

### Abstract

As increasing numbers of adults return to school for advanced degrees, more non-traditional-aged new faculty are appearing in our institutions. These older adults, most of whom have had a distinct career before moving into teaching, face additional challenges above those of a new faculty member related to their age and prior professional experience. This study used the National Survey of Post-Secondary Faculty, first with the 1999 data and later with the 2004 data, to observe the differences between this non-traditional group and more traditional-aged new faculty, as well as to assess the satisfaction, success, and likelihood of achieving tenure for this group.

#### Introduction

It has been widely acknowledge that our population is aging; the percentage of people 65 and over has risen from 5.4% in 1930 to 12.4% in 2000, and estimates by the U.S. Census Bureau predict it will exceed 20% by the year 2050. For those 85 and over, the number has gone from 0.2% to 1.5% and is expected to top 5% by 2050 (U.S. Census Bureau, 2001).

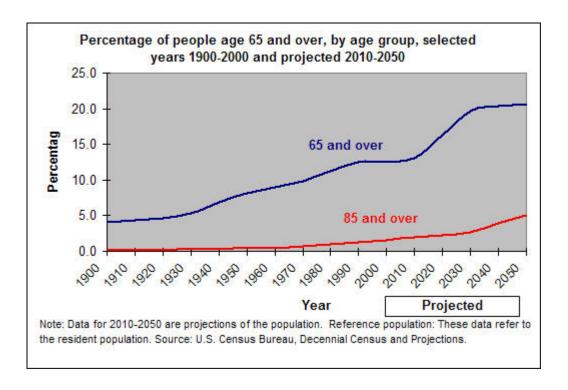


Figure 1 - Percentage of population over ages 65 and 85, including projections

This trend is further exacerbated by the steadily increasing life expectancy. Men born in 1930 were expected to live to 57.5 and women to age 60.9. A boy born in 2000 can now expect to live to 74.3 and a girl to 79.7 (National Center for

Health Statistics, 2005). Medical advances and better diet make it possible for older citizens to live longer, healthier lives. Trends show that this population is staying in the work force longer than ever. Since 1990, the number of men remaining in the work force between ages 65 and 69 has increased 6.6% and the number of women has increased 6.3% (Bureau of Labor Statistics, 2005).

These facts may seem unrelated to faculty, but this increasing longevity and longer working career is affecting the labor pool. Much has already been written about the aging of the faculty but little has touched on those entering the faculty at later stages of life due to career changes. These numbers, while currently small, are growing and will continue to expand as adults find themselves with a longer life and a desire to pursue alternative interests.

In a 1998 survey conducted by George Mason University, more than half of the participants had already changed careers at least once since college graduation ("Lifetime Learning"). Different media outlets suggest that the average American will have between three and five different, distinct careers during their lifetimes. Estimates on the number of distinct jobs stands at 10 and climbing, while the concept of a lifelong job appears to be disappearing.

At the same time we are seeing a demographic shift in the graduate student population. As early as 1995, "more than half of the 1.7 million working toward master's degrees and Ph.D.'s were 30 or older" (Horn, 1998). By 2004 that number had increased to 68%. By the year 2008 graduate education will be dominated by "female students over the age of 35" (Ebersole, 2004). It is clear that graduate education is going to produce far more non-traditional alumni and

that a percentage of those will achieve doctoral or first professional degrees. Some percentage of those will move into faculty positions in post-secondary institutions. It will not be uncommon for a new faculty member to be 40 years of age or older and still have 30+ productive working years available to their chosen institution. Given this demographic shift it is necessary to examine the satisfaction, retention and tenure of these non-traditional faculty members.

### Theory

Just as with gender or race, age is generally an obvious trait of a person. Humans automatically categorize people on these three dimensions. "This categorization is so well-learned and so fundamental to social perception that researchers refer to these dimensions as "primitive" or "automatic" categories." (Nelson, 2005) Yet while racism and sexism are actively researched and written upon, only a small fraction of the effort has been put into looking at ageism. Age prejudice is one of the most institutionalized and socially-condoned forms of prejudice, resulting in it often being overlooked by researchers.

