The Changing Profile of Tenure-Track Faculty in Archaeology

Justin Cramb , Brandon T. Ritchison , Carla S. Hadden , Qian Zhang, Edgar Alarcón-Tinajero , Xianyan Chen, K. C. Jones, Travis Jones , Katharine Napora , Matthew Veres, and Victor D. Thompson .

ABSTRACT

The goal for many PhD students in archaeology is tenure-track employment. Students primarily receive their training by tenure-track or tenured professors, and they are often tacitly expected—or explicitly encouraged—to follow in the footsteps of their advisor. However, the career trajectories that current and recent PhD students follow may hold little resemblance to the ones experienced by their advisors. To understand these different paths and to provide information for current PhD students considering pursuing a career in academia, we surveyed 438 archaeologists holding tenured or tenure-track positions in the United States. The survey, recorded in 2019, posed a variety of questions regarding the personal experiences of individual professors. The results are binned by the decade in which the respondent graduated. Evident patterns are discussed in terms of change over time. The resulting portraits of academic pathways through the past five decades indicate that although broad commonalities exist in the qualifications of early career academics, there is no singular pathway to obtaining tenure-track employment. We highlight the commonalities revealed in our survey to provide a set of general qualifications that might provide a baseline set of skills and experiences for an archaeologist seeking a tenure-track job in the United States.

Keywords: tenure track, mentoring, graduate school, academic qualifications, job market, professorial demographics

Doctorantes en arqueología comúnmente anhelan lograr empleo académico con tenencia docente. Los estudiantes de doctorado principalmente reciben formación académica y profesional por parte de profesores que al igual han obtenido o anhelan obtener empleo con tenencia docente. Comúnmente, se espera tácita o explícitamente proseguir en pasos de sus asesores. Sin embargo, la trayectoria profesional de estudiantes doctorales y recién egresados suelen tener poca semejanza a las trayectorias de sus respectivos asesores. Encuestamos 438 arqueólogos en plazas con tenencia docente o con posibilidad de tenencia docente en los Estados Unidos para esclarecer diversas trayectorias profesionales y asesorar actuales doctorantes que contemplan una carrera académica. La encuesta que se llevó a cabo en 2019 plantea una variedad de preguntas acerca de experiencias individuales de los encuestados. Los resultados se agrupan por década en cual se egresó el encuestado. Se discuten los evidentes patrones conforme cambios cronológicos. Los resúmenes de trayectorias profesionales académicas a lo largo de las últimas cinco décadas indican que aunque existen características compartidas en las cualificaciones de los recién egresados académicos profesionales, no existe una ruta singular hacia un empleo con tenencia docente. Resaltamos las características compartidas entre los encuestados para presentar cualificaciones que pueden ser un punto de referencia de las destrezas y experiencias adecuadas para un arqueólogo en busca de tenencia docente en los Estados Unidos.

Palabras clave: tenencia docente, asesoría, posgrado, cualificaciones académicas, mercado laboral, demografía profesoral

Archaeologists with PhDs obtain employment in many sectors, including government positions and cultural resource management (CRM). For many PhD students and recent graduates, employment as a tenure-track (TT) professor is a primary goal. The TT job market is saturated and increasingly competitive, making it difficult for recent PhDs to secure such a position (Speakman, Hadden, Colvin, Cramb, Jones, Kling, et al. 2018, Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018). To make matters worse, students often lack the knowledge and experience necessary to successfully navigate the "black box"

that is the academic job market (Kelsky 2015). This stems from numerous systemic issues in academia, including—but not limited to—the types of training they receive, their own institution's values and practices, and the experiences and knowledge of their mentors. Furthermore, academia is not a meritocracy, as much as we often think otherwise, and unquantifiable variables can influence one's "luck" on the job market. To make matters harder for the job seeker, there are few independent sources (literature, blogs, etc.) that students can look to that provide discipline-specific information on the academic job market, although this seems to

Advances in Archaeological Practice 10(4), 2022, pp. 371-381

Copyright © The Author(s), 2022. Published by Cambridge University Press on behalf of Society for American Archaeology. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike licence (https://creativecommons.org/licenses/by-nc-sa/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the same Creative Commons licence is included and the original work is properly cited. The written permission of Cambridge University Press must be obtained for commercial re-use.

be changing (e.g., Speakman, Hadden, Colvin, Cramb, Jones, Jones, Kling, et al. 2018; Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018).

For most first-time job seekers, the TT job market is shrouded in mystery because few institutions offer courses or other resources that specifically address the process of an academic job search. In general, students may know how to prepare for job talks and interviews, but the specifics of what makes a successful candidate are often primarily conveyed through anecdote. Most often, advice on how to prepare for and become competitive in an increasingly crowded field comes from already tenured advisors who succeeded in their own job searches in the context of past markets, sometimes decades prior. This can leave students unprepared, or improperly prepared, because they do not know how or where best to focus their efforts during their time in graduate school. Anecdotal advice may lead students to prioritize certain qualifications over others (e.g., publications, teaching experience, field experience, industry experience, grants, etc.), perhaps to their own detriment. In this article, we seek to examine how demographics and academic profiles of people who succeeded on the American TT job market have shifted over the last 50 years. We focus on patterns in the profiles of respondents across multiple, potentially contributing, factors such as gender, race, socioeconomics, and funding, as well as quantifiable research products and other experiences held at the time of receiving a PhD. This includes grants, publications, and courses taught.

