

Retention and Turnover of Early Career Research Administrators – Preliminary Results

ABSTRACT

The goal of this report is to provide NCURA a report on the preliminary results of an ongoing research study examining the retention and job turnover among early career research administrators (five years or less experience). The aim of the study is to determine if job characteristics or workplace characteristics have a greater influence on job turnover. The findings reported are only preliminary and not conclusive. Data is still being gathered to increase the level of responses. Only 28 complete responses were received from a population of 294 institutions.

The report provides an overview of the purpose, theory, and description of the research design. Preliminary results are reported and a discussion of the lessons-learned and difficulties are included. The preliminary results indicated that 46.28% planned to remain in their positions and 35.27% of the respondents intend to find new employment opportunities. Those who were unsure about staying or leaving their current jobs was 18.45%. At this point, the variables that indicated high to moderate agreement among respondents were: ethical workplace, skill variety, autonomy, job feedback, professional support, and professional job satisfaction. The variables that did not indicate a high or moderate level of agreement among the respondents were: work exhaustion, autonomy, job significance, task identify, trust in senior management, structural fairness, job opportunities, and workplace security. These results should be taken with a great amount of caution due to the low response rate and results may change once a larger sample of data has been gathered. The PI will continue to gather data in April to conduct analysis and reporting in May and June.

INTRODUCTION

For many research institutions managing early career research administrator turnover is a key concern. Research administrators are responsible for improving the efficiency and implementation of research administrative activities within their research institutions. Due to the profession's unique complex body of knowledge, it often takes several years for a research administrator to learn and gain ample experience on the job before becoming a proficient and highly productive administrator. In addition, during the early years of their employment significant financial resources and investments of time and effort are spent to recruit, train and mentor a fledgling research administrator. Research organizations recognize that knowledgeable and skilled research administrators are better able to make informed decisions and create optimal solutions to complex problems.

With high levels of retiring research administrators and smaller numbers entering the field, many research institutions are interested in identifying variables that will influence the retention of their early

career research administrators. However, no specific research has been conducted to compare the relationship of job characteristics and workplace characteristics on job turnover of early career research administrators. This research is aimed at conducting an exploratory investigation to determine the relationship of job and workplace characteristics on job turnover. The study aims to examine which variables have a greater influence on early career researcher administrators' (ECRAs') intent to leave—job characteristics or workplace characteristics.

Theoretical Framework

Basically *Job Characteristics Theory* describes how the specific features of a job can influence motivation, performance, and job satisfaction. Job characteristics: include skill variety, task identity, task significance, autonomy and feedback (Hackman & Oldham, 1980). Whereas *Workplace Characteristics* focus on organizational aspects of a working environment or culture that influence employees perceptions about the workplace such as pay satisfaction, advancement opportunities, merit or award systems, and job security (McKnight, Phillips, & Hardgrave, 2009). Ethical climate of organization was added in the revised version of the questionnaire.