There are several different theories that can account for ageism, two of which have shown promise in understanding ageism and how it is perpetuated. Snyder and Meine posit that negative attitudes help younger persons to deny the self-threatening aspects of old age (1994). Alternatively, Terror Management Theory has been put forth as accounting for ageism as a buffering agent against the fear of ones own mortality (Nelson, 2005). Yet neither of these theories seem complete in the case of the workplace.

The Age Discrimination in Employment Act (ADEA), enacted in 1967, prohibits age discrimination in hiring, discharge, pay, promotions, fringe benefits, and other aspects of employment for persons 40 years of age and older. Yet as of 2005 the Equal Employment Opportunity Commission still sees 22% of its complaints in the area of age discrimination (2006). 25% of these claims were based on failure to hire, where an older person felt they were passed over for a position that was given to a younger person despite the older person having better qualifications.

Companies cite varying reasons for not hiring older workers. According to the American Association of Retired Persons (AARP) these fall into a number of distinct categories, however two are more likely to apply to new faculty.

- Potential Tenure: "Many employers today still suffer from a mindset concerning lifetime employment." (Brosi & Kleiner, 1999) Hoping that people will stay for many years, they "suffer from the delusion that the younger the person they hire, the longer they will stay with them." (Brosi & Kleiner, 1999).
- Increased Costs: Companies expect older workers to call in sick more and cost more in terms of health insurance. Despite evidence to the contrary, this contention has reached almost religious proportions within many workplaces.

Much of the theoretical study of age in the workplace has looked at either normative or demographic groupings. Normative approaches measure the relationship between age norms and behavior, while demographic approaches use

age distributions as proxies for age norms. The key difference is that normative approaches take into account the social system's shared age estimates and judgments. (Lawrence, 1988) This is important as it speaks as much to the search committee's attitudes toward age and their perception of the age of a candidate as to the actual age of the applicant. For this reason, it is necessary to see if there is evidence of ageism within hiring in academia and to review the satisfaction and tenure prospects of those who have been hired.

#### The Data

This study makes use of data collected by the National Center for Education Statistics (NCES). The National Survey of Postsecondary Faculty is conducted approximately every 5 years and "includes a nationally representative sample of full-and part-time faculty and instructional staff at public and private not-for-profit 2- and 4-year institutions in the United States." (NCES, 2005) This paper makes use of both the 1999 and 2004 data sets.

It was first necessary to limit the data set to those applicable types of faculty. As such, the following limitations were put on all analysis:

- Highest Degree: Doctorate or First Professional. Finally it has become more common, particularly at 2-year institutions, for faculty to have a Masters degree instead of a Doctorate. Given the drastic difference in the nature of work required for the two degrees, the target population was set to require, as highest degree, either a Doctorate or First-Professional (M.D., J.D., etc.) degree. This constraint eliminated the 38.3 percent of the population whose highest degree is a Masters and the additional 11.3 percent of the faculty population whose highest degree is a Bachelors or less. This criterion alone eliminates 50.9% of the total surveyed population.
- Principal Activity: Teaching or Research. By limiting the principle
   activity to those directly related to classroom instruction we remove
   those who have faculty status but very different responsibilities. This
   group includes librarians, senior administrators, counselors and clinical

- faculty in the health related fields who are primarily clinicians. This criteria eliminates 17.5% of the survey population
- employed Full or Part Time at this Institution: Full Time. Full Time employment was chosen to ensure that each person was only counted once. Otherwise those who have multiple part-time positions could appear in the survey more than once. Moreover this report is interested in those who have changed careers into a faculty role from some other type of work. It is not at all uncommon for those who are still working full-time in their base field to take on part-time faculty positions as well. Eliminating them from this report permitted a more direct focus on those who were building a career specifically in academe. This criterion alone eliminates 43.7% of the surveyed population.

Thus the weighted sample size is reduced to 361,800.

