2010 Profile of a Research Administrator

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ABSTRACT

This paper expands upon the seminal work of Roberts and House, which described the first empirical study of the demographic profile of a research administrator. The original work was based upon data from the 2005 Research Administrator Survey (RAS), a regional study of research administrators in the southeastern United States. In this paper, nationwide demographic data from the 2010 Research Administrators Stress Perception Survey (RASPerS) are compared to the 2005 RAS data. These comparisons revealed that the general profile of a research administrator continues to be overwhelmingly female (80.1%), holding a higher education degree (88.7%), and aged 40–49 years (31.9%). The 2010 data showed an extremely significant difference in the modal salary level, which increased from \$50,000 to \$74,999 (40.0%). In 2005, the increase was from \$40,000 to \$50,000 (23%). Level of education was slightly higher in 2010 than in 2005, with more research administrators holding both bachelor's and master's degrees. Additional demographic and social data are described from the 2010 RASPerS. These include both work and non-work factors. These data are offered to provide information that may be useful for others with an interest in expanding the body of knowledge about the profession of research administration.

INTRODUCTION

While a body of information is constantly growing pertaining to what

research administrators do, or are supposed to do, little has been done to date to describe who research administrators are as

a profession. As pointed out by Beasley (2006), this emerging profession really came into being in the1940s after Vannevar Bush persuaded President Franklin Delano Roosevelt to create an agency that would coordinate collaboration between federal and civilian laboratories. Hanson and Moreland (2004) reflected upon the conundrum research administrators face in their constant balancing between the sometimes competing demands of sponsoring agencies and over-worked academic researchers. Research administrators must assume many roles, perform both complex and mundane functions, and act as a liaison with both internal and external parties. It takes a multi-talented and mission-dedicated individual to thrive or succeed in the profession. And, as shown in the 2007 RASPerS (Shambrook & Brawman-Mintzer, 2007), research administrators perceive this work to often be done in a stressful environment with little recognition from their non-administrative colleagues to whom they are providing a service.

"Research administrators must assume many roles, perform both complex and mundane functions, and act as a liaison with both internal and external parties. It takes a multi-talented and mission-dedicated individual to thrive or succeed in the profession." Who are the people who make up this profession? Prior to the 2006 publication by Roberts and House, solid empirical demographic data did not exist for research administrators. In this paper, we update this seminal work using more recent national, rather than regional, data. Comparisons are made that both serve to validate the original work and reveal some differences that indicate professional trends. Finally, additional demographic factors have been added that provide baseline data for additional studies that may seek to expand the body of knowledge about this emerging profession.

METHODS

Both the RAS (Roberts, 2005) and 2010 RASPerS (Shambrook, 2010) recruited participants from a closed population of research administrators who were members of the National Council of Research Administrators (NCURA). The RAS recruited solely from NCURA Region III, which is comprised of eleven Southeastern states and the Territory of Puerto Rico. Through the selection and randomization process described in Roberts and House (2006), there were 277 potential study participants for the electronic survey. The usable return rate was 83%, with 226 total survey participants. Thus, with a confidence level of 99%, the confidence interval was 3.69.

The 2010 RASPerS (Shambrook, 2010) modeled several demographic factors after the 2005 RAS in order to make valid comparisons, but expanded recruitment to include the entire nationwide membership of NCURA. Expanding the catchment area for recruitment was a recommendation for Roberts and House (2006). The 2010 RASPerS also sought to make comparisons with Behavioral Risk Factor Surveillance Survey (BRFSS) data from the U.S. Centers for Disease Control and Prevention (CDC). Therefore, some factors were somewhat adjusted in the survey (e.g., salary ranges) and others were added (e.g., ethnic heritage and marital status). It was the intent of the 2010 RASPerS questionnaire to generate data that could be compared with data from both previous surveys (RAS and BRFSS). The National Institute of Occupational Safety and Health (NIOSH, n.d.) Non-Work Factors Scale from the NIOSH Generic Job Stress Questionnaire was used to collect information about other commitments (e.g., eldercare or pursuing another academic degree).

The composite 2010 RASPerS questionnaire consists of 12 components which include demographic data, non-work activities, three instruments for health behaviors, and seven stress-related instruments. These are preceded by an introduction, participant rights statement, and statement of consent.

The data collection process began with an email to the entire membership of NCURA with a link to the 2010 RASPerS electronic survey. The total population of the NCURA membership was 6,232 at the time of the survey in February 2010. A total of 1,188 participants took portions of the future study in the 2006 RAS article

survey. As comparisons were being drawn between multiple factors of the survey, the *N* varied among the 12 survey instruments which were combined to make up the composite survey. However, for a 99% confidence level with a confidence interval of 4.0, only 891 responses were needed and over 1,000 responses were collected for each of the instruments, generating a 99% level of confidence and confidence intervals of less than 4.0 for each instrument.

