Adolescence*, 19, 289-306. <https://dx.doi.org/10.1002/cd.75/10.1007/BF01537074>
- Heflin, C. M., & Pattillo, M. (2006). Poverty in the family: Race, siblings, and socioeconomic heterogeneity. *Social Science Research*, 35(4), 804-822. <https://dx.doi.org/10.1002/cd.75/10.1016/j.ssresearch.2004.09.002>
- Hektner, (1995). When moving up implies moving out: Rural adolescent conflict in the transition to adulthood. *Journal of Research in Rural Education*, 11, 3-14.
- Horowitz, A. D., & Bromnick, R. D. (2007). "Contestable adulthood": Variability and disparity in markers for negotiating the transition to adulthood. *Youth & Society*, 39(2), 209-231. <https://dx.doi.org/10.1002/cd.75/10.1177/0044118X06296692>
- Johnson, K. (2006). *Demographic trends in rural and small town America*. Carsey Institute Reports on Rural America. Durham, NH: Carsey Institute.
- Johnson, M., Elder, G. H., & Stern, M. (2005). Attachments to family and community and the young adult transition of rural youth. *Journal of Research on Adolescence*, 15(1), 99-125. <https://dx.doi.org/10.1002/cd.75/10.1111/j.1532-7795.2005.00088.x>
- Johnson, J., Showalter, D., Klein, R., & Lester, C. (2014). *Why rural matters 2013-2014: The condition of rural education in the 50 states*. Washington, DC: Rural School and Community Trust.
- Johnson, J., & Strange, M. (2009). *Why rural matters 2009: State and regional challenges and opportunities*. Washington, DC: Rural School Community and Trust. Retrieved from <http://files.ruraledu.org/wrm09/WRM09.pdf>
- Lichter, D. T., & Brown, D. L. (2011). Rural America in an urban society: Changing spatial and social boundaries. *Annual Review of Sociology*, 37, 565-592. <https://dx.doi.org/10.1002/cd.75/10.1146/annurev-soc-081309-150208>
- Lichter D. T., & Johnson, K. M. (2007). The changing spatial concentration of America's rural poor population. *Rural Sociology*, 72, 331-358. <https://dx.doi.org/10.1002/cd.75/10.1526/003601107781799290>
- Macmillan, R., & Copher, R. (2005). Families in the life course: Interdependency of roles, role configurations, and pathways. *Journal of Marriage and Family*, 67, 858-879. <https://dx.doi.org/10.1002/cd.75/10.1111/j.1741-3737.2005.00180.x>
- Marini, M. M. (1985). Determinants of the timing of adult role entry. *Social Science Research*, 14, 309-350. [https://dx.doi.org/10.1002/cd.75/10.1016/0049-089X\(85\)90015-8](https://dx.doi.org/10.1002/cd.75/10.1016/0049-089X(85)90015-8)
- McLanahan, S. (2004). Diverging destinies: How children are faring under the second demographic transition. *Demography*, 41, 607-627. <https://dx.doi.org/10.1002/cd.75/10.1353/dem.2004.0033>
- McLaughlin, D. K., & Coleman-Jensen, A. (2008). Nonstandard employment in the nonmetropolitan United States. *Rural Sociology*, 73, 631-659. <https://dx.doi.org/10.1002/cd.75/10.1526/003601108786471558>
- McLaughlin, D. K., Lichter, D. T., & Johnston, G. M. (1993). Some women marry young: Transitions to first marriage in metropolitan and nonmetropolitan areas. *Journal of Marriage and Family*, 55(4), 827-838. <https://dx.doi.org/10.1002/cd.75/10.2307/352765>
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204. <https://dx.doi.org/10.1002/cd.75/10.1037/0003-066X.53.2.185>
- Meece, J. L., Askew, K. S., Agger, C. A., Hutchins, B. C., & Byun, S. (2014). Familial and economic influences on the gender-related educational and occupational aspirations of rural adolescents. *Journal of Educational and Developmental Psychology*, 4(1), 238-257. <https://dx.doi.org/10.1002/cd.75/10.5539/jedp.v4n1p238>
- Meece, J. L., Hutchins, B. C., Byun, S., Farmer, T. W., Irvin, M. J., & Weiss, M. (2013). Preparing for adulthood: A recent examination of the alignment of rural youth's future educational and vocational aspirations.