To identify those who have changed careers we used a proxy of their age at the time of completion of their highest degree. This was chosen because it was most likely to indicate a distinct change in career. This was done to eliminate those who had not changed fields, such as a biologist who followed a traditional path for their Ph.D., spent 10 years doing research for a private firm and then took a faculty position. This study was most interested in those who had made a substantial change, thus leading to the use of a new degree as the proxy. The mean age at which faculty who meet the above criteria received their degree was 32.29 with a standard deviation of 7.92. Therefore for the purpose of this paper non-traditional

aged new faculty will be defined as those who received their highest degree at age 40 or later.

### Findings

Faculty whose highest degree was achieved at age 40 or later account for 15.1% of the population, up from 14.6% in 1999. They are predominantly female, with 25% of women receiving their degree at 40+ while only 10% of men. Despite the fact that men outnumber women in the faculty almost 2 to 1, more women in absolute numbers are receiving their degrees at 40+ than men.

While 14% of white non-Hispanics receive their degree at 40+, 28% of blacks, 18% of multiracial and 17% of Hispanics receive their degree later. The group remains predominantly white due to the 78.5% representation of whites in faculty roles.

While 27% work at public doctoral institutions, this represents only 9.7% of those institutions faculties. At the same time, 28.6% of the faculty with doctorates at public associates level institutions received their degree at 40+. Public and private master's level institutions employ around 23% of their faculty from this pool, while private doctoral institutions employ only 8.1%.

Field of study is fundamentally important in understanding who these faculty are. 40% of full-time Education faculty received their degree at 40+. On the other end of the scale, only 7% of natural science faculty and 8.4% of engineering faculty receive their degree at that age. As you can see in Figure 2, some of these fields are also seeing a higher percentage of entrants than others. Education in particular saw a 9% increase in this population between 1999 and 2004 while agriculture and home economics, a small population overall, tripled the number of faculty from this population. At the same time Humanities dropped by a third.

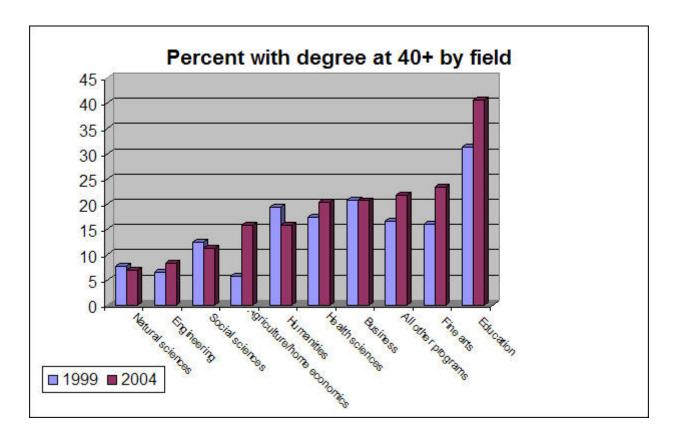


Figure 2 – Percentage of faculty in each field who received their degree at 40+

Taking these key areas of interest, the data was run through a regression analysis. Age in this case was used as a continuous variable in order to identify the age difference certain types of changes would make. R<sup>2</sup> was relatively low at .181, indicating that age at time of degree alone was not a predictive factor. However it was interesting to see the age differences implied when certain changes were made from the base population.

For this analysis, the base population was that of a white male full-time tenured faculty member at a public doctoral institution in the physical and computer sciences or math. He achieved his highest degree at an average age of 28.9. In

comparison, a women who meets all of the same criteria achieved her degree at an average age of 30.5.

