

Class Inequality and Adult Attainment Projects among Middle-Aged Men in the United States, 1980–2010

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Abstract: Adult attainment projects (AAP) consist of a series of traditional adult statuses: labor force participation, residential independence, marriage, parenthood, and homeownership. This article examines these status indicators as integral parts of an individualized attainment project that is best assessed later in adulthood. Close examination of AAP gives novel insights into the changing U.S. opportunity structure that go beyond what can be achieved through studying temporal patterns of adult status indicators independently. From 1980 to 2010, rates of completed AAP declined by double digits, and the difference in the odds of completing AAP between men on different ends of the income distribution doubled. There are structural and cultural explanations for these trends. Divergence hypotheses favor structural explanations involving social stratification processes. Convergence hypotheses favor cultural explanations based on the loosening of norms regarding traditional adult statuses. This article uses factor analytic models on data from the Current Population Survey, in conjunction with formal measurement invariance testing, to evaluate these hypotheses. The adaptive differentiation hypothesis, a blended explanation positing analytically distinct AAP profiles for different socioeconomic groups, receives the most empirical support. The results affirm a structurally prevailing change in the lives of poor, working class, and lower-middle class Americans.

Keywords: inequality; latent construct; measurement invariance, social stratification; transition to adulthood

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THE pursuit of the American Dream is the quintessential adult attainment project. The American Dream represents a powerful collective belief in an opportunity structure that is capable of providing individuals from modest beginnings an equal chance to earn a living, to own property, and to start a family. The roots of this opportunity structure lie in modernity which, through public education, improvements to life expectancy, and economic growth, fostered a social environment that allowed a normative life-course pattern to emerge (Shanahan 2000).¹ Although the American Dream conjures fanciful notions of becoming rich and famous, it is the boilerplate version based on traditional milestones of adulthood—e.g., developing independence, establishing a reliable livelihood (however modest), family formation, and homeownership—that historically has been attainable, albeit at different rates, for the masses in a post-WWII era.

Today there is growing skepticism about whether economic prosperity is reaching lower- and middle-income families (Danziger and Ratner 2010; Duncan, Boisjoly, and Smeeding 1996; Kefalas 2003; Moen and Roehling 2005; Smith 2012). Increasing levels of income inequality (Autor, Katz, and Kearney 2008; Piketty and Saez

2003), together with static or even decreasing rates of social mobility (Mishel et al. 2014:163–173), the proliferation of precarious employment conditions (Kalleberg 2009), and the increasing importance of higher education in gaining access to “good jobs” (Settersten and Ray 2010), are raising concerns about equitable access to the opportunity structure. Many fear these structural conditions are jeopardizing the rates of successful adult transitions because the economic security needed to pursue an adult attainment project has become more elusive (Sironi and Furstenberg 2012; although cf. Danzinger and Rouse 2007).

Alternatively, increasing cultural tolerance for different family forms (Cherlin 2004), increasingly individualized pathways into adulthood (Elzinga and Liebroer 2007), changing lifestyle preferences, and looser social norms regarding traditional adult statuses (Côté 2000) may render the 1950s model of adult status antiquated in today’s society. This presents a unique challenge to our ability to assess changes to the normative adult attainment project: are individuals choosing not to pursue these status attainments because there is less social pressure to do so, or is the decline rooted primarily in the changing nature of the opportunity structure in the United States? Addressing this question is essential if we are to fully understand the remaking of an American way of life.

This study takes a comparative approach to this question. By comparing the changing patterns among several status indicators across a socioeconomic hierarchy we can effectively evaluate changes to the traditional adult-status model. To aid in this endeavor, we conceptualize the *adult attainment project* (AAP) as a latent measurement construct. This construct enables us to formulate specific hypotheses about the cultural and structural factors that are affecting traditional adult milestones. This study builds directly on the transition-to-adulthood literature, which examines adulthood through a series of status attainments, such as education, employment, residential independence, marriage, parenting, and others. (Oesterle et al. 2010; Osgood et al. 2005; Sandefur, Eggerling-Boeck, and Park 2005). However, instead of examining each of these status attainments individually during young adulthood, this study treats them as integral parts of a holistic project that is best assessed in later adulthood when individuals have been given enough time to establish a career path.

To unpack the nature of change in AAP over time, we conduct a thorough examination of the construct using factor analytic models with formal invariance testing (e.g., Kamata and Bauer 2008). Invariance testing is important for any study of social change because it evaluates measurement issues that can jeopardize valid comparisons of a social phenomenon over time (e.g., Davidov, Schmidt, and Schwarz 2008). Measurement invariance testing in this context requires the simultaneous study of multiple status indicators. Invariance testing can help us determine whether the nature of change to AAP is a difference in degree from one decade to the next, or whether a more fundamental cultural change has occurred that makes rates of AAP completion difficult if not impossible to compare across time. This analysis informs our understanding of the cultural and structural engines of social change that are causing the decline of traditional adult-status attainments.

Class Inequality and the Changing Nature of the Adult Attainment Project

Although the timing and sequencing of traditional adult attainment markers have changed significantly in recent decades (Danziger and Rouse 2007; Furstenberg, Rumbaut, and Settersten 2005; Hogan and Astone 1986; Sironi and Furstenberg 2012), by the time men² reach their mid-thirties and early forties a majority will have established self-sufficiency and their own nuclear families. According to the 2010 American Community Survey, labor force participation for men between the ages of 35 and 45 is approximately 91 percent; about 65 percent of men between the ages of 35 and 45 are married; 57 percent are living with their children;³ and the homeownership rate is 67 percent (authors' calculations). However, in an era of increasing social inequality and changing social norms about family and adulthood, these individual status attainments are becoming disjointed, making the full completion of AAP exceedingly less common. Incomplete projects can have many causes. Socioeconomic inequalities that are relevant during the transition to adulthood will likely continue to matter throughout the life course (Furstenberg 2008; Oesterle et al. 2010; Osgood et al. 2005; Sandefur, Eggerling-Boeck, and Park 2005; Settersten and Ray 2010; cf. Schoeni and Ross 2005), but there are cultural shifts that are independent of stratification processes that are also having an impact. Examining the degree to which the socioeconomic disparity in the rates of AAP completion has changed in recent decades helps us determine whether stratification processes have become more or less relevant as a paradigm for understanding the nature of social change in the contemporary United States.

Our comparative analysis of the socioeconomic gap in AAP completion over time is facilitated by two transition-to-adulthood perspectives—the standardization perspective and the individualized perspective (for review see Shanahan 2000). The standardization perspective credits modernity with providing an opportunity structure that fosters a normative set of values and goals for the transition to adulthood. From this perspective, self-sufficiency, family formation, and homeownership are assumed to be status aspirations held, not universally, but by a large majority. As the rates of attainment of traditional adult statuses continue to attenuate, especially for men in the bottom half of the income distribution (see Figure 2), the standardization perspective is called into question.

Conversely, individualized perspectives have emerged in late modernity as a way to explain multiple pathways into adulthood. From an individualized perspective, changing cultural and political circumstances in contemporary society have loosened social norms around AAP, giving individuals more flexibility to adapt to changes and/or more freedom to define their individualized adult attainment projects. Whereas the standardization perspective is firmly rooted in a stratified opportunity structure, the individualized perspective is tied more closely to cultural changes that signify a weakened link between traditional adult statuses and the stratified opportunity structure.