Public perception of the importance of higher education in the United States has shifted, and more careers than ever before require an undergraduate degree (Brundage 2017). The rising cost of education has made financing a degree a necessity for many. Additionally, the availability of Pell grants, student loans, and the GI bill have made the capital needed for undergraduate education available to more people than ever before (e.g., Olson 1973; Sjoquist and Winters 2012). This has spurred a need for more professors to teach these students. Many of these students (the lead author included) had no personal support mechanism to help navigate higher education or what followed. Likewise, even academics who could presumably rely on the experience and support of family members now face a context that is much different from the one their support system faced. This leads to the common scenario where PhD advisors and other trusted academic mentors have become the primary source of career advice for matriculating graduate students.

Job seekers may also pursue the limited (and sometimes dated) literature that exists on the subject (e.g., Feibelman 2011; Kelsky 2015; Peters 1997). The information in these sources, although potentially illuminating, is often anecdotal and stresses the things that worked for the authors (and the authors' advisees). Consequently, we seek first to examine the variables that we are taught to believe are most important for succeeding on the TT job market in an evolving academic climate and then to demonstrate how these variables (and expectations for qualified candidates) have, or have not, changed over time. In so doing, we discuss which aspects of education and graduate preparation students should focus on as they pursue their PhDs and prepare for the post-graduation job market, with the hope that this information will benefit both prospective TT archaeologists and their academic mentors.

PROJECT BACKGROUND

This project is a continuation of previous work examining the nature and character of the academic job market in American anthropology (Speakman, Hadden, Colvin, Cramb, Jones, Jones, Kling, et al. 2018; Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018). These projects demonstrated patterns in hiring for TT positions at the institutional scale, where a minority of universities produced the majority of the PhDs who currently hold TT positions. This work is part of a growing body of literature examining the nature of academic jobs as they articulate with a host of social, economic, and historical trends—such as gender (e.g., Fulkerson and Tushingham 2019; Overholtzer and Jalbert 2021; Tushingham et al. 2017), social networks and pedigrees (e.g., Kawa et al. 2019), and job choice (e.g., Bartram 2021; Lyon 2018), among others. Such research is important in several respects, given that it exposes the inherent biases of our discipline specifically, and of academia in general. Furthermore, such research provides students with real-world information on these career paths, thereby helping them make informed decisions regarding pursuing jobs or even attending graduate school.

Hiring trends over the past 40 years have ebbed and flowed in relation to historical events. The implementation of the Age Discrimination in Employment Act (ADEA) resulted in fewer retirements during the 1980s and 1990s. This likely influenced a period of decline in TT hires in archaeology. By the 2000s, the market was in a recovery trend before a rapid decline in hiring during the recession of the late 2000s (Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018). However, according to 2014 data, US institutions now produce more PhDs in anthropology than ever before, with a 70% increase in production since the late 1980s (Speakman, Hadden, Colvin, Cramb, Jones, Jones, Kling, et al. 2018). Over 500 programs in the United States alone offer some sort of anthropology degree, yet trends indicate a decline in undergraduate degrees awarded beginning in 2013 (Ginsberg 2017). A continued decline in enrollment may lead to a reduced demand for TT anthropology faculty in an already saturated market. How that might translate to archaeology and other anthropological subdisciplines is unknown. Therefore, to provide the best information possible to individuals so that they can make more informed decisions regarding the pursuit of a TT job in anthropology—and specifically archaeology—we conducted a survey of archaeologists who currently hold TT positions in order to begin to develop a profile of what a "successful candidate" on the TT market looks like today, and how the attributes of a "successful candidate" have changed over time.

Before moving on to the study itself, we note several important points about what this current study does and does not present. First, given that we did not survey people who did not obtain TT jobs, we cannot say with certainty what variables specifically confer a competitive advantage with this study alone. Much like the recent study published in Science Advances regarding TT jobs in neuroscience (Hsu et al. 2021), our purpose here is to provide a profile of individuals over time who have gone on to obtain a TT position. This information can then be used by those who wish to pursue a TT career, as well as by those offering advice to mentees. As we will show, there is no one path to a TT job in archaeology. However, understanding some of the general trends can help students clarify and inform their career aspirations.

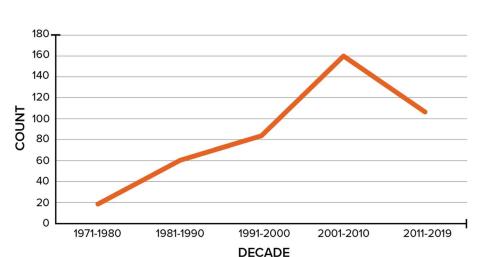


FIGURE 1. The number of respondents who received their PhD in a given decade.