Model	100	Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
	(Constant)	28.904	0.157		184.147	0.000
	Engineering	1.282	0.286	0.047	4.480	0.000
	Agriculture and home economics	3.456	0.464	0.075	7.440	0.000
	Business	3.502	0.278	0.133	12.583	0.000
	Education	6.246	0.293	0.229	21.346	0.000
	Fine arts	3.671	0.361	0.104	10.164	0.000
	Health sciences	1.567	0.262	0.065	5.977	0.000
	Humanities	2.083	0.207	0.114	10.058	0.000
	Social sciences	1.252	0.212	0.066	5.907	0.000
	All other programs	2.285	0.249	0.100	9.191	0.000
	Female	1.548	0.144	0.110	10.732	0.000
	On tenure track but not tenured	1.606	0.154	0.108	10.400	0.000
	Not on tenure track	2.007	0.195	0.109	10.312	0.000
	Not tenured-no tenure system	1.746	0.355	0.051	4.923	0.000
	American Indian/Alaska Native	3.759	1.358	0.027	2.768	0.006
	Asian/Pacific Islander	-0.032	0.208	-0.002	-0.154	0.878
	Black/African American non-Hispanic	1.514	0.292	0.051	5.192	0.000
	Hispanic White or Hispanic Black	0.268	0.398	0.007	0.672	0.502
	More than one race/ethnicity	0.134	0.470	0.003	0.284	0.776
	Private not-for-profit doctoral	-0.591	0.188	-0.033	-3.149	0.002
	Public master	2.806	0.192	0.159	14.606	0.000
	Private not-for-profit master	2.589	0.267	0.101	9.701	0.000
	Private not-for-profit baccalaureate	1.625	0.263	0.065	6.174	0.000
	Public associates	4.075	0.307	0.140	13.263	0.000
	1 Other type of institution	3.222	0.317	0.105	10.174	0.000
a. Depend	lent Variable: Highest degree, age received					
	lel: White Male Full-time Tenured at a Public	Doctoral institution in	the Physical	/Computer Sciences or Math		
	not significant					

Figure 3 – Regression analysis, Age at Highest Degree as Dependent Variable

As you can see from Figure 3with the exception of certain minority ethnicities these elements are all significant to age at time of degree. Interestingly, American Indian/Alaska Natives, while a small number overall and too small a number to have been included in the descriptive statistics, are particularly affected by age. On average they are almost 4 years older than our base faculty member if no other criteria changes, more than twice the difference seen with Black faculty. While the

standard error is quite large, this is likely due to the small population size and not unexpected. .

As would be expected, teaching in the field of education raises the expected age by 6.25, while working in the field of engineering raises it a mere 1.28 years. Type of institution also appears to be affected. While private doctoral institutions actually have a slightly lower age for our base line faculty member, most other types of institutions have faculty whose age at degree was 2.5-4 years older.

### Satisfaction and Tenure

With a somewhat better understanding of who this population is, it is time to turn our attention to how they are doing. Two critical measures of this are found in their tenure status and their self-reported answers to questions about job satisfaction and whether they would choose the same career again if given the chance. Figure 4 shows the results of the job satisfaction question.

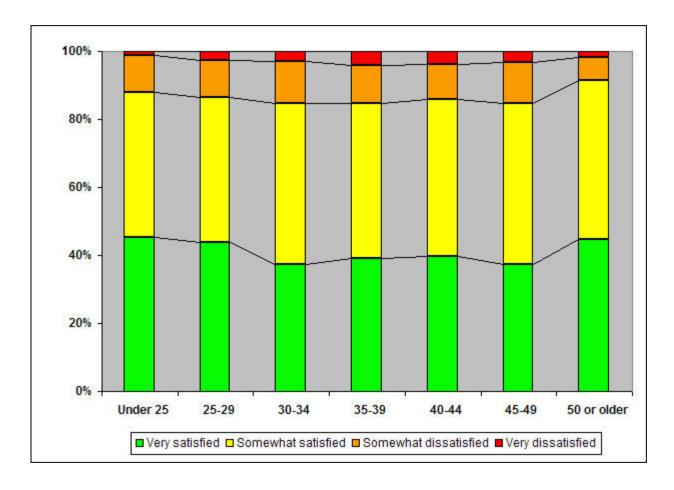


Figure 4 - Job Satisfaction by Age at Highest Degree

Noteworthy in Figure 4 is the increase in satisfaction for those 50 and older at time of degree.

Equally interesting is the question of choosing an academic career again (Figure 5). While positive response was very high, the most negative answers came from those who received their degree between 45 and 49. In both questions those who got their degree youngest appeared the most satisfied.