Figure 1 presents a schema for developing hypotheses of social change that are based on the standardization and individualized perspectives. The figure communicates how these two perspectives are intertwined in ways that make analytical

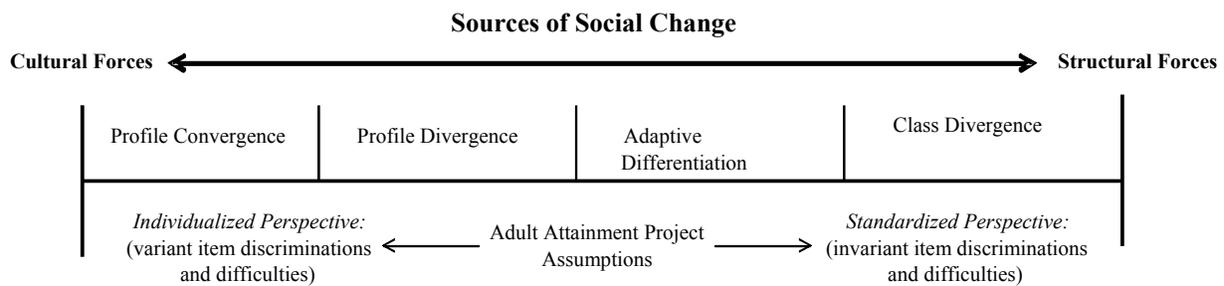


Figure 1: Structural and Cultural Forces of Social Change on a Continuum Segmented by Adult Attainment Project Hypotheses

separation feasible only in the abstract. In reality, structural and cultural forces of social change are best viewed on a continuum from entirely structural to entirely cultural, with much space in between for mixed contributions. A case in point is Silvia's ethnographic work (2012, 2013) in which working class young adults are eschewing mainstream social norms regarding AAP because structural changes to the economy have made it very difficult to achieve traditional status markers. In her case there is no clear distinction between structural and cultural causes of change to AAP. Instead, these forces are blended in a reciprocal relationship where individualized attainment projects have a mixture of cultural *and* structural influences. Conceptually, we examine this dynamic process of change by segmenting the cultural/structural continuum into different analytical domains that are represented by four hypotheses.

Methodologically, we employ a comparative framework based on two analytical dimensions of the AAP socioeconomic gap that coincide with the standardized and individualized perspectives. The first dimension simply involves the changing rates of AAP completion by income quintile (our proxy measure of social class). In order to attribute diminished levels of AAP completion to changing structural conditions, the key assumption of the standardization perspective must be upheld. The second dimension is more sophisticated, as it speaks to the changing makeup of the adult attainment project itself. Changes to the makeup of AAP evoke the individualized assumption in that the composition of individual status attainments that define AAP must have changed to some significant degree. Over time, any particular adult status marker may become more or less desirable and/or easier or more difficult to attain (item difficulties), and any particular adult status marker may also contribute more or less weight to what constitutes AAP success (item discriminations). The assumption here is that some statuses may be more significant than others in defining AAP success, and their importance may shift over time. In technical terms, item difficulties and item discriminations are the measurement parameters that make up the latent AAP construct, and measurement invariance testing can be used to assess whether these parameters have changed significantly over time. The following hypotheses are built on this comparative framework.

Concerns about equitable access to the opportunity structure inform the *class divergence hypothesis*. Divergence hypotheses point to significant macro-level economic forces that have made it harder for poor, working class, and lower-middle class people to pursue their adult attainment projects. The class divergence hypothesis maintains that the desire for a traditional adult attainment project is unchanged, irrespective of social class and time period. This presupposition evokes a strong version of the standardization assumption: that the nature of the stratified opportunity structure has changed, not the fundamental nature of the adult attainment project itself. The class divergence hypothesis is located the furthest to the right on the continuum in Figure 1 because it makes the strongest claims about the consequences of structural change. The class divergence hypothesis anticipates declining rates of AAP completion especially among lower income groups that have been disproportionately hindered by macroeconomic change.

An alternative divergence hypothesis that does not require as strong of a standardization assumption is the *adaptive differentiation hypothesis*. The adaptive differentiation hypothesis posits that members of different social classes have adapted to different sets of social conditions and constraints. For example, working class communities with longstanding difficulty in sustaining livelihoods and homeownership might put more significance on family formation (being married and having children) in defining AAP success than upper-class individuals (e.g., Cherlin 2014). These adaptations imply that people of different classes will apply different weights to each measurement component of the latent AAP construct (i.e., the estimated weights applied to the item difficulties and item discriminations that represent AAP parameters will differ by class). This hypothesis entails more cultural variation in response to structural change than the class divergence hypothesis and is therefore located slightly to the left on the continuum. According to this hypothesis, the configural profile of AAP will be different across different social classes, making assessments of AAP change only valid *within* socioeconomic groups. For the same structural reasons that inform the class divergence hypothesis—e.g., increasing social inequality and employment vulnerability among low earners—we should anticipate greater within-class declines of AAP completion among lower income groups.

The adaptive differentiation hypothesis relaxes the standardization assumption partially but not fully, because the adaptive process is held constant within social class groupings over time. However, the possibility exists that the adaptive measures taken by members of different socioeconomic positions today may be very different compared to those of thirty years ago, thus calling into question the robustness of the standardization assumption. The *profile divergence hypothesis* accounts for this possibility. The profile divergence hypothesis anticipates increasingly differentiated AAP configural profiles as each social class responds in different ways to changing cultural values and divergent macroeconomic conditions. Here we anticipate more influence from individualized pathways into adulthood—a development that is remaking traditional adult attainment projects in ways that remain tied to a socioeconomic hierarchy, but in new forms that are difficult to reconcile with a purely structural lens. Unlike the adaptive differentiation hypothesis, diverging AAP configural profiles mean that we will be unable to reliably compare levels of

AAP completion either within or between social classes. Evidence in support of the profile divergence hypothesis indicates a complex intertwining of structural and cultural change affecting AAP.

The profile convergence hypothesis is the last and most culturally centered of the AAP hypotheses. The *profile convergence hypothesis* posits that cultural change has eased social pressures regarding traditional adult status attainments across the social class spectrum, making socioeconomic standing less of a differentiating factor in defining AAP success. For example, upper-middle and working class households may jointly feel less normative pressure to get married, stay married, and perhaps to a lesser extent among women, have children. Trends suggest that some young adults are forgoing family formation entirely, dual-income couples with no children are on the rise, and women breadwinner households with stay-at-home fathers are also becoming more common (Furstenberg 2008; Kasarda, Billy, and West 1986; Medved 2009; Raley, Mattingly, and Bianchi 2006). Cultural shifts, especially around gender norms, are the primary reason for these developments. The loosening of gender norms is allowing personalized preferences and individualized pathways into adulthood that have little connection to the stratified opportunity structure. Accordingly, we should observe the importance of each status indicator in defining AAP to be changing in a similar fashion, or converging, across a socioeconomic hierarchy. The presumption is that class standing signifies an individual's relation to the stratified opportunity structure, and if changes to AAP are independent from the opportunity structure then we should observe increasing similarities across class, not growing class differences. Like the profile divergence perspective, support for profile convergence will preclude reliable assessments of AAP completion over time.