- Journal of Educational and Developmental Psychology*, 3(2), 175-192.
<https://dx.doi.org/10.1002/cd.75/10.5539/jedp.v3n2p175>
- Mello, Z. R. (2008). Gender variation in developmental trajectories of educational and occupational expectations and attainment from adolescence to adulthood. *Developmental Psychology*, 44(4), 1069-1080.
<https://dx.doi.org/10.1002/cd.75/10.1037/0012-1649.44.4.1069>
- Mortimer, J. T., & Johnson, M. K. (1998). New perspectives on adolescent work and the transition to adulthood. *New Perspectives on Adolescent Risk Behavior*, 425-496.
<https://dx.doi.org/10.1002/cd.75/10.1017/CBO9780511571138.014>
- Nurmi, J. E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review*, 11, 1-59.
[https://dx.doi.org/10.1002/cd.75/10.1016/0273-2297\(91\)90002-6](https://dx.doi.org/10.1002/cd.75/10.1016/0273-2297(91)90002-6)
- Oesterle, S., Hawkins, J. D., Hill, K. G., & Bailey, J. A. (2010). Men's and women's pathways to adulthood and their adolescent precursors. *Journal of Marriage and Family*, 72, 1436-1453.
<https://dx.doi.org/10.1002/cd.75/10.1111/j.1741-3737.2010.00775.x>
- Petrin, R. A., Farmer, T. W., Meece, J. L., & Byun, S. (2011). Interpersonal competence configurations, attachment to community, and residential aspirations of rural adolescents. *Journal of Youth and Adolescence*, 40, 1091-1105. <https://dx.doi.org/10.1002/cd.75/10.1007/s10964-011-9690-2>
- Petrin, R. A., Schafft, K. A., & Meece, J. L. (2014). Educational sorting and residential aspirations among rural high school students: What are the contributions of schools and educators to rural brain drain? *American Educational Research Journal*, 51, 294-326. <https://dx.doi.org/10.1002/cd.75/10.3102/0002831214527493>
- Pew Latino Center. (2009). *Between two worlds. How young Latinos come of age in America*. Retrieved from <http://pewLatino.org/reports/report.php?ReportID=117>
- Provasnik, S., KewalRamani, A., Coleman, M. M., Gilbertson, L., Herring, W., & Xie, Q. (2007). Status of Education in Rural America. *National Center for Education Statistics*.
- Rindfuss, R. R., Swicegood, C. G., & Rosenfeld, R. A. (1987). Disorder in the life course: How common and does it matter? *American Sociological Review*, 52, 785-801.
<https://dx.doi.org/10.1002/cd.75/10.2307/2095835>
- Roscigno, V. J., & Crowley, M. L. (2001). Rurality, institutional disadvantage, and achievement/attainment. *Rural Sociology*, 66, 268-293. <https://dx.doi.org/10.1002/cd.75/10.1111/j.1549-0831.2001.tb00067.x>
- Schneider, B., & Stevenson, D. (1999). *The ambitious generation: America's teenagers, motivated but directionless*. New Haven, CT: Yale University Press.
- Schoen, R., Landale, N. S., Daniels, K., & Cheng, Y. H. A. (2009). Social background differences in early family behavior. *Journal of Marriage and Family*, 71, 384-395.
<https://dx.doi.org/10.1002/cd.75/10.1111/j.1741-3737.2009.00606.x>
- Schoon, I. (2010). Becoming adult: The persisting importance of class and gender. In J. Scott, R. Crompton, & C. Lyonette (Eds.), *Gender inequalities in the 21st century* (pp. 19-39). Cheltenham, England: Edward Elgar.
<https://dx.doi.org/10.1002/cd.75/10.4337/9781849805568.00008>
- Schoon, I., Martin, P., & Ross, A. (2007). Career transitions in times of social change. His and her story. *Journal of Vocational Behavior*, 70, 78-96. <https://dx.doi.org/10.1002/cd.75/10.1016/j.jvb.2006.04.009>
- Schoon, I., Ross, A., & Martin, P. (2009). Sequences, patterns, and variations in the assumption of work and family-related roles: Evidence from two British birth cohorts. In I. Schoon, & R. Silbereisen (Eds.), *Transitions from School to Work. Globalisation, Individualisation, and Patterns of Diversity* (pp. 219-242). Cambridge, UK: Cambridge University Press.
<https://dx.doi.org/10.1002/cd.75/10.1017/CBO9780511605369.010>
- Settersten, R. A. Jr., & Ray, B. (2010). What's going on with young people today? The long and twisting path to adulthood. *The Future of Children*, 20(1), 19-41. <https://dx.doi.org/10.1002/cd.75/10.1353/foc.0.0044>
- Shanahan, M. J. (2000). Pathways to adulthood in changing societies: Variability and mechanisms in life course perspective. *Annual Review of Sociology*, 26, 667-692.
<https://dx.doi.org/10.1002/cd.75/10.1146/annurev.soc.26.1.667>