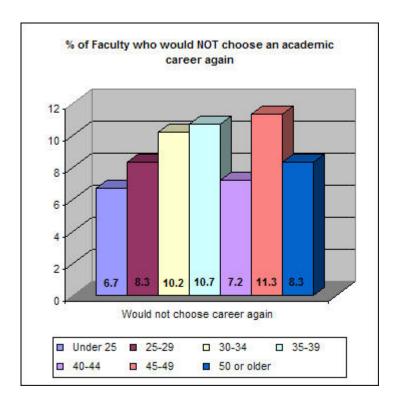


Figure 5 - % who would choose an academic career again

Regarding tenure, figure 6 reflects the percentage of those 40+ in the different possible statuses. Of particular interest is the jump of 4% in those from this age group as a percentage of the population at institutions with no tenure system.

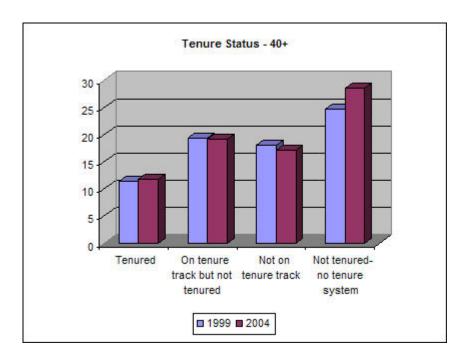


Figure 6 - tenure status for those age 40+

Figure 3 above shows that those who are not on a tenure track are, on average, 2 years older than our base faculty member.

#### Discussion

This data does not seem to indicate a rash of blatant age discrimination in the academy as yet, but it does suggest several areas of concern. Certain groups, particularly women and some minorities are disproportionately represented among those getting their degree later. This is not entirely surprising given both the fields in which later degrees are most commonly granted and the life-experiences and opportunities available to many women and minorities. A woman who has stayed home and raised a family or worked a utilitarian job may choose to start a new career later in life that involves this kind of sweeping change. Minorities historically have struggled to find funds, time and opportunity to attend college compared to white men and thus also can join their fields later. However it is apparent that there are combinations of these attributes that can and regularly do lead to considerably older new faculty than we typically envision.

Certain fields, such as education and in general the more practitioneroriented fields, appear to be more open to older new colleagues and the experience
they bring with them. This is to the point where 40% of Education faculty are
drawn from this pool. Yet even in an area where this type of new colleague is
commonplace there are still reasons to be concerned. As you can see in figure 7,
the percentage of education faculty who received their degree at 40+ who have
tenure is less than 30%, whereas the percentage in each of the other possible
statuses are close to or above 50%. While the increasing percentage over 1999 of
those tenured or on track seems encouraging, the two years show a significant drop
(12%) in the total actual number who are tenured. Thus the number of tenured

faculty represented by those percentages remains the same. Equally interesting is the significant (12+%) increase in those not on a tenure track despite tenure existing at an institution. This represents a doubling of the actual number of people not on a tenure track from this group due to the overall growth of faculty teaching full time but not on tenure tracks.

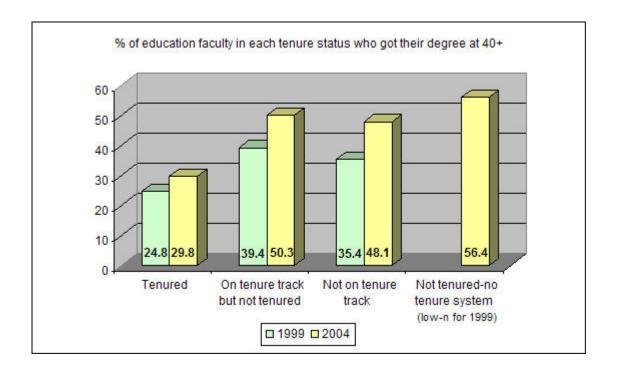


Figure 7 - Percentage of Education Faculty who received their degree at 40+, by tenure status

In the humanities the percentage of faculty whose terminal degree came at 40+ who are at a no-tenure school is double the percentage at schools with tenure. This is a smaller population, but is being made up of older graduates and leads to

the question of whether some form of subtle discrimination is driving these faculty to these types of organizations.