To summarize, in order to make inferences about changes to the opportunity structure in the United States, the standardization perspective needs some degree of validation. Studying multiple adult status indicators will provide this validation *if measurement invariance is upheld*. Measurement invariance is a necessary condition for either the class divergence hypothesis or the adaptive differentiation hypothesis, and support for either of these hypotheses will affirm the value of a stratification paradigm for understanding social change. On the other hand, strong empirical support for either the profile divergence or the profile convergence hypothesis prevents us from comparing mean differences in levels of AAP completion over time. If social norms and men's status preferences have changed *in significant ways*, it will violate the measurement invariance assumption, and we would erroneously compare apples (AAP in 1980) and oranges (AAP in 2010). This finding would signal the saliency of cultural change over structural shifts in explaining the decline of traditional adult attainment projects and would prompt reconsideration among researchers in the field of how we study traditional adult statuses over generations.

Data and Methods

Data for this study come from the Integrated Public Use Microdata Series (IPUMS) for the 1980, 1990, 2000, and 2010 March Supplements of the Current Population Survey (King et al. 2010). The Current Population Survey (CPS) is conducted by the

U.S. Census Bureau and the Bureau of Labor Statistics on randomly selected U.S. households. CPS data on men between the ages of 35 and 45 ($N = 50,869$) provide large enough sample sizes for adequate cell coverage across an array of achieved status combinations. These data are organized into pooled cross-sections that are standardized across time by IPUMS, which greatly facilitates temporal comparisons. All analyses are done using CPS sampling weights.⁴

Social class is measured using family-income quintiles, which include those with negative and/or zero family income. Family-income quintiles provide a straightforward and temporally consistent proxy to study class-based outcomes over time. Although certainly not a comprehensive indicator of social class, income quintiles require fewer assumptions than the alternatives (e.g., measures of class based on education and/or occupational status).⁵ Cross-sectional measures of social class have some obvious limitations. Most notably, we are unable to capture the association between social mobility and AAP because we lack complete information about social class origins. Nonetheless, a pooled cross-sectional research design provides comparative data points that are quite useful for examining social change.

The traditional adult attainment statuses in the CPS data include: (1) homeownership; (2) resident parenthood; (3) marital status; (4) labor force activity; and (5) residential independence. It is the combination of these achieved statuses by mid-adulthood that serves as our metric for understanding changes to the adult attainment project.⁶ All variables are dummy coded, 1 signifying a currently achieved status or 0 otherwise. *Homeownership* includes those living in an owner-occupied dwelling (or paying on a mortgage for the dwelling). *Resident parenthood* is whether or not the respondent has one or more of their own children living in their household. If the respondent has no children, or children living in a different household, the code is 0. *Marital status* includes currently separated relationships among those coded 1, but codes widows, divorcees, and others as 0.⁷ *Labor force activity* includes being either in the labor force or engaged in some form of educational training. We incorporate educational training even if the respondent is not working because it captures the process of striving to improve their labor market position.⁸ The quality of employment, although important, is not considered essential for AAP success because of its relation to income. *Residential independence* is determined based on whether they are the head of household or the spouse of the head. Residential independence is distinct from homeownership as it includes those that are renting and excludes those living in an owner-occupied dwelling where they (or their spouse) are not the householder (e.g., excludes those living with parents in a home owned by the parents). These five status indicators best capture the traditional nuclear family living situation for men: a productive father living with children and a spouse in their own home.

Factor Analytic Models and Item Response Theory: Item response theory and factor analytic methods give researchers the tools to evaluate latent constructs. Latent constructs are measures of phenomena that cannot be observed directly (e.g., AAP) but rather must be inferred from manifest indicators that are directly observed (e.g., status attainment indicators). Factor analytic models with categorical variables (as is the case here) define probabilistic, nonlinear relationships between the latent construct and its manifest indicators. Manifest indicators typically contain random

and/or systematic measurement error, and factor analytic methods take these errors into account. The estimated parameters from a factor analytic model, in combination with measurement invariance tests, can be used to better understand the characteristics of a latent construct, and specifically for our purposes, to better understand the temporal changes of the construct.

The first step of the analysis is to establish factor unidimensionality through an exploratory factor analysis (EFA). This is done to ensure that our adult attainment indicators (i.e., manifest indicators) only inform one general version of an adult attainment project. That is, an EFA is done to ensure that we have one latent construct, not two or more different kinds of hypothetical constructs. The results affirm our expectation that the five status attainment indicators load into one primary latent construct: the eigenvalue for the first factor is 3.03, and the eigenvalues drop precipitously down to 0.0875 for the second factor (results not shown). Following the EFA, we conduct a confirmatory factor analysis (CFA) to get model fit statistics and to describe the modal patterns in the data. These findings are discussed in the results section.

The central aim of this article is to determine whether the AAP profile has changed, in what ways, and for which income groups. To examine these questions, we rely on factorial invariance testing within a multi-group framework (e.g., Gregorich 2006).⁹ A multi-group factorial invariance analysis allows us to compare across income quintiles and across decades the *factor loadings* (item discriminations), which tell us the strength of the association between a manifest indicator and the latent construct; the *thresholds* (item difficulties), which tell us the probability of an affirmative status attainment at particular levels of the AAP construct; and the *mean values* of the latent construct, which tells us whether AAP has gotten easier or more difficult to complete over time. Taken together, these components are used to determine if the AAP profiles have changed in ways that support either the divergence or convergence hypotheses.

Using either the normal ogive (probits) or the logistic ogive (logits) distribution, a CFA with dichotomous indicators and a two-parameter item response model are mathematically equivalent. The factor loadings from a CFA can be converted into IRT item discriminations, and the CFA thresholds can be converted into IRT item difficulties (Glockner-Rist and Hoijsink 2003; Kamata and Bauer 2008; Muthén and Asparouhov 2013). This conversion is useful for several reasons. First, item difficulties and item discriminations can be used to plot item characteristic curves that will provide a visual representation of the AAP profile (Harris 1989) and its changes over time. Second, item difficulties and item discriminations provide an intuitive standardization of the factor loadings and thresholds that allow us to compare specific components of the AAP construct. Item discriminations and difficulties are presented for the unrestricted model (i.e., no invariance restrictions on the loadings or thresholds). Factor loadings and thresholds are presented for the factorial invariance models, so that the equality restrictions placed on the loadings and thresholds, and the reference categories for the mean values and variances of AAP, are clearly identified for the audience.