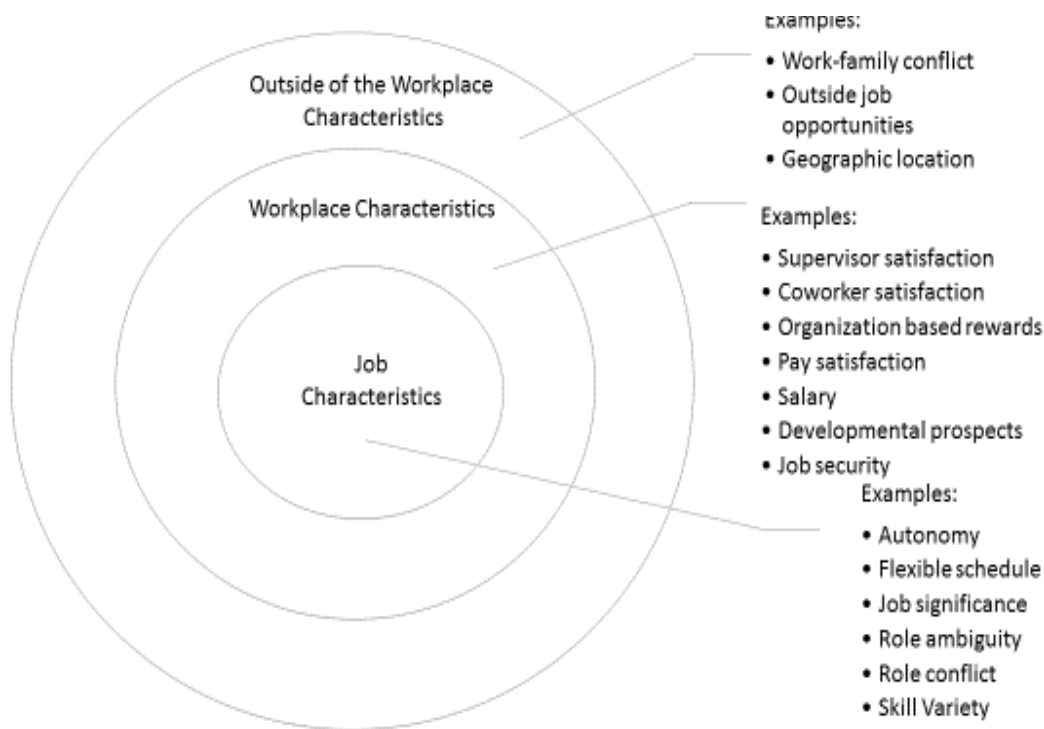


Figure 1: Job and workplace characteristics. Modified version from McKnight, Phillips, & Hardgrave (2009)

Several hypotheses are being addressed in the study:

Hypotheses related to Job Characteristics

- H1: Job satisfaction will negatively influence turnover intention.
- H2: Work exhaustion will positively influence turnover intention.
- H3: Job feedback will negatively influence retention.
- H4: Job significance negatively influence turnover intention.

H5. Job satisfaction and work exhaustion will fully mediate the effects of perceived job characteristics on turnover intention.

Hypotheses related to Workplace Characteristics

H6. Workplace characteristics will positively influence job satisfaction.

H7. Workplace characteristics will negatively influence work exhaustion.

H8. Job satisfaction and work exhaustion will partially mediate the negative effects of perceived workplace characteristics on turnover intention.

H9. Workplace characteristics will have a stronger total influence on turnover intention than will perceived job characteristics.

The study is still gathering data for in order to obtain sufficient number of respondents to conduct a reliable and valid correlational analysis in order to report the final results at the NCURA national conference in August 2017. This report describes the lessons-learned from the implementation and the preliminary findings of the study. The final results of this study will help leaders in research administration know where to focus their energy and resources to help reduce turnover and retain early career research administrators.

PROJECT DESCRIPTION

This correlational study was designed based on similar studies found in the research literature that were focused on employee turnover and retention in other professional fields such as information technologists, nursing, and medicine. This is a deductive, quantitative, non-experimental correlational study examining the relationship between job characteristics and workplace characteristic and turnover intention. The independent variables are job characteristics and workplace characteristics, and the dependent variable is turnover intention.

Rather than just sending out the questionnaire through NCURA's Connect Network, a more systematic approach was developed. A specific population of 294 research universities that are categorized as either very high research activity, high research activity, or doctoral research universities were targeted. These university categories were developed by the Carnegie Commission on Higher Education in 1970 to support its research program. The listing was most recently updated in 2015. The university classifications and numbers of universities in each category are listed in Table 1: Carnegie Classifications. A sample size of 209 would result in high reliability and validity of the results. The plan is to be able to aggregate the data based on university classification to determine if type of research organization also influences turnover and retention.

Category #	Classification	# of Institutions
15	RU/VH: Research Universities (very high research activity)	117
16	RU/H: Research Universities (high research activity)	107
17	DRU: Doctoral/Research Universities	70
Total # of Institutions		294

Source: http://carnegieclassifications.iu.edu/classification_descriptions/basic.php	
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Table 1: Carnegie Classifications