METHODS

In 2019, we created a 56-question Qualtrics survey to construct early career profiles of those who held TT positions in archaeology at that time. We obtained the e-mail addresses of TT archaeologists at colleges and universities in North America from faculty web pages, academic listservs, and social media. In all, individual, single-use survey links were sent to 1,130 individuals. Of these, we received 438 responses, 90% (N = 393) of which were complete. The questions included information regarding the academic path of the individual, including demographic information (age, gender, ethnicity, etc.), current and past work history (academic and nonacademic), educational history (school, teaching experience, publications, student loans, research, etc.), and the hiring process (numbers of applications and interviews, starting wages, etc.). We then analyzed the responses using descriptive statistics, which we present in graphical form in the body of this paper. Data from incomplete questionnaires were used where possible for individual metrics. We group individuals based on the decade in which they received their PhD. These decadal cohorts include 1971-1980 (the '70s), 1981-1990 (the '80s), 1991-2000 (the '90s), 2001-2010 (the '00s), and 2011-2019 (the '10s). An anonymized version of the survey data and the survey questions are available as supplemental data (Supplemental Table 1; Supplemental Text 1).

RESULTS

The results of the survey presented here focus strictly on the data generated from the research instrument (Supplemental Text 1) regarding demographics, academic milestones, and the academic job market. We use this data to create a generalized profile of individuals who currently hold TT positions in academia. Questions not considered here are present in Supplemental Table 1, and they may provide avenues for future research.

Demographics

To examine the demographic profile of TT archaeologists in America, we looked first at year of graduation, then ethnicity and gender, and finally student debt and support structures. The data demonstrate that although the number of PhDs earned has increased over the decades, the racial diversity of TT archaeologists remains shockingly low. The demographic profile of today's average TT archaeologist is usually white and equally likely to be male or female. Socioeconomic indicators remain highly variable, suggesting no link between the education level of an individual's parents and the attainment of a TT position, but student debt is more substantial for more recent cohorts.

Year of Graduation. Of the 425 respondents who indicated the year in which they received their PhD, we see a clear trend that demonstrates the increased accessibility of-and perhaps the demand for people with—advanced degrees in archaeology and related fields (Figure 1). Our first cohort, the '70s, only included 18 individuals. The numbers of graduates currently holding TT positions increases throughout the decades, with a steady rise to 159 in the '00s. This is followed by a decline in the '10s, which may be reflective of an oversaturation of the job market in recent years (Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018). This also corresponds to the decline in anthropology degrees awarded by institutions beginning in 2013 (Ginsberg 2017). This trend, in part, is likely due to the growth of programs as well as the founding of new programs over time. To some degree, it also probably reflects attrition, because older members of the discipline have since left their university positions or perhaps were less likely to respond to our survey than their younger colleagues.

Ethnicity and Gender. Ethnic diversity among TT appointments is extremely low, both in the past and currently. Of archaeologists in our survey who graduated in the '70s, 89% identified as white. This number remained between 84% and 92% over the following decades, with the '10s having the most diverse cohort (but still overwhelmingly white). However, we see a more varied profile in the ratio of reported gender between our decadal cohorts (Figure 2). In the '70s, men dominated the discipline, with 72% of the cohort identifying as male. This percentage shifted steadily over the decades, with women making up 50% of those surveyed who graduated in the '00s. By the '10s, women make up the clear majority of the cohort, with

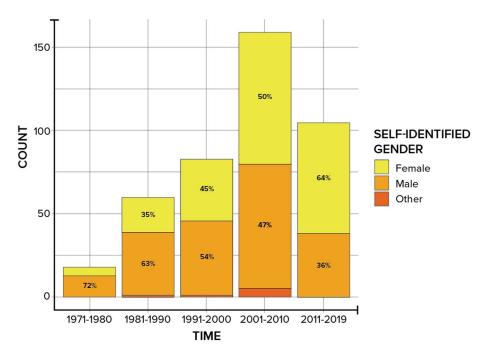


FIGURE 2. The self-identified gender of respondents who received their PhD in a given decade.

64% of the sample identifying as female. This is likely a real phenomenon and not an artifact of our survey strategy, given that the total number of respondents in the survey who identified as female (N = 209) was equal to those that identified as male (N = 209). In addition, our previous work identified that women represent a growing number of PhD graduates within anthropology, and in fact by the mid-'90s, they became the majority (Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018: Figure 1). Consequently, it is probably correct to assume that there are more women applying to the average TT job than there are men (Speakman, Hadden, Colvin, Cramb, Jones, Jones, Kling, et al. 2018:5).

Student Debt and Support Structures. It is difficult to measure and compare the relative socioeconomic status of respondents during their education and how it impacted their ability to secure a TT job. We asked respondents to provide their student loan debt amounts. Student debt represents a notable hardship incurred by many students who are attempting to earn a PhD and gain subsequent employment but who lack personal wealth. Graduates from the '70s reported the lowest amounts of student debt, with 76% holding \$0-\$4,999 at the time of graduation. Over the following decades, we see an increase in graduates with higher amounts of debt. By the '10s, only 35% of graduates report \$0-\$4,999 of debt, instead experiencing a wide spread of higher debt amounts. A staggering 21% of graduates held \$80,000 or more in student loan debt at the time of graduation. We recognize that inflation, more easily accessed loans, and increased cost of education account for some of the reported increase in the amount of debt held by graduates over time. Based on the Consumer Price Index (US Bureau of Labor Statistics 2021), \$5,000 in 1971 would have purchasing power equivalent to nearly \$34,000 in 2021. That said, the proportion of student debt to the average faculty starting salary among these decadal cohorts varies widely, with the most recent decadal cohort having more debt than the average starting salary for assistant professors at R1 institutions (Supplemental Table 1).