Results

A preliminary inspection of the traditional adult indicators by family-income quintile between 1980 and 2010 supports the decline others have observed. Figure 2 illustrates these declines by income quintile. There is a modest degree of class divergence over time for all five adult status markers. For example, the downward trend in homeownership has occurred for all men in this age group regardless of income quintile, but men in the lowest two income quintiles have seen the greatest drop. In 1980 the homeownership rate for lowest-earning men was about 56 percent, but by 2010 the rate had dropped to near 40 percent. A very similar pattern emerges for the other status indicators: a slight decline in the rates among the upper income quintiles and a more precipitous decline in the rates among the bottom two quintiles. For men 35–45 in the bottom two quintiles, having children living at home has fallen below the rate of 50 percent, while the upper two income quintiles have seen only slight fluctuations.¹⁰ The same pattern emerges for marital status: in 2010, men in the bottom two income quintiles have less than a 50 percent chance of being married. This is a drop of approximately 30 percentage points among those earning working class and lower-middle class incomes. Labor force activity remains high for all income groups except the bottom quintile, but here too we see increasing class divergence. The rates of residential independence have declined most notably among the bottom two income quintiles, while the rates remain above 90 percent among the top two quintiles. Further analysis will reveal even greater class inequalities when these status attainments are viewed collectively in the form of an adult attainment project.

The model fit statistics from a one-factor CFA (i.e., ignoring the multiple groups of decades and income quintiles) are: RMSEA = 0.034; CFI = 0.997; TLI = 0.993; and a $\chi^2 = 302.63$, $df = 5$, $p < 0.05$. With the exception of the χ^2 statistic, the model fit looks acceptable. Although the χ^2 rejection of the null hypothesis is evidence against AAP as a hypothetical construct, rejection of the χ^2 null is not unusual when using a large sample size.

Table 1 provides substantive and methodological information that can be used to better assess the performance of the AAP construct. Substantively, we find 32 different status combinations. These status combinations are ranked from most common to least common. The most frequent pattern is full AAP completion, with all five status indicators met: nearly 47 percent of all men between the ages of 35 and 45 are homeowners, have children living at home, are married, are active in the labor force, and have attained residential independence. The next most common pattern meets all the status markers except homeownership; the third most common pattern omits children; and the fourth most common pattern only satisfies the labor force and residential independence criteria.

Methodologically, Table 1 compares the actual observed count of each status combination from the raw data to the expected count that is predicted using the latent AAP construct. If the observed count and the predicted count were near-identical then there would be no statistical difference between the observed and the expected data, and the χ^2 null would not be rejected. However, we do observe some notable disparities between the observed and predicted counts, and the χ^2 null is

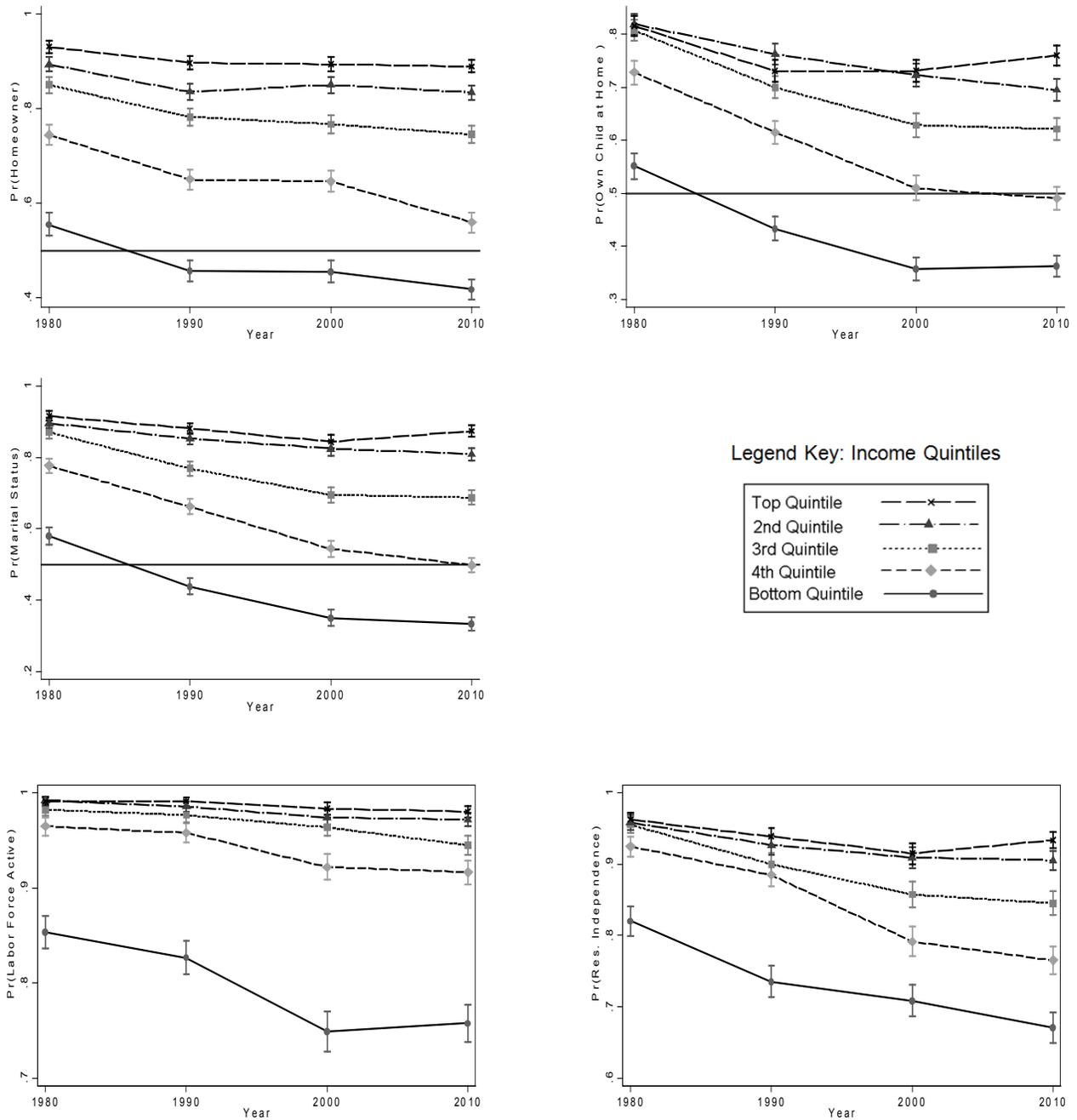


Figure 2: Probability of Adult Status Attainments among Middle-Aged Men (ages 35-45), Current Population Survey 1980-2010

Table 1: Predictive Results from a Confirmatory Factor Analysis of the Adult Attainment Project: Current Population Survey, 1980-2010

Rank	Pattern	CFA		Observed Percentage	Standardized Residual (z-score)
		Observed Count	Predicted Count		
1	11111	23,765	23,424	46.72%	2.45
2	01111	5,118	5,618	10.06%	-5.69
3	10111	3,858	3,752	7.58%	1.45
4	00011	2,930	2,208	5.76%	12.66
5	10011	2,837	3,416	5.58%	-8.26
6	10010	2,758	2,277	5.42%	8.31
7	00111	1,711	1,703	3.36%	0.16
8	00010	1,589	2,114	3.12%	-9.39
9	10000	780	525	1.53%	9.01
10	11011	773	866	1.52%	-2.57
11	11101	619	725	1.22%	-3.19
12	01011	502	417	0.99%	3.36
13	10110	438	511	0.86%	-2.61
14	00000	397	592	0.78%	-6.49
15	00110	395	282	0.78%	5.41
16	00001	393	324	0.77%	3.11
17	01101	360	217	0.71%	7.86
18	11110	300	388	0.59%	-3.60
19	10101	232	290	0.46%	-2.76
20	10001	230	449	0.45%	-8.38
21	00101	193	144	0.38%	3.27
22	11010	155	143	0.31%	0.86
23	01110	153	148	0.30%	0.33
24	01010	65	82	0.13%	-1.54
25	10100	59	53	0.12%	0.76
26	01001	58	38	0.11%	2.64
27	00100	53	31	0.10%	3.19
28	11001	49	73	0.10%	-2.28
29	11000	37	16	0.07%	4.37
30	11100	24	23	0.05%	0.16
31	01100	18	10	0.04%	2.13
32	01000	17	10	0.03%	1.84
Total N		50,869	50,869		