The principle exception to this pattern is the health sciences. Interestingly this area has the 4<sup>th</sup> highest number of later graduates but sees the third lowest overall difference in number of people who graduated at 40+ in teaching positions. This could be related to the difference in traditional career paths for Doctors and Nurses, where Nurses generally practice for several years before completing a doctorate and moving into teaching while Doctors (M.D.s) move straight through.

The 28.6% of faculty who got their doctorates at 40+ and are teaching full time at public associates level institutions is of particular note. This is the highest percentage of any of the institutional classifications, which on the one hand speaks to the openness of the community colleges in this country. On the other hand, there is no need to get a doctorate to teach at most associates level institution. Are these non-traditional faculty accepting these positions out of a love of teaching or out of few other options. If a pattern of pushing these graduates off to less research-oriented institutions were to emerge it could be a sign of discrimination.

This study has no way of identifying people working part time positions who want or are seeking full time positions but are unable to secure them. While there were actually more people in full-time positions in the 2004 survey than in 1999 (68% vs. 67% of faculty with a doctorate or first professional degree and whose primary responsibility is teaching or research), the 2004 survey showed 11% more of those in part time positions having achieved their degrees later. 17.9% of all faculty (full and part time) with doctorates received them after age 40+, but 26%

of the faculty in part time positions did so compared with only 15% of those in full time positions. Is this by choice or out of no other options?

Seeking a position at 35 when the norm is 30 is unlikely to invoke a biased response. Seeking one at 45 is another story entirely. So far the symptoms are subtle and could as easily be related to race and gender as to age. All three are readily apparent and all three are known to affect hiring decisions. However as the tenure numbers for education show, a one third increase in overall population of this subgroup has resulted in a doubling of the number of faculty not in a tenure track position.

Differentiating the impact of age from that of race or gender is a difficult task in this population, since the white male student is the norm for who the systems were put in place and the processes designed. Understanding the motivation and reasoning of the hiring committee is a task for which this kind of survey is ill-suited. We see in the numbers that there is something going on, but whether that something is directly age related or whether it is race/gender related and age is nothing more than a factor correlated to that population will need to be reviewed as additional data is made available and longer-term trends can be analyzed.

#### Areas for Further Research

This small study has barely scratched the surface of what will be an expanding issue over the coming decades. As stated above, we can expect many more faculty members who have taken a circuitous route to the academy and who have much to offer for many years to come. Thus there are a substantial number of research questions that will need answering.

An area that cannot be looked at in this data set is the job search process for these graduates. Does it take them longer to find jobs? Do they go on more or less interviews? Do they present limitations themselves (such as geographic limits) that impact their job searches? Do they disproportionately end up in part time positions and non-tenure track positions due to either these limitations or their age? Or are these the only doors consistently open?

Are there any fields that are seeking out this group for recruitment and, if not, why not? Education and Business particularly have much to gain from the practical experiences brought by those who have had another career first. For those fields that appear less open to this population, why? What is it about the graduate experience that keeps older students out of those fields in the first place so that there are few older graduates to choose from during a hiring cycle? Is the problem more a matter of lack of interested parties or discouragement from those inside the academy? This discouragement would theoretically start long before a job hunt, during the graduate admissions process.

A rich area of study would be to longitudinally follow a representative, interdisciplinary group for the first few years of their career to see how things

progress. This would allow a real assessment of any subtle discriminatory activities that take place, such as slower movement toward tenure.

# Conclusions

Equity has long been a desire of all academicians and with the increasing size of this non-traditional population our institutions need to be vigilant for unequal treatment. This study hopes to shine the light on a potential problem early in a demographic trend.

It may be that no problem emerges; that institutions as employers quickly adapt to the changing face of new graduates and welcome these new colleagues with open arms, setting an example for industry. But as can be seen already there is a slight trend toward differential treatment. Given the prevalence of women and minorities in this population it is important that vigilance be maintained and an open mind be kept toward these new colleagues.

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