In addition to debt, we sought to identify the challenges of firstgeneration students by looking at changes in the level of degree held by a respondent's parents. Studies show that first-generation students face a plethora of challenges not faced by those who have a personal support network experienced in academia (Collier and Morgan 2008). Whereas the educational attainment of respondents' parents fluctuated over time, the number of firstgeneration students remained steady across our decadal cohorts. Additionally, we did not find a statistically significant relationship between the education level of a respondent's parents and the amount of student debt held at the time of graduation.

Overall, the demographic profile of the TT archaeologist has changed over time, but some aspects have remained constant. TT academic archaeologists remain primarily white and come from a mix of socioeconomic backgrounds and academic lineages. However, the proportion of gender identities among our survey respondents has shifted significantly between our decadal cohorts.

Academic Milestones

If asked what the important milestones one must complete to be competitive in the academic job market are, many faculty advisors might answer by giving numeric figures. They may say "complete your PhD in five years or less" or "have three first-author, peerreviewed publications by the time you graduate." To quantify how such milestones were met by successful academic candidates, we asked questions regarding traditional metrics of academic productivity. This includes time to degree completion, teaching experience, originality and mode of research, amount of fieldwork, numbers and types of publications, number of grants, number of professional presentations, and time spent on assistantships. The

results indicate that although some general expectations have remained constant, such as time to completion, the goalposts of achievement have indeed moved over the decades.

Academic Support and Time to Completion. Students seeking PhDs require institutional and grant-aided support—such as teaching or research assistantships—in addition to student loans, external work, or existing wealth to support themselves financially during their graduate studies. Teaching or assisting with teaching or ongoing research is often expected in return for financial support and tuition. Assistantships also provide important experiential learning opportunities in research and pedagogy. Of respondents graduating in the '70s, 11% completed their studies with no academic support, whereas the remaining 89% held a teaching or research assistantship for at least three semesters. A slight trend of increased assistantship support is visible across our decadal cohorts. Only 2% of respondents were entirely lacking in assistantship support in the '00s and '10s. We found that the number of years of support was related to the number of years spent in a PhD program, regardless of decade. Most students received support for the entire —or close to the entire—time in their PhD program. The duration of enrollment in a PhD program (Figure 3) averaged seven years for those graduating in the 1980s-2010s. Time to completion was slightly shorter in the '70s, at six years on average. Interestingly, this is also the academic cohort that conducted the least amount of original fieldwork for their dissertations, which may in part have contributed to the shorter time to graduation. Nevertheless, all of this suggests that regardless of when they entered the job market, financial support has been and remains a necessity for students who ultimately find success on the TT job market.

Teaching Experience. Frequently, academic job advertisements state a preference for candidates with experience as an instructor, or minimally, as a teaching assistant. We asked participants to quantify their years of experience as teaching assistants and/or as instructors of record as graduate students—that is, before they were hired into their TT position. The rate at which respondents served as teaching assistants varied across decades, with no discernable trends. However, the number of courses in which students were instructors of record remained constant through the decades. Those who graduated in the '00s-'10s were most likely to have taught at least one course by graduation. Only 25% of respondents graduating in the '00s and 19% of those graduating in the '10s indicated that they had finished their degrees without any formal teaching experience. This represents a general reduction over time in the number of TT hires who had no teaching experience of any kind, which may indicate that more recent graduates are expected to have a greater amount of teaching experience than in previous decades (Figure 4).

Original Fieldwork. Many advisors might also stress the importance of conducting original archaeological fieldwork, defined as fieldwork that was not a part of their advisor's ongoing research, but as a part of a student's academic training and doctoral research. Our survey data support this view and show that the valuation of original fieldwork by hiring committees has not varied significantly over the period covered by our survey. At the low end, only 59% of respondents who graduated in the '70s completed original fieldwork as a part of their dissertation. This increased to 76% in the '80s and 85% in the '90s before declining to 77% in the '00s and 78% in the '10s. This indicates that the completion of original fieldwork has maintained its importance for archaeology hiring committees and that those who complete original fieldwork as part of their dissertation may be more likely to secure TT positions than those who do not.

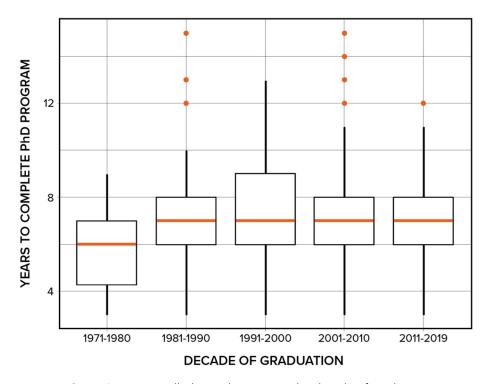


FIGURE 3. Time enrolled in a PhD program by decade of graduation.