Note: Pattern Positioning: 1. Homeownership; 2. Children; 3. Marital Status; 4. Labor-Force Active; 5. Residential Independence.

rejected. The standardized residuals provide a metric to identify where the model fits poorly. For example, the latent AAP construct does a poor job of predicting who belongs in the fourth most common pattern (00011). There are a number of other

status combinations where the model also does poorly. Any pattern with a z-score above five appears to slightly alter the monotonicity between the observed data and expected data. For the most part, however, the monotonic ranking from the most common pattern to the least common pattern is replicated using the predicted counts: Spearman's $\rho = 0.977$ between the observed and expected counts. This strong correlation provides face validity for the AAP construct.

For analytic comparisons, income quintiles are collapsed into the upper two quintiles and the lower two quintiles. The middle income quintile is omitted ($N = 50,869 - 10,305 = 40,564$). Collapsing quintiles in this manner corresponds to the major cleavages observed in the descriptive analysis, and it makes the multi-group analysis below more parsimonious with no substantive downside to hypothesis testing. In 1980, the rate of completion of all five adult status indicators was 41 percent for the low income group and 75 percent for the high income group (results not shown). The corresponding odds ratio in 1980 between low and high income groups was 4.29: middle-aged, high income men were more than four times more likely to have satisfied all five status indicators relative to middle-aged, low income men. By 2010, the rate of full AAP completion had dropped to 17 percent for the low income group (a 24 percentage point drop) and 63 percent for the high income group (a 12 percentage point drop). The corresponding odds ratio had just about doubled by 2010, to 8.15. We turn to measurement invariance testing to examine the cultural and structural nature of this social change.

Table 2 provides a comparative analysis of AAP change via model fit statistics from a multi-group measurement invariance analysis. There are five different models that are used to test the similarities and differences of the AAP construct by decade and by income group. Using the collapsed income quintiles results in a total of eight groups: two income groups (high and low) per decade, with four decades. The first model in Table 2 is the unrestricted model that allows the factor loadings and thresholds to vary for each of the eight groups. This is the model to which all other models will be compared. As with the universal CFA, the χ^2 tests fail to reject the null, but the CFI, TLI, and RMSEA all look acceptable, with the exception of model 2 and perhaps model 3. Again, the same methodological qualifications that apply above to the single-group CFA apply in the multi-group context.

There are four main hypotheses postulated in this article: class divergence, adaptive differentiation, profile divergence, and profile convergence. Models 2–4 in Table 2 assess these hypotheses. Models 2 and 3 assess whether the AAP configural profiles between income groups have become more or less similar over time. Model 2 tests the convergence hypothesis by constraining the factor loadings and thresholds between high and low income groups to be equal in 2010 (i.e., more similar in 2010 than at other times), but free in the other decades. Model 3 tests the profile divergence hypothesis by constraining the factor loading and thresholds between high and low income groups to be the same in 1980 (i.e., more similar in 1980 than at other times), but free in the other decades. If the AAP profile had become more similar between high and low income groups over time, then model 2 would be an improvement in fit over the unconstrained model. Conversely, if profile divergence was supported, we would expect the AAP profile to have become more dissimilar between high and low income groups over time, and model 3 would be

Table 2: Model Fit Statistics for a Profile Analysis of the Adult Attainment Project for High and Low Income Quintiles: Current Population Survey, 1980-2010

Factor Analytic/ 2-PL IRT Models	N	# param.	χ^2	df	p-value	χ^2 -diff. test*	df	p-value	CFI	TLI	RMSEA
1. Unconstrained Model (free loadings and thresholds)	40,564	80	340.3	40	0.000				0.995	0.990	0.038
2. Profile Convergence: (equality constraints in 2010)	40,564	66	7691.1	54	0.000	4,917.6	14	0.000	0.876	0.816	0.167
3. Profile Divergence: (equality constraints in 1980)	40,564	66	2,465.7	54	0.000	1,458.0	14	0.000	0.961	0.942	0.094
4. Adaptive Differentiation: (w/in class factorial invariance)	40,564	62	284.2	58	0.000	44.7	18	0.001	0.996	0.995	0.028
5. Class Divergence: (full factorial invariance)	40,564	59	470.9	61	0.000	184.2	21	0.000	0.993	0.991	0.036

* WLSMV is the Mplus estimator for a multigroup non-linear IRT analysis. However, the chi-square values from multiple WLSMV models are not directly comparable; the DIFFTEST function is used to properly conduct the chi-square difference test (See Mplus website). The null model is the constrained model; the alternative is the unconstrained model. A significant p-value means that the constraints did not significantly improve model fit over the unconstrained model.

an improvement in fit over the unconstrained model. According to the χ^2 difference tests (the null hypothesis being that the constrained model—model 2 or 3—is preferred over the unconstrained model—model 1), neither model is a statistical improvement over the unconstrained model (the null hypothesis is rejected). In fact, model 2 has the worst (absolute and relative) fit of any of the models (RMSEA = 0.167). There is no empirical support to suggest systematic increases in profile similarity or systematic increases in profile divergence of adult status attainments among high income men and low income men between 1980 and 2010.

Models 4 and 5 evaluate the adaptive differentiation hypothesis and the class divergence hypothesis. According to the model fit statistics, models 4 and 5 are better than models 2 and 3. However, none of the models pass the χ^2 difference tests over the unconstrained model. With ample data, small parameter deviations across groups in the unconstrained model make it difficult to falsify these theoretical perspectives. The RMSEA is a better metric of model fit for this reason. The RMSEA is slightly lower for the class divergence model (0.036) relative to the unconstrained model (0.038), and the RMSEA is the lowest for the adaptive differentiation model (0.028). Accordingly, we find more support for the adaptive differentiation hypothesis.

Table 3 presents the item discriminations and item difficulties from the unconstrained model: all factor loadings and thresholds are free to vary across decades and across income groups. The results in this table provide a descriptive assessment of how the components of AAP have changed over time by income group. Table 3 includes: (1) the relative within-income group ranking for each parameter; (2) Spearman's rho correlations, which are used to compare the relative ranking of parameters in each decade across income groups; and (3) the absolute difference in the parameters across income groups within decade. The estimates from the unconstrained model are also used to create the item characteristic curves, which serve as a visual representation of AAP (Figure 3). Although the results of Table 3 do not provide a formal statistical test of our hypotheses, the descriptive patterns are nonetheless very informative in the following ways.