Approved protocols for human participant protections were in place by the appropriate Institutional Review Boards for the RAS at the University of Central Florida and 2010 RASPerS at Walden University. Data were analyzed using both descriptive and inferential techniques. Frequencies and percentages are shown for all factors. Fisher's Exact Test was used in comparing two factors and Cochran-Armitage Trend Test was used for multiple factors to determine statistical level of significance.

RESULTS Work-related Factors

Work-related data gathered by the 2010 RASPerS included primary research administration role, number of years in research administration, certified research administrator status, annual salary, usual number of hours worked per week, and health insurance status. These data are shown at Table 1.

Work-1	related Factor		Frequency	% Population
Primar	y Research Administration Role			
•	Department Administrator		348	30.3%
٠	Pre-Award		340	29.6%
٠	Post-Award Accounting		208	18.1%
٠	Research Integrity/Compliance		36	3.1%
٠	Other		216	18.8%
		Total N	1,146	100%
Numb	er of Years in Research Administration			
٠	<1 year		27	2.3%
٠	1 < 5 years		288	25.1%
٠	5 < 10 years		305	26.5%
٠	10 < 20 years		353	30.7%
٠	≥20 years		178	15.3%
		Total N	1,149	100%
Certifi	ed Research Administrator status			
٠	Yes		161	14.1%
٠	No		984	85.9%
		Total N	1,145	100%
Annua	l Salary as a Research Administrator			
٠	<\$35,000		29	2.5%
٠	\$35,000 -\$49,999		205	18.0%
٠	\$50,000 - \$74,999		455	40.0%
٠	\$75,000 -\$99,999		246	21.6%
٠	≥\$100,000		203	17.8%
		Total N	1,138	100%
Hours	Worked per Week			
٠	<u>≤</u> 40		281	24.5%
٠	40 < 45		332	28.9%
٠	45 < 50		300	26.1%
٠	50 < 60		193	16.8%
٠	<u>≥</u> 60		42	3.7%
		Total N	1,148	100%
Health	Insurance Status			
٠	Yes		1,120	99.5%
٠	No		6	.5%
		Total N	1,126	100%

Table 1. Work-related Factors as Shown in 2010 RASPerS

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As shown in Table 1, there is a broad distribution across research administrator roles with fairly even distribution between department administrators (30.3%) and preaward administrators (29.6%); post-award accounting (18.1%) and all other (18.8%); about 3.1% were working in research integrity or compliance roles.

The mode for number of years in research administration was 10 < 20 years (30.7%). The percentage with 5 < 10 years (26.5%) and 1 < 5 years (25.1%) were very similar to one another. Only 2.3% had less than 1 year of experience. There were 15.3% with 20 or more years of experience as research administrators. Health insurance was held by 99.5% of the participants. Only 14.1% indicated that they held credentials as Certified Research Administrators. The mode annual salary was \$50,000 to \$74,999. Less than 3% earned salaries of less than \$35,000. A total of 17.8% reported salaries of over \$100,000. This is comparable to data reported by the Bureau of Labor Statistics (BLS), U.S. Department of Labor, which shows the median annual income for all professionals at \$59,748 and for all full-time employees with a bachelor's degree or higher at \$60,216 (Bureau of Labor Statistics, 2010).

The mode for hours usually worked per week was from 40 to 45 hours (28.9%). This was followed closely (26.1%) by those working 45 < 50 hours per week. A total of 16.8% reported routinely working from 50 < 60 hours per week and 3.7% reported working 60 or more hours per week.

Social Demographic Factors

Social demographic information gathered by the 2010 RASPerS included gender, age, race/ethnic group, marital status, and highest level of educational achievement. These data are shown in Table 2.

Social Demographic Factors		Frequency	% Population
Gender			
• Female		915	80.1%
• Male		228	19.9%
	Total N	1,143	100%
Age			
• <30		87	7.6%
• 30–39		266	23.2%
• 40–49		365	31.9%
• 50–59		331	28.9%
• ≥ 60		96	8.4%
	Total N	1,138	100%
Race/Ethnic Group			
Non-Hispanic White		954	83.4%
• Hispanic		56	4.9%
African-American		72	6.3%
• Asian		41	3.6%
Native Hawaiian or Pacific Islander		3	0.3%
Native American		10	0.9%
Prefer not to answer		24	2.1%
	Total N	1,144	100%
Marital Status			
Married		745	65.5%
Partnered		60	5.3%
Separated		12	1.1%
• Divorced		141	12.4%
Widowed		13	1.1%
Never married		167	14.7%
	Total N	1,138	100%
Highest Level of Educational Achievement			
High school or GED		7	0.6%
Some college credit		90	7.9%
Associate's degree		31	2.7%
Bachelor's degree		475	41.4%
Master's degree		428	37.3%
Doctoral degree		115	10.0%
	Total N	1,146	100%