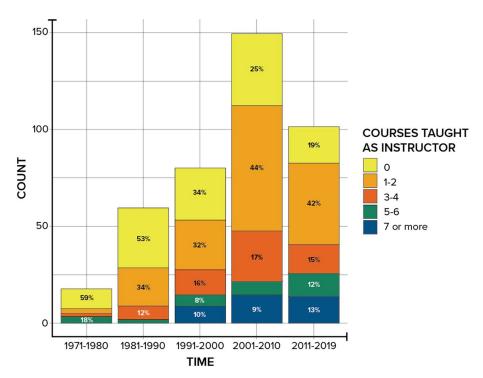


FIGURE 4. Courses taught during graduate school as instructor of record by decade of graduation.

Grants and Funding. Faculty often expect PhD students in archaeology to pursue external research funding and to take advantage of internal opportunities. We asked respondents to list their internal and external awards as PhD students. The trends revealed in Figures 5 and 6 are clear: over the past five decades, the successful TT job candidate has been increasingly effective in obtaining funding for research. In the '70s, only 22% of graduates surveyed received \$1,000 or more in internal research support; 50% received external research support. Both metrics increased in subsequent decades. In the '10s, 85% of those surveyed received \$1,000 or more in internal research support, and 80% received external research support of more than \$1,000. Again, as in our questions regarding personal debt, we recognize that the comparison of dollars to dollars across this time frame might be misleading. However, we see the general pattern of more recent hires having received more external research funding as graduate students as a real trend. This may simply indicate that these sources of funding became more commonly available in recent decades. It does however also indicate that—possibly due to this increased availability—a record of receiving grants is expected for those who seek TT employment.

Publications. "Publish or perish" is perhaps the most recognizable academic adage. Many PhD students are not spared from having this motto forced on them at an early stage of their education, but is publishing as a PhD student necessary to gain employment as a TT academic? Our data suggest that it is not, strictly speaking. Some individuals (17% of those surveyed) gained TT employment with zero peer-reviewed journal publications upon graduation; 9% of those surveyed attained TT employment without any peer-reviewed journal publications, book reviews, or chapters in refereed volumes.

However, most respondents (57.2%) had between one and three publications upon graduation (Figure 7). This number has remained steady over the decades, with an increase evident in the '10s, clearly showing its increased importance in recent years. The range of variability in this metric has increased significantly over the decades: in our earliest cohort, no respondents had more than four publications at the time of hire, whereas a handful of recent graduates had 13 or more publications at the time of hire. Our data further suggest that the role of student authors is perhaps less important than their participation in the publication process, generally. Respondents with publications had at least one publication as first author 84% of the time, and a sole author publication only 59.2% of the time.

Additional types of publications—such as book reviews, book chapters, and publications in regional, state, and local journals were infrequently present in our respondents' graduate records. This suggests that these products may have less bearing on TT hiring. A record of publishing original research has been, and remains, an important element of how hiring committees rank TT applicants.

Conference Presentations. Publication is not the only outlet for dissemination available to graduate students. Conference presentations, often seen as a way of developing research skills and networking, have been presented as important activities for TT employment-seeking graduate students for decades. The prevalence and frequency of presenting at conferences has climbed steadily over the decades (Figure 8). Students graduating in the '70s averaged three presentations during their time as graduate students. That number has climbed to 12 for those graduating in the '10s. This suggests that networking and experience in public speaking may be a crucial

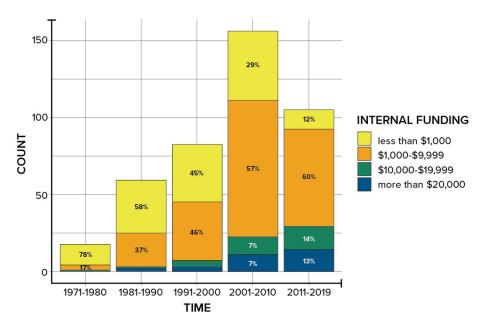


FIGURE 5. Internal funding by decade of graduation.

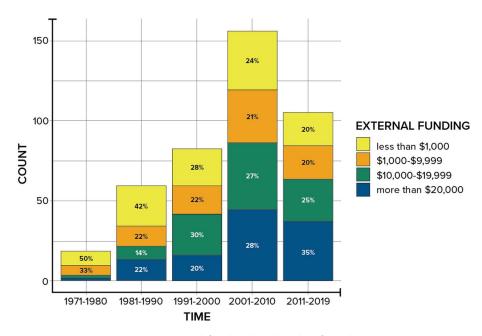


FIGURE 6. External funding by decade of graduation.

part of TT academic success and that regular presentations at conferences are therefore a vital aspect of preparation for the job market.

The Job Market

Although some graduates move directly into TT academic appointments following graduate school, our data demonstrate that this is much less common today than it once was. Of respondents who graduated in the '70s, 41% spent less than a year seeking TT employment on the job market. This fell to 25% in the '80s and 21% in the '90s before climbing back to 38% in the '00s and 33% in the '10s. It was not uncommon for recently graduated respondents (15%–29%) to spend up to two years on the job market, with some respondents having spent even more time searching.

For some, this time is spent in postdoctoral appointments (usually one- to two-year appointments). Most (more than 50% of respondents) spent some time in non-tenure-track academic appointments. The non-TT-appointment route has maintained prevalence over the decades, with 65% of respondents graduating in the '70s reporting some time spent in non-TT, but related, work.