First, the rank order of the item discriminations and item difficulties are quite static within income groups over this thirty-year period. This is why the adaptive differential model has the most support. For example, the rank order does not change at all for the lower income group's item discriminations or the upper income group's item difficulties. This means that the relative weights of the adult attainment indicators in defining AAP completion has not changed among lower income men, and that the relative difficulty of attaining these adult statuses has not changed for upper income men. Second, there are three notable changes in the rank patterns. Among upper income men, having children at home is a more defining status attainment in 2010 than previously: the ranking moved from third to second (larger item discriminations λ reflect steeper slopes and thus greater influence in defining AAP success). The major change among lower income men involves the difficulty of homeownership (the larger the point estimate, the more difficult the status is to attain). In 1980 homeownership was the fourth-hardest status attainment for low income men, but by 2010 it had become the second-hardest; the change was gradual, passing through the third spot in 1990 and 2000.¹¹

Table 3: IRT Parameter Estimates from the Unconstrained Model in Table 1

	Item Discriminations					Item Difficulties				
	Income Quintiles		Income Quintiles			Income Quintiles		Income Quintiles		
	Top	Bottom				Top	Bottom			
	Rk	λ_j	Rk	λ_j	Diff.	Rk	δ_j	Rk	δ_j	Diff.
1980										
Homeownership	5	0.372	5	0.276	-0.096	4	-3.876	4	-1.433	2.443
Children	3	2.309	1	3.304	0.995	1	-0.988	1	-0.371	0.617
Marital Status	1	2.652	2	2.743	0.091	2	-1.511	2	-0.675	0.836
Labor Force Active	4	0.529	4	0.334	-0.195	5	-5.088	5	-4.204	0.884
Res. Independence	2	2.365	3	1.428	-0.937	3	-1.905	3	-1.385	0.520
	Spearman's rho = 0.700					Spearman's rho = 1.000				
1990										
Homeownership	5	0.292	5	0.208	-0.084	4	-3.959	3	-0.660	3.299
Children	3	1.918	1	5.003	3.085	1	-0.749	1	-0.062	0.687
Marital Status	1	3.313	2	1.933	-1.380	2	-1.240	2	-0.331	0.909
Labor Force Active	4	0.548	4	0.324	-0.224	5	-4.710	5	-4.016	0.694
Res. Independence	2	3.060	3	1.180	-1.880	3	-1.574	4	-1.150	0.424
	Spearman's rho = 0.700					Spearman's rho = 0.900				
2000										
Homeownership	5	0.288	5	0.170	-0.118	4	-4.097	3	-0.761	3.336
Children	3	2.047	1	3.073	1.026	1	-0.673	1	0.176	0.849
Marital Status	1	3.179	2	1.966	-1.213	2	-1.113	2	-0.038	1.075
Labor Force Active	4	0.554	4	0.324	-0.230	5	-4.181	5	-3.165	1.016
Res. Independence	2	2.264	3	1.002	-1.262	3	-1.480	4	-0.953	0.527
	Spearman's rho = 0.700					Spearman's rho = 0.900				
2010										
Homeownership	5	0.321	5	0.164	-0.15	4	-3.557	2	0.178	3.735
Children	2	2.042	1	3.136	1.094	1	-0.675	1	0.194	0.869
Marital Status	1	4.134	2	1.578	-2.556	2	-1.125	3	0.021	1.146
Labor Force Active	4	0.376	4	0.283	-0.093	5	-5.631	5	-3.606	2.025
Res. Independence	3	1.747	3	0.884	-0.863	3	-1.615	4	-0.870	0.745
	Spearman's rho = 0.900					Spearman's rho = 0.700				

Third, according to Spearman's rho, systematic AAP profile differences are moving in two opposing directions: the relative rankings of item discriminations are becoming more similar between high and low income men (1980 $\rho = 0.700$; 2010 $\rho = 0.900$), but the item difficulties are becoming more dissimilar (1980 $\rho = 1.000$; 2010 $\rho = 0.700$). In other words, the relative weight of each status attainment in defining AAP success has become more similar, but the relative level of difficulty in fulfilling these status attainments has become more dissimilar. Current theoretical perspectives cannot fully account for this nuance. On the one hand, these findings

seem to suggest a modest degree of cultural diffusion in defining the relative importance of particular status attainments, particularly resident parenthood, for AAP success. Yet, on the other hand, these findings seem to suggest diverging structural opportunities between high and low income men that produce different class-based capacities for status attainment, especially with regard to homeownership.

Fourth, and in contrast to the rank comparisons, comparing the income group differences in the absolute magnitude of the estimates does more to support the profile divergence perspective than the profile convergence perspective. The most noticeable difference involves the influence of marital status in defining AAP success: in 1980 the class difference was essentially non-existent (0.091); by 2010 the difference had increased 30-fold (2.556). Marital status has come to be more definitive of AAP success among high income men while it has come to be less definitive for low income men—although in relative terms, marriage still ranks high in both groups. Homeownership (1980 dif = 2.443 versus 2010 dif. = 3.735) and labor force activity (1980 dif = 0.884 versus 2010 dif. = 2.025) are the two status indicators that have become increasingly more difficult for lower income men. Overall, these patterns appear to support profile divergence more than profile convergence; but because there is some, albeit limited, profile convergence, the profile divergence model did not demonstrate a statistically improved model fit (see Table 2).

Figure 3 graphically illustrates the AAP profile for high and low income groups in 1980 and in 2010 using the estimates from the unconstrained model in Table 3. On the x-axis, the AAP scale ranges on a continuum from low AAP completion to high AAP completion. The steeper the logistic curve for a manifest indicator, the larger the factor loading/item discrimination, and thus the better the indicator is in distinguishing AAP success from non-success. The further right the logistic curve along the x-axis, the greater the threshold/item difficulty, and thus the higher one's AAP score needs to be in order to fulfill that particular status indicator, on average. The major visual changes to these curves over time have been discussed above in reference to the relative and absolute pattern differences in Table 3.

The item characteristic curves provide two additional insights. First, both homeownership and labor force activity poorly define AAP success (relatively flat slopes). According to item response theory, if these manifest indicators were test items they would be considered poor indicators of ability (Glockner-Rist and Hoijtink 2003). In this context, homeownership and labor force activity are considered poor indicators of AAP success. This is somewhat understandable for labor force activity, given its high rate for both income groups in all decades; but for homeownership, this finding is unexpected given how iconic homeownership is for the American Dream. Among men it appears that the status indicators that require forming personal social relations—marriage and children—are more definitive of AAP success than the economic-based achievements of homeownership and labor force activity. Second, Figure 3 makes it clear that the thresholds have shifted to the right, especially for low income men; this means that middle-aged men, on average, need higher AAP scores in 2010 to fulfill the same level of status attainment as in 1980. This finding is consistent with the downward sloping trends presented in Figure 1. However, it is also important to note that the AAP profile looks as distinct between high and low income groups in 1980 as in 2010.