Table 2. Social Demographic Factors as Shown by 2010 RASPerS

RASPerS 2010 national data show that research administration is a profession that is 80.1% female. The modal age group was 40–49 years, at 31.9%, closely followed by 50-59 years at 28.9%. Only 30.8% were under 40 years of age. Over 70% of research administrators reported being either married (65.5%) or partnered (5.3%). A total of 1.1% reported being widowed; 14.7% reported having never been married; and only 13.5% were either separated (1.1%) or divorced (12.4%). These data reflect a similar distribution to that reported by the Pew Charitable Trusts (PEW), with 64% of college-educated adults being married (Pew Charitable Trusts, 2010).

Research administrators overwhelmingly reported educational achievement of bachelor's degree or higher at 88.7%. Of the 11.3% without a higher degree, 10.7% reported having either some college (7.9%) or an associate's degree (2.7%). Less than one percent (0.6%) reported only having a high school education or GED, or only seven out of 1,146 participants. Master's degrees were held by 37.3% and doctoral degrees were held by 10%.

NIOSH Non-Work Factors

Additional non-work demographic factors were measured in the 2010 RASPerS which were considered as possible contributing factors to overall stress (NIOSH, n.d.). These factors are offered here to further describe the demographic make-up of research administrators shown in Table 3. These factors include participant reporting of an additional job; children in the home; primary responsibility for childcare duties, house-cleaning duties, or care for an elderly or disabled person; current enrollment in courses for a degree; and/or a high level of time commitment to volunteer work.

NIOSH Non-work Factor		Frequency	% Population
Additional Job			
• Yes		163	14.3%
• No		976	85.7%
	Total N	1,139	100%
Children at Home			
• Yes		467	40.9%
• No		676	59.1%
	Total N	1,143	100%
Primary Responsibility for Childcare Duties			
• Yes		298	26.2%
• No		839	73.8%
	Total N	1,137	100%
Primary Responsibility for House-cleaning Duti	es		
• Yes		844	74.2%
• No		293	25.8%
	Total N	1,137	100%
Primary Responsibility for Care of Elderly or Disabled Person			
• Yes		116	10.1%
• No		1,027	89.9%
	Total N	1,143	100%
Currently Enrolled in Courses for Credit			
toward a Degree			
• Yes		163	14.3%
• No		977	85.7%
	Total N	1,140	100%
Volunteer Work of at Least 5–10 Hours per Week			
• Yes		305	26.9%
• No		829	73.1%
	Total N	1,134	100%

Table 3. NIOSH Non-Work Factors as Shown by 2010 RASPerS

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Participants reporting having extensive non-family related commitments included 14.3% having an additional job and 14.3% being currently enrolled in courses leading to a degree. A higher percentage, 26.9%, reported devoting at least 5–10 hours each week to volunteer work in addition to their research administration jobs.

Children living in the home were reported by 40.9% of the participants, but only 26.2% reported having primary responsibility for childcare duties. Primary responsibility for care of an elderly or disabled person was reported by 10.1%. Participants overwhelmingly reported having primary responsibility for housecleaning duties at 74.2%.

Comparisons of 2005 RAS and 2010 RASPerS

Table 4 shows a comparison between the regional 2005 RAS and the national 2010 RASPerS. The purpose of this analysis was

to determine the validity of the 2005 RAS regional data by comparison with the 2010 RASPerS national data. A *p* –value equal to or less than 0.05 indicates a significant difference between data sets. As shown in Table 4, no significant difference is shown among gender, age, or education when comparing the results of the two data sets. There is a weak (non-significant) difference in education, which indicates that a trend may be developing toward higher educational attainment. The only significant difference shown was in the area of salaries, which were significantly higher in 2010 than in 2005. In 2005, only six out of ten participants reported having annual earnings of greater than \$50,000; in 2010, eight out of ten reported having earnings greater than \$50,000 per year. This indicates an extremely significant difference between annual incomes reported for 2005 and 2010.