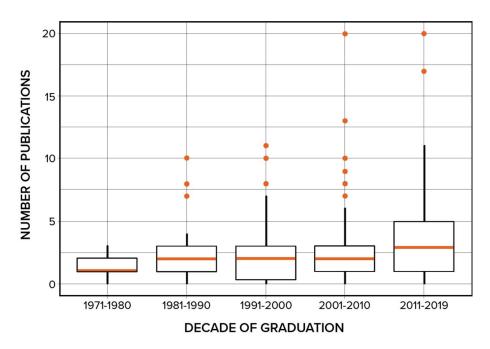


FIGURE 7. Peer-reviewed publications at time of graduation by decade.

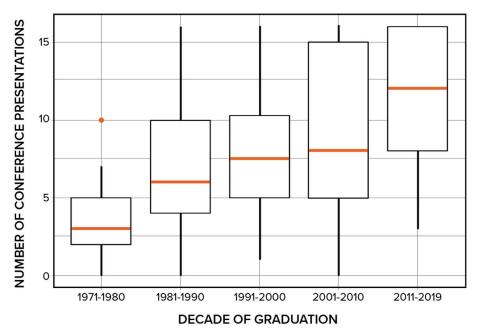


FIGURE 8. Number of conference presentations by decade of graduation.

This number hovers between 53% and 57% for graduates between the '80s and '00s before decreasing to 44% in the '10s. It is likely that this time in a non-TT appointment is important for building experience before obtaining a TT job. It is also likely that a large percentage of those who spend years in non-TT positions gain permanent employment outside of academia. Quantifying this proportion of individuals is beyond our current capability given the limitations of our data.

DISCUSSION AND CONCLUSIONS

The findings we present here indicate that much of the advice given by academic mentors regarding what is important to accomplish while in graduate school, if one is hoping ultimately to obtain a TT job, holds true. Given our data, a generalized profile of a successful TT job recipient is someone who (1) finished their PhD in six to eight years, (2) published at least one

first- or sole-author publication, (3) taught at least one class as instructor of record, (4) conducted original fieldwork for their dissertation, (5) had some type of grant support, and (6) regularly presented at conferences. What is unclear from our generalized profile is to what extent a person wishing to obtain a TT job in archaeology should pursue each of these categories of experience. In fact, our results suggest there was variability among today's academic archaeologists when they obtained their first tenured/tenure track position.

Academic Institutions

Part of the variability in experience that we observe among TT archaeologists is likely related to a few different factors. One is the value placed on each of these categories by different types of academic institutions. For example, the value placed on number of first-author publications will be different for a hiring committee at an R1 institution than it is for a regional comprehensive university or liberal arts college, which may value teaching experience more—although each institution values both experiences in a candidate. Therefore, in considering strategies for accumulating experience as a graduate student, there is more to preparing than simply examining the profile we provide here.

Metrics of Productivity

Productivity metrics are becoming a popular means of evaluating academic growth. They are commonly used in tenure evaluation and may be considered during the hiring of junior faculty (Beck et al. 2021). The availability and use of citation indices (e.g., H-index, i10, etc.) in academia is decried by some and defended by others as an indicator of scholarly impact and productivity. To what extent different institutions use such metrics is unknown. However, given the literature on this subject, it is clear that such metrics play an increasingly important role in academic career advancement and that universities do utilize these metrics in hiring, promotion, and tenure. This is especially true over the last decade as Web of Science, Scopus, and Google Scholar have become widely accessible and common resources for academics. Given the increase in the number of publications by individuals in our most recent cohort group who obtained TT jobs, our evidence indicates an increasing focus on indexed publications even in early career academics. These are largely journal articles, although some databases index books and book chapters as well (e.g., Google Scholar). That said, there are still individuals who obtained a TT position with no journal publications.

Conference Presentations

It would seem that the presentation of research at conferences has increased in importance over time. Faculty often view conference presentations as a first step toward publication and, given that publications are more important now than ever, it makes sense that the rate of conference presentations would also increase. This, however, does not fully explain the overall growth over time, because the increased prominence of journal publications appears to be relatively recent. The next logical reason why conference presentations may be so prevalent among our recent respondents relates to the research exposure and networking opportunities available at professional conferences. Candidates who regularly attend meetings, present their research, and engage with faculty at potential hiring institutions become "known quantities." Consequently, active

participation in conferences is important when developing such networks in preparation for future job opportunities.

Evidence of Funding

Across all of the cohorts, the ability to secure grants seems to be a stable characteristic of those who obtain TT jobs. In part, the reason for the importance of grants can be linked to the ability to conduct significant research. The other reason that we see grants being relatively important across time may be related to the "Matthew effect"—that is, early success is much more likely to result in subsequent success and therefore a long-term record of success in funding (Merton 1968). This idea is not new, and although likely unmentioned among hiring committees, faculty are acutely aware of the phenomenon. It has even been the subject of scientific analysis. Bol and colleagues (2018) found the Matthew effect present in science funding. What is perhaps most interesting about the Bol et alia study is that part of the disparity in funding was a result of first-time nonwinners not applying for grants later on. In thinking about how these points translate to what students should do, we suggest that they "apply liberally and often" until they are awarded an external grant.