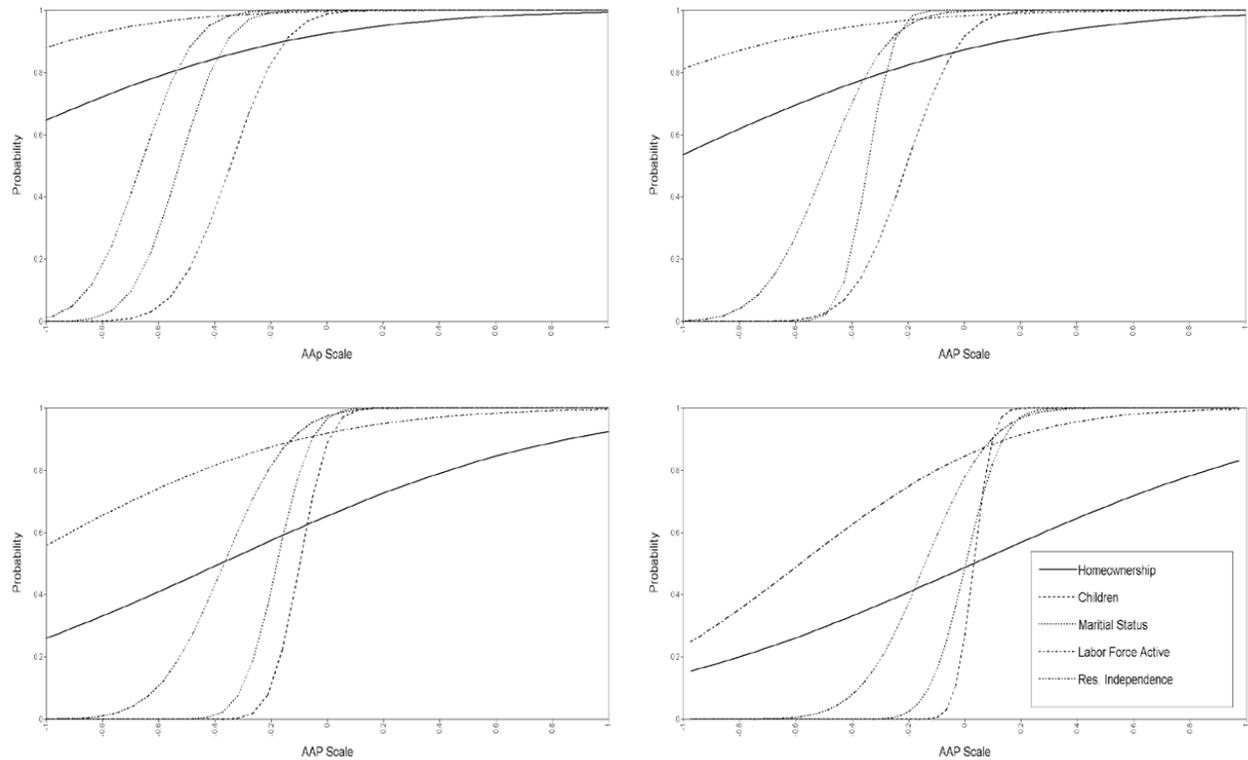


Figure 3: Item Characteristic Curves of the Adult Attainment Project for Middle-Aged Men in Low Income and High Income Categories, Current Population Survey 1980-2010

Table 4 presents the mean changes to AAP scores. The top half of the table presents the findings from the class divergence model (model 5, Table 2). The class divergence model constrains factor loadings and thresholds across decades for high and low income groups. The exception is for the marital status indicator. Freeing this parameter addresses the negative error variance that results when the parameter is constrained. Given how much the item discrimination for marital status changed for low income men, it is not surprising that equality constraints for this parameter across income groups create model convergence issues. The reference category for the class divergence model is high income men in 1980, assigned a mean AAP score of zero. According to the class divergence model, we find increasing declines of average AAP scores for both high and low income men. The declines are the greatest between 1980 and 1990 (-0.17 and -0.30) and then level off between 2000 and 2010 (-0.20 versus -0.22 and -0.50 versus -0.51). In support of the class divergence hypothesis, we find that the declines of AAP scores are notably greater for low income men (e.g., -0.17 versus -0.30 ; -0.22 versus -0.51).

The bottom half of Table 4 presents the findings from the best fitting model, the adaptive differentiation model (model 4, Table 2). The adaptive differentiation model constrains factor loadings and thresholds within income groups. For model

Table 4: Estimated AAP Mean Differences* from two Factorial Invariant Models: Class Divergence and Adaptive Differentiation Models

Model 5	Top Income Quintiles				Bottom Income Quintiles			
Class Divergence	1980	1990	2000	2010	1980	1990	2000	2010
Loadings								
Homeownership	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Children	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13
Marital Status	2.26	2.26	2.26	2.26	2.50 [†]	2.60 [†]	2.69 [†]	2.71 [†]
Labor Force Active	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31
Res. Independence	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21
Thresholds								
Homeownership	-1.33	-1.33	-1.33	-1.33	-1.33	-1.33	-1.33	-1.33
Children	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95	-0.95
Marital Status	-1.38	-1.38	-1.38	-1.38	-1.38	-1.38	-1.38	-1.38
Labor Force Active	-2.35	-2.35	-2.35	-2.35	-2.35	-2.35	-2.35	-2.35
Res. Independence	-1.75	-1.75	-1.75	-1.75	-1.75	-1.75	-1.75	-1.75
Means	0.00	-0.17	-0.20	-0.22	-0.30	-0.42	-0.50	-0.51
Variances	0.18	0.14	0.14	0.12	0.14	0.12	0.11	0.10
Model 4	Top Income Quintiles				Bottom Income Quintiles			
Adaptive Diff.	1980	1990	2000	2010	1980	1990	2000	2010
Loadings								
Homeownership	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Children	2.80	2.80	2.80	2.80	3.10	3.10	3.10	3.10
Marital Status	2.91	2.91	2.91	2.91	3.13	3.13	3.13	3.13
Labor Force Active	1.41	1.41	1.41	1.41	1.07	1.07	1.07	1.07
Res. Independence	2.84	2.84	2.84	2.84	2.64	2.64	2.64	2.64
Thresholds								
Homeownership	-1.36	-1.36	-1.36	-1.36	-0.34	-0.34	-0.34	-0.34
Children	-0.92	-0.92	-0.92	-0.92	-0.38	-0.38	-0.38	-0.38
Marital Status	-1.40	-1.40	-1.40	-1.40	-0.60	-0.60	-0.60	-0.60
Labor Force Active	-2.39	-2.39	-2.39	-2.39	-1.33	-1.33	-1.33	-1.33
Res. Independence	-1.75	-1.75	-1.75	-1.75	-1.18	-1.18	-1.18	-1.18
Means	0.00	-0.07	-0.09	-0.12	0.00	-0.10	-0.18	-0.19
Variances	0.11	0.12	0.12	0.10	0.09	0.09	0.09	0.09

* All point-estimates (including mean differences) in Table 4 are statistically different from zero at the $p < 0.001$ level.

[†] Model A is technically a partial measurement invariance model because the factor loading for marital status is free for those in the bottom quintiles. Freeing this parameter address the negative error variance that results otherwise.

4, there are two separate reference groups, one for high income men and one for low income men. The results in Table 4 support the adaptive differentiation hypothesis in two ways. First, the within-class declines of AAP scores are more pronounced among low income men than high income men (-0.07 versus -0.10 ; -0.09 versus -0.18 ; -0.12 versus -0.19). Second, the magnitude of the decline is less pronounced compared to the model that evokes the full standardization assumption (model 5). This suggests that each income group adapts to circumstances in ways that tend to optimize their AAP completion, but adaptation has become more challenging over time, especially for lower income men. Thus, regardless of the analysis (descriptive or factor analytical) and regardless of the comparison group (within or across income groups), this article finds that it has gotten especially hard for lower income men to complete their adult attainment projects.