Demogra	ohic Factor		2005 RAS N (%)	2010 RASPerS N (%)	Significance P value
Gender					
• Fe	emale		172 (76%)	915 (80%)	0.18ª
• M	ale		54 (24%)	228 (20%)	
		Totals	226 (100%)	1,143 (100%)	
Age					
• <3	60		7 (3%)	87 (7.6%)	0.47 ^b
• 30	-39		55 (24%)	266 (23.2%)	
• 40	-49		82 (36%)	365 (31.9%)	
• 50	-59		66 (29%)	331 (28.9%)	•
• ≥	60		16 (8%)	96 (8.4%)	
		Totals	226 (100%)	1,145 (100%)	
Highest L	evel of Educational Achie	vement			
• H	igh school or GED		5 (2%)	7 (0.6%)	0.057 ^b
• Sc	ome college credit		29 (13%)	90 (7.9%)	
• A:	ssociate's degree		3 (1%)	31 (2.7%)	
• Ba	achelor's degree		89 (40%)	475 (41.4%)	
• M	aster's degree		73 (32%)	428 (37.3%)	
• De	octoral degree		27 (12%)	115 (10.0%)	
		Totals	226 (100%)	1,146 (100%)	
Salary as I	Research Administrator				
• < 2	\$50,000/year		86 (39%)	234 (21%)	<0.0001ª
• ≥	\$50,000/year		136 (61%)	954 (79%)	
		Totals	222 (100%)	1,138 (100%)	

Table 4. Comparison of Selected Demographic Factors from 2005 RAS and 2010 RASPerS

a: Fisher's Exact Test *p*-values

b: Cochran-Armitage Trend Test *p*-value

Notes:

- Gender and Age distribution does not seem to change from 2005 to 2010.
- There seems to be some evidence of an overall trend of having higher level of education in 2010 compared to 2005, while this finding is not strong.
- There is a significant change from 2005 to 2010 in salary, where every 8 out 10 people have salaries above \$50,000 in 2010 while only 6 out of 10 did so in 2005.

CONCLUSION

The regional 2005 RAS data are supported and validated by the national 2010 RASPerS with respect to age, gender, and education. There is an extremely significant difference in income. This difference may be attributed, in part, to an overall 13.5% rise in national median annual income for all wage and salary earners in the U.S. (Bureau of Labor Statistics, 2010).

Research administrators may be described as a nearly homogenous group who are overwhelmingly university degreed (88.7%), female (80.1%), earning an annual income of over \$50,000 (79.4%), with a majority over 40 years of age (69.2%). Other demographic factors show research administrators to be either married (65.5%) or partnered (5.3%), having more than five years of experience in research administration (72.6%), and working more than 40 hours per week (75.5%). Research administrators overwhelmingly have health insurance coverage (99.5%).

RECOMMENDATIONS FOR FURTHER STUDY

The demographic profile of research administrators may be used as foundational information in the further study of this or similar occupational groups. Further study is recommended of possible associations among salary, gender, ethnicity, and other demographic factors.

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LITERATURE CITED

- Beasley, K. L. (2006). The history of research administration. In E. C. Kulakowski & L. U. Chronister (Eds.), *Research administration and management* (pp. 9–29.). Sudbury, MA: Jones and Bartlett Publishers.
- Behavioral Risk Factor Surveillance System. (2008). Prevalence and trends. Retrieved October 3, 2009, from http://apps.nccd.cdc.gov/brfss.
- Bureau of Labor Statistics. (2010). *Usual weekly earnings of wage and salary workers, Third Quarter,* 2010. Retrieved December 27, 2010 <u>http://www.bls.gov/news.release/pdf/wkyeng.pdf</u> USDL-10-1450. Press release Tuesday, October 19, 2010.

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- Hansen, S., & Moreland, K. (2004). The Janus face of research administration. *Research Management Review*, 14(1), 43–53.
- National Institute for Occupational Safety and Health. (n.d.). *Generic Job Stress Questionnaire*. Retrieved June 9, 2009, from http://www.cdc.gov/niosh/topics/workorg/tools/niosh-jobstress-questionnaire.html.
- Pew Charitable Trusts. (2010). *The decline of marriage and rise of new families*. Retrieved December 27, 2010 from <u>http://pewsocialtrends.org/files/2010/11/pew-social-trends-2010-families.pdf</u>)
- Roberts, T. J. (2005). *Perceptions of research administrators on the value of certification*. Doctoral dissertation, University of Central Florida. *Dissertation Abstracts International*, 68/08, 2799.
- Roberts, T. J., & House, J. (2006). Profile of a research administrator. *Research Management Review*, *15*(1), 41–47.
- Shambrook, J. (2010). *Health behavior, occupational stress, and stress resiliency in research administrators working in the academic environment*. Doctoral dissertation, Walden University. *Dissertation Abstracts International, AAT* 3412291.