Original Fieldwork

Except for the oldest cohort, one of the common characteristics of newly hired faculty is that they conducted original fieldwork for their dissertation research. That the percentage of people with original fieldwork is relatively stable over time speaks to its importance. We propose a relatively straightforward explanation of why this might be so. Departments often expect newly hired faculty to teach field schools, or at least provide opportunities for graduate and undergraduate field training in archaeology. Therefore, hiring candidates with active field programs makes a great deal of sense.

Concluding Remarks

Some may look at the generalized profile and some of the points that we provide above and wonder, "I have all this experience, so why have I not obtained a TT job?" Such a perspective is understandable, and as much as we like to think that academia is a meritocracy, it is not, strictly speaking. The truth is that one can have all the right experiences and still have trouble obtaining a TT position. The academic profiles and the observations we provide here do not begin to address all of the varied idiosyncrasies of hiring committees, job searches, the yearly job market, the pool of applicants, university policies, and the like.

There are, of course, contingent factors in the market that no individual can fully account for in preparing for the TT job hunt. Some will find TT jobs despite not having any publications, which we see in our current data. Does this mean that publications are unimportant? No. It simply means that the circumstances were right for that individual to get a job without them. Perhaps they held a degree from the "right" institution (e.g., Speakman, Hadden, Colvin, Cramb, Jones, Jones, Kling, et al. 2018; Speakman, Hadden, Colvin, Cramb, Jones, Jones, Lulewicz, et al. 2018), had the right networks, or had a desired skills that set them apart. Or, they might just have "fit" better in the department. The point is that one cannot control the intangible and capricious aspects of the TT job search. One can, however, acquire a set of experiences, as outlined in this article, that most people who had success

obtaining a TT job possess. Will doing this get one a job? Maybe and maybe not. However, not having most of these characteristics may greatly diminish the likelihood of obtaining a TT appointment. In short, one needs to be ready to be lucky.

Given all that we outline here, we ask, Does the academic hiring process need to change? "Traditional" measures of productivity can be limiting and exclusionary due to the structural inequities inherent in the system. Tenure committees increasingly value community involvement, activist-oriented research, and alternative means of dissemination. Will this translate to changing evaluative frameworks at the level of hiring committees? Certainly, anthropology as a field values these alternative research outlets. Expanding what we see as desirable characteristics in a job candidate may provide opportunities for those of differing demographics who often face disproportionate scrutiny and systemic undervaluation (e.g., Aguirre 2000; Biernat and Kobrynowicz 1997; Rivera 2017). However, the increasing quantification of scholarly impact for administrative evaluation also suggests that this is unlikely. We can only suggest here that hiring committees weigh these qualities when considering applicants.

On a final note, if you are a student reading this and you are planning to pursue a TT job, we suggest that you "do all the things" indicated here. But do not panic. The profile of each individual is often lacking one or more of the things that constitute the ideal whole. That said, be aware of what you need to do and pursue the experiences you need to build a robust set of skills that are broadly desirable. Do not focus too much on one thing (e.g., publications) to the exclusion of other experiences. Be creative and flexible in your job searches and remember that you are trained for careers in and beyond academia. Your diversity of training is your strength.

If you are a mentor reading this, we encourage you not to be passive in your advice to your students. Do not tell them, "You're smart. You'll be fine." This is simply not something you can promise. Be active in understanding the modern market that your mentees face. Do not merely rely on your experience on the job market 30, 20, 10, or even five years ago. The expectations of academic jobs change at a rapid pace, even if our ideas about how we train the next generation do not evolve at the same speed.

Acknowledgments

We thank the University of Georgia Department of Anthropology and Center for Applied Isotope Studies for institutional support of this research. Special thanks to Jeff Speakman, Jordan Chapman, Katherine Reinberger, Matthew Colvin, Alexandra Edwards, and Sara Cramb. In addition, we thank the 438 tenured and tenure-track archaeology faculty who contributed to our survey, as well as Jon Driver and the anonymous reviewers who strengthened this manuscript with their comments and insights. This research was completed with IRB approval from the University of Georgia, PROJECT00000148-Faculty Success Survey in Archaeology. All participants in the survey did so voluntarily and with informed consent.

Data Availability Statement

All data related to this project, in its anonymized form, is available as supplemental data attached to this manuscript.

Supplemental Material

For supplemental material accompanying this article, visit https:// doi.org/10.1017/aap.2022.8.

Supplemental Table 1. Anonymized Tenure-Track Survey Data.

Supplemental Text 1. Faculty Survey in Anthropological Archaeology Questionnaire.

Competing Interests

The authors declare none.

REFERENCES CITED

Aguirre, Adalberto, Jr.

2000 Women and Minority Faculty in the Academic Workplace. Jossey-Bass, San Francisco.

Bartram Laurence Jr.

2021 Off the Beaten Path: Employing an Archaeological Education in Non-Traditional Careers. Archaeologies 17:161–177.

Beck, Jess, Erik Gjesfjeld, and Stephen Chrisomalis

2021 Prestige or Perish: Publishing Decisions in Academic Archaeology. American Antiquity 86:669-695.

Biernat, Monica, and Diane Kobrynowicz

1997 Gender and Race-Based Standards of Competence: Lower Minimum Standards but Higher Ability Standards for Devalued Groups. Journal of Personality and Social Psychology 72:544-557.