- Snyder, T. D., & Dillow, S. A. (2010). *Digest of education statistics 2009 (NCES 2010-013)*. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C.
- Spohn, K., Crowther, T., & Lykins, C. D. (1992). *Appalachian access and success: A research project of the Ohio Board of Regents and a consortium of two- and four-year colleges and universities in Appalachian Ohio*. Portsmouth, OH: Shawnee State University.
- Turcios-Cotto, V. Y., & Milan, S. (2013). Racial/Ethnic differences in the educational expectations of adolescents: Does pursuing higher education mean something different to Latino students compared to white and black students? *Journal of Youth and Adolescence*, 42(9), 1399-1412. <https://dx.doi.org/10.1002/cd.75/10.1007/s10964-012-9845-9>
- Turley, R. N. L. (2009). College proximity: Mapping access to opportunity. *Sociology of Education*, 82(2), 126-146. <https://dx.doi.org/10.1002/cd.75/10.1177/003804070908200202>
- Upchurch, D. M. (1993). Early schooling and childbearing experiences: Implications for postsecondary attendance. *Journal of Research on Adolescence*, 3, 423-443. https://dx.doi.org/10.1002/cd.75/10.1207/s15327795jra0304_6
- U.S. Department of Agriculture. (2013). *Rural America at a Glance, 2013 Edition*. Washington, DC. Retrieved from <http://www.ers.usda.gov>
- Von Hippel, P. T. (2005). How many imputations are needed? A comment on Hershberger and Fisher (2003). *Structural Equation Modeling*, 12(2), 334-335. https://dx.doi.org/10.1002/cd.75/10.1207/s15328007sem1202_8
- Wald, M. S. (2005). Foreword. In W. Osgood, E. M. Foster, C. Flanagan, & G. R. Ruth (Eds.), *On your own without a net: The transition to adulthood for vulnerable populations* (pp. vii-xii). Chicago, IL: University of Chicago Press.
- Waters, M. C., Carr, P. J., & Kefalas, M. J. (2011). Introduction. In M. Waters, P. Carr, M. Kefalas, & J. Holdaway (Eds.), *Coming of age in America: The transition to adulthood in the twenty-first century* (pp. 1-27). Berkeley, CA: University of California Press. <https://dx.doi.org/10.1002/cd.75/10.1525/california/9780520270923.003.0001>

Note

Note 1. Respondents were given the option of selecting one or more race categories to indicate racial identities, which led to a higher proportion of a multiracial group. Because of the nature of the questions asked, our data on race/ethnicity are not directly comparable with data collected by the U.S. Census Bureau or NCES.

Appendix

Table A. Descriptive statistics for the independent variables included in analyses

Variable	M or %	SD	% imputed
<i>Individual characteristics</i>			
Female	52.38	—	0.00
Race/ethnicity			0.00
White	67.25	—	
Black	6.77	—	
Hispanic	10.48	—	
Native	3.60	—	
Multiracial	11.89	—	
Grade			0.03

9th	27.75	—	
10th	27.36	—	
11th	24.91	—	
12th	19.98	—	
Educational aspirations	16.75	2.46	7.77
Academic achievement	6.21	1.61	3.49
Residential aspirations			1.55
Home state	35.76	—	
Another state	30.12	—	
Have not thought or decided	34.12	—	
Residential stability			0.88
Less than 5 years	17.10	—	
5-10 years	18.61	—	
More than 10 years	64.29	—	
<i>Family characteristics</i>			
Parental education	13.87	2.59	11.59
Family economic hardship	1.80	0.94	6.28
Intact family	56.78	—	0.00
<i>Community characteristics</i>			
Isolation			0.00
Town, fringe or distant	7.60	—	
Town, remote	11.66	—	
Rural, fringe or distant	36.67	—	
Rural, remote	44.07	—	
% of population aged 25 or older with college degrees	18.25	5.77	0.00
Poverty rate	16.30	5.00	0.00
<i>N</i>		7,298	

Note. We performed descriptive analyses for each of ten imputed datasets and then averaged the mean and standard deviations by using Rubin's rule.

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