Conclusion

Social change over the last decades of the twentieth century and into the twenty-first century has made the traditional adult attainment project more difficult. The decline in the share of men who are active in the labor force, residentially independent, married, living with their children, and homeowners has occurred across the socioeconomic hierarchy, but this decline is especially pronounced among poor, working class, and lower-middle class men. In an era of shifting economic opportunities and changing social norms about family and adulthood, these individual status attainments are also becoming disjointed in a way that is making the full completion of the adult attainment project less common. These population trends are clear, but the reasons for this social change are numerous and complex. This article provides an analytical approach that helps us unpack the nexus of structural and cultural forces surrounding the decline of the traditional adult attainment project. In the process it becomes evident how social stratification remains an important paradigm for understanding the nature of social change in the United States.

This study provides an intuitive schema that allows researchers to recognize, through a simple continuum, not only the unique structural and cultural contributions of change, but their potential interactions. Support for the adaptive differentiation hypothesis is a clear case of this interaction. The adaptive differentiation hypothesis allows for cultural adaptation among different segments of society when it comes to defining and completing their adult attainment projects but, importantly, this adaptation is also seen as a response to the opportunity structure (Silvia 2012, 2013). This means that even though working class men may have traditional notions about male breadwinner families that differ from those of upper-middle class men, the structural shifts in the economy have left many working class men struggling to find and maintain the types of secure and well paying jobs that provide the level of stability conducive to traditional family formation (Cherlin 2014). Although we do not directly observe individual preferences for these traditional status attainments, it is difficult to imagine how the significantly greater decline of the adult attainment project within lower income groups could be driven by cultural changes that are unrelated to changing structural conditions. This conclusion exemplifies how knowledge about, and comparative analyses designed in accordance with,

social stratification processes can be used to assess structural and cultural sources of change.

Methodologically, our comparative analysis is based on modern factor analytic techniques that rely on measurement invariance testing (Gregorich 2006; Muthén and Asparouhov 2013). This analytic approach allows us to comprehensively evaluate changes to the measurement construct of AAP over time. This is a powerful technique that provides more points of analytical comparison than is possible through the study of these adult status indicators separately. Factor analytic methods paired with measurement invariance testing should be a standard tool for quantitative assessments of social change.

The data, method, and analyses here are not without limitation. The failed chi-square test of model fit means that the measurement construct of an adult attainment project that combines all five status indicators is quantitatively imperfect. However, this misfit does not greatly alter the monotonicity between the observed and expected patterns in the data, and therefore we judge the degree of misfit to be modest. We suspect that future research using large samples and employing factor analytic approaches to capture individual attainment projects could also be challenged by the chi-square tests.

We suspect that better measurement specificity of individual status indicators would help on this matter. For example, having more detailed relationship indicators that provide temporally consistent measurement of cohabitation would improve the reliability and validity of the overall construct. We suspect that incorporating more information about employment security and job satisfaction would also be beneficial. The Current Population Survey and other census data products have limited temporal consistency regarding these details, and researchers will likely need to turn to longitudinal data in order to provide a more detailed assessment of the formation and development of individual attainment projects. This is the next logical step, but caution must be taken to ensure adequate subgroup variation across each individual status indicator. Data with large samples may lack status indicator specificity, but they ensure sufficient variation among independent status indicators that are nearly universally affirmative for some groups (e.g., labor force activity and residential independence).

Future research would also benefit from a more detailed measure of social class background. We acknowledge that income quintiles are a blunt instrument of social class standing, but in our opinion it is the instrument that requires the fewest assumptions. Future research should also examine socio-demographic reasons for why the class gap in AAP completion has increased. In this study we have assumed that economic, political, and cultural factors are the leading reasons for the hypothesized changes. In addition to these possibilities, researchers should also consider selective mobility processes and racial and ethnic compositional changes to the population. A special focus on the changing value of higher education might also be a fruitful undertaking. These are worthy avenues of consideration when contemplating social change, class inequality, and the adult attainment project.

Notes

- 1 “Normative” is used throughout the article to convey traditional mainstream beliefs, values, and ideas about adult status attainments over the life course.
- 2 We focus on men because the adult attainment project is more nuanced and complicated among women in ways that our data are unable to unearth, especially when examining trends over time by social class. For example, it is difficult to stratify women in the upper quintile who are stay at home mothers versus mothers with careers. Our data don’t explicitly account for AAP preferences, and while men also have preferences, the normative ideal over the duration of the study period is that men should be in the labor force.
- 3 Census data identify resident parents with children living in the household. Normative AAP success is defined by having children who are living in the same household, as opposed to simply having children who may or may not be living in the same household. Comparatively, the rate of fatherhood, regardless of living situation, among men between the ages of 35 and 45 is approximately 71 percent (source: *General Social Survey*).
- 4 Data and statistical codes are available through the lead author’s faculty page.
- 5 Note that adequate measures of wealth from alternative data sources (e.g., PSID) are unavailable for the duration of the study period.
- 6 We are purposely not interested in the sequencing of these adult attainments. Sequencing is best studied under the purview of the transition-to-adulthood literature.
- 7 Ideally we would have liked to incorporate cohabitating couples, but the data lacked that specificity over the duration of the study period.
- 8 The corollary in the transition-to-adulthood literature are idle young adults who are not working or in school (e.g., Edelman, Holzer, and Offner, 2006).
- 9 With continuous manifest indicators there is also metric invariance testing, but because of identification restrictions needed for categorical data analysis the thresholds and factor loading are tested together. As a result, the metric invariance test is an intractable and unnecessary step (See the Mplus website for technical references, <http://www.statmodel.com>). We could also do invariance testing to determine differential item functioning (DIF) within a MIMIC framework (MacIntosh and Hashim 2003). In supplemental models the results are similar (AAP harder to fulfill especially for lower income quintiles). However, the multi-group approach is preferred because it is more transparent and provides more flexibility with regard to equality restrictions.
- 10 Part of the growing income disparity could be from higher income families having children later in the life course. While this is also true among lower income families, the age delay has not been as pronounced. Therefore, there will be more 40- to 45-year-old men in lower income groups who would have adult children who have moved out of the house than is the case among high income families. Restricting the sample to just 35-year-old men does reduce the disparity by income, but the general pattern remains: the lower two income quintiles have seen greater declines in children living at home.
- 11 As conjecture, this finding likely signals the emergence of a pent up demand for housing among lower income men, and by extension, the rise of subprime mortgages as a means to fill the demand. With credit reports becoming a standard metric with which to gauge mortgage worthiness in the 1980s, lower income families that once were able to secure conventional mortgages only a generation earlier likely found subprime instruments their only option. This interpretation is considerably different from the idea that subprime loans were being offered to *new, undeserving segments* of society that were simply

unqualified to own homes. The declining rate of homeownership among the lower income quintiles suggests that prior generations of low income earners maintained a relatively high rate of homeownership (in 1980 a majority in fact; see Figure 2).

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