Bol, Thijs, Mathijs de Vaan, and Arnout van de Rijt

2018 The Matthew Effect in Science Funding. PNAS 115:4887-4890. Brundage, Vernon, Jr.

2017 Profile of the Labor Force by Educational Attainment. Electronic document, https://www.bls.gov/spotlight/2017/educational-attainment-of-the laborforce/pdf/educational-attainment-of-the-labor-force.pdf, accessed August 22, 2021.

Collier, Peter J, and David L. Morgan

2008 Is That Paper Really Due Today? Differences in First-Generation and Traditional College Students' Understandings of Faculty Expectations. Higher Education 55:425-446.

Feibelman, Peter J.

2011 A Ph.D. Is Not Enough! A Guide to Survival in Science. Basic Books, New York.

Fulkerson, Tiffany J., and Shannon Tushingham

2019 Who Dominates the Discourses of the Past? Gender, Occupational Affiliation, and Multivocality in North American Archaeology Publishing. American Antiquity 84:379-399.

Ginsberg, Daniel

2017 Trends in Anthropology Bachelor's Degrees: A Review of Federal Data. Electronic document, http://s3.amazonaws.com/rdcms-aaa/files/producti on/public/File Downloads/pdfs/IPEDS%20 anthro%20 bachelor's %20 degrees.pdf, accessed August 22, 2021.

Hsu, Nina S., K. Paul Rezai-zadeh, Michael S. Tennekoon, and Stephen J. Korn 2021 Myths and Facts about Getting an Academic Faculty Position in Neuroscience. Science Advances 7(35). DOI:10.1126/sciadv.abj2604.

Kawa, Nicholas C., José A. Clavijo Michelangeli, Jessica L. Clark, Daniel Ginsberg, and Christopher McCarty

2019 The Social Network of US Academic Anthropology and Its Inequalities. American Anthropologist 121:14-29.

Kelsky, Karen

2015 The Professor Is In. Three Rivers Press, New York.

Lyon, Sarah

2018 The Work of Anthropology Reconsidered: Career Diversity and the Future of Doctoral Education. Anthropology of Work Review 39(1):26-39. Merton, Robert K.

1968 The Matthew Effect in Science: The Reward and Communication Systems of Science Are Considered. Science 159:56-63.

Olson, Keith W.

1973 The G. I. Bill and Higher Education: Success and Surprise. American Quarterly 25:596-610.

Overholtzer, Lisa, and Catherine L. Jalbert

2021 A "Leaky" Pipeline and Chilly Climate in Archaeology in Canada. American Antiquity 86:261-282.

Peters, Robert L.

1997 Getting What You Came For: The Smart Student's Guide to Earning an M.A. or a Ph.D. Farrar, Straus and Giroux, New York.

Rivera, Lauren A.

2017 When Two Bodies Are (Not) a Problem: Gender and Relationship Status Discrimination in Academic Hiring. American Sociological Review 82:1111-1138.

Sjoquist, David L., and John V. Winters

2012 Building the Stock of College-Educated Labor Revisited. Journal of Human Resources 47:270-285.

Speakman, Robert J., Carla S. Hadden, Matthew H. Colvin, Justin Cramb, K. C. Jones, Travis W. Jones, Corbin L. Kling, et al.

2018 Choosing a Path to the Ancient World in a Modern Market: The Reality of Faculty Jobs in Archaeology. American Antiquity 83:1-12.

Speakman Robert J., Carla S. Hadden, Matthew H. Colvin, Justin Cramb, K. C. Jones, Travis W. Jones, Isabelle Lulewicz, et al.

2018 Market Share and Recent Hiring Trends and Trajectories in Anthropology Faculty Positions. PLoS ONE 13(9):e0202528. DOI:10.1371/ journal.pone.0202528

Tushingham, Shannon, Tiffany Fulkerson, and Katheryn Hill

2017 The Peer Review Gap: A Longitudinal Case Study of Gendered Publishing and Occupational Patterns in a Female-Rich Discipline, Western North America (1974-2016). PLoS ONE 12(11):e0202528. DOI:10.1371/journal.pone.0188403.

US Bureau of Labor Statistics

2021 CPI for All Urban Consumers, 1913-2021. Electronic document, https:// www.bls.gov/cpi/data.htm, accessed August 22, 2021.

AUTHOR INFORMATION

Justin Cramb Department of Anthropology, University of Alaska Fairbanks, Fairbanks, AK, USA

 $\textbf{Brandon T. Ritchison} \ \blacksquare \ \text{Department of Anthropology, University of Illinois}$ Urbana-Champaign, Urbana, IL, USA (britch@illinois.edu, corresponding author)

Carla S. Hadden ■ Center for Applied Isotope Studies, University of Georgia, Athens, GA, USA

Qian Zhang and Xianyan Chen Department of Statistics, University of Georgia, Athens, GA, USA

Edgar Alarcón-Tinajero Department of Anthropology and Center for Applied Isotope Studies, University of Georgia, Athens, GA, USA

K. C. Jones and Travis Jones PaleoResearch Institute, Golden, CO, USA

Katharine Napora ■ Webb Museum of Anthropology and Office of State Archaeology, University of Kentucky, Lexington, KY, USA

Matthew Veres and Victor D. Thompson ■ Department of Anthropology, University of Georgia, Athens, GA, USA