The survey questionnaire was a modified version of Hackman’s (1980) measures on job characteristics and satisfaction, Moore’s (2000) measures for turnover intention and work exhaustion, and McKnight, Phillips & Hardgrave (2009) measures on structural fairness. The items were reviewed by the UCF Masters of Research Administration Advisory Board in April-May 2016 .and feedback was used to revise items to align more readily to early career research administrators’ job and workplace characteristics. Job characteristics are measured in regards to type of job feedback, perception of job significance, level of autonomy, identification with tasks, variety in types of skills employed, level of role conflict, level of role ambiguity, role clarity, and boundary spanning (Ang & Slaughter, (2001). Workplace characteristics include items related to supervisor and coworker satisfaction, coworker satisfaction, organization based rewards, pay satisfaction, developmental prospects, and job security. A new revision of the questionnaire in November added ethical climate as workplace characteristic based on research studies that ethical climate can influence the motivation and satisfaction of employees (Borhani, Jalali, Abbaszadeh & Haghdoost, 2014; Schwepker, 2001; Ulrich, O’Donnell, Taylor, Farrar, Danis, & Grady, 2007). It was also added because there is an emphasis on ethical research practices in most research organizations due to the recent passing of more stringent regulations for those studies involving human subjects. A seven (7) level Likert-type scale was used for questionnaire responses (i.e. not likely, somewhat likely, strongly agree, somewhat agree, etc.). The questionnaire included six demographic questions (age, gender, ethnic background, education, household composition, type of institution, 45 items related to the variables and several open-ended questions asking why specifically they intend to stay or leave a position. A copy of the final questionnaire is found in Appendix A.

IMPLEMENTATION OF THE PROJECT DESIGN AND DATA SUMMARY

The dissemination of the online questionnaire was distributed in mid-December and was entirely voluntary. It was difficult to identify which research administrators were early career so the approach was to send an email directly to directors of sponsored research offices whose email addresses were gathered from university research office websites requesting they forward the email to any early career administrators working within their universities. A UCF graduate student was hired using the grant funds to assist in inputting the survey, identifying Directors and recording names, titles, and email addresses at the 294 institutions targeted, and disseminating the survey. Unfortunately, the dissemination of the survey in December resulted in only 24 respondents. *Obviously*, this was not a good approach. The revised approach is to search the websites of the remaining 272 to identify early career administrators using keywords in their titles such as specialist, coordinator, etc. that are traditionally associated with entry level titles in research administration. Currently we are in the process of expanding our dissemination list. In addition, I have requested some assistance from NCURA on identifying early career research administrators because this information is collected on new members. The plan is to send out the survey again in April to try and increase the response rate.

DATA ANALYSIS

Although preliminary descriptive statistics (demographic: age, ethnical background, type/name of institution) will be provided on the limited number of responses, this is not the final analysis. When sufficient responses have been gathered, data will be analyzed using SPSS. In addition, standard deviations from the mean will be calculated. The correlation coefficient will be statistically significant based on a .05 p level of significance. The purpose of the analysis is to observe any evidence of an association between variables. A Pearson's product-moment correlation (Pearson's r) will be used to analyze and determine the correlations within the data. In addition, a correlation matrix will be created to illustrate the results of the degree of relationships between variables. A coefficient of determination will also help measure the amount of variability that can be attributed to each variable. The primary limitation of this type of correlational study is causation of the results cannot be determined.

RESULTS AND DISCUSSION

Limited Preliminary Results:

In this report limited preliminary data results cannot be considered definitive or complete but are provided. There were 28 respondents that answered all questions of a total of 31 respondents. This will cause the total number of respondents on each item to vary from 28 to 31. During the final analysis the data will be carefully analyzed and will address issues related to incomplete responders and any other inconsistencies in the data. Data for each variable is reported and indicate the percent of respondents that choose either "Strongly Agree to Agree", "Neither agree nor Disagree" (neutral) and those that chose "Strongly Disagree to Disagree." Questions whose responses indicated a high percentage of agreement among respondents are highlighted in yellow (80% or more of the respondents chose that response) and those that appear were moderately agreed upon are highlighted in blue (79% to 75% agreement). Other questions did not indicate any significant agreement.

Demographics:

High school or less	3.57%	1
Bachelor's degree	60.71%	17
Master's degree	25.00%	7
Doctoral degree	10.71%	3
Total		28

Gender:	
Male	32.14% 9
Female	67.86% 19
Total	28

Age Range:

18 - 29	24.14%	7
30-49	58.62%	17
50-64	13.79%	4
65 +	3.45%	1
Total		28

Ethnicity:

White	85.71%	24
Black or African American	10.71%	3
Hispanic or Latino	3.57%	1
Total		28

TURN OVER INTENTION:

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
I will probably look for a research administration position in a different research organization in the next year.	31	16.13%	32.26%	51.61%
I intend to take steps in the future to secure a position in research administration at a different organization.	30	43.33%	30.00%	26.67%
I often think about leaving my current organization for a job at a different research organization in the next year.	31	38.71%	6.45%	54.84%
I plan to be with this organization 5 years from now.	30	50.00%	16.67%	33.33%
I often think about changing to a different job outside the area of research administration.	29	44.83%	6.90%	48.28%

PROFESSIONAL /JOB SATISFACTION

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
Overall, I am satisfied with the kind of work I do as a research administrator.	30	83.33%	0.00%	16.67%
I would be satisfied to remain in the field of research administration until I retire.	31	51.61%	25.81%	22.58%

JOB FEEDBACK

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
The work activities themselves provide direct and clear information about the	30	63.33%	16.67%	20.00%

effectiveness of my job performance (e.g., quality and quantity).				
This job provides me feedback itself and clues about how well I am doing aside from any feedback co-workers or supervisors may provide.	30	80.00%	6.67%	13.34%
After I finish a task, I know whether I performed it well.	31	77.42%	6.45%	16.13%

JOB SIGNIFICANCE

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
The job itself is very significant and important in the broader scheme of things.	31	77.42%	11.11%	0.00%
I am doing something worthwhile as a research administrator.	30	93.33%	0.00%	6.67%
The job has a large impact on people outside the organization.	30	63.33%	10.00%	26.66%

SKILL VARIETY

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
My job requires me to do many different functions at work, using a variety of my skills and talents.	30	96.66%	0.00%	3.33%
Overall, my tasks are simple or repetitive.	31	45.16%	6.45%	48.38%
The job requires the performance of a wide range of tasks.	30	93.34%	0.00%	6.67%

PROFESSIONAL SUPPORT

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
In our work group, people freely discuss various topics important to our team.	30	86.67%	6.67%	6.66%
I receive support and guidance from my colleagues.	30	83.33%	0.00%	16.67%
It is easy for any member of our group to ask for information from any member of the group.	30	76.67%	10.00%	13.33%

ETHICAL WORKPLACE

		Strongly Agree to Agree	Neither agree nor disagree	Strong Disagree to Disagree
In this organization, it is expected that you will do what is right for the researchers and the public good.	31	96.77%	3.23%	0.00%
In this organization, leadership sends a clear message that professional ethical standards are to be followed.	31	87.10%	3.23%	9.68%
In this organization, the law or ethical code of the profession is a major consideration even above efficiency.	31	83.87%	0.00%	16.13%

Summary of Preliminary Results:

The percent of those that indicated their intent to find new employment was 35.27%. The percent that planned to remain in their jobs was 46.28%. While 18.45% were not sure if they were going to stay or leave their current positions. Variables that indicated high to moderate agreement among respondents were:

- Ethical workplace
- Skill Variety
- Autonomy
- Job Feedback
- Professional Support
- Professional Job Satisfaction

Highlights from the open-ended comments are listed below:

Positive aspects of being a research administrator-

- Liked the nature of the job and being in a research environment
- Job security was an important factor in remaining in the profession
- Felt that what they did on the job was contributing to society
- Indicated that they liked coworkers and a being in supportive environment

Negative aspects of being a research administrator-

- Salary too low for level of responsibility
- Did not like the nature of the job
- Not valued - treated poorly by PIs
- Not respected or heard by leadership
- Lack of training

Lessons-learned:

The estimated timeframe to complete the study is 1.5 years (January 2016-June 2017). This timeframe is a result of a failed approach to gather data resulting from an insufficient level of responses from the first dissemination of the survey.

Other issues that contributed to the expanded timeframe was the need for a second IRB approval on the revised instrument. In addition, the PI was only able to dedicate a small amount of FTE (5%) to dedicate to the project during Fall 2016 and Spring 2017 semesters without a reduction in workload. Sufficient amount of release time from the institution of at least 25% during fall and spring semesters would have sped up the time required to gather data, conduct the analysis and report the results. Due to the low response rate, the PI is continuing to gather data to improve research results.

Dissemination of Study

A preliminary presentation of the research plan was given at the 2016 Annual Meeting and another presentation was given at the Florida Research Administration Conference in January 2017. The final results of this study will be disseminated through multiple channels. A presentation is scheduled to provide the final results at the NCURA Annual Meeting in Washington DC, 2017. In addition, presentations proposal will be submitted for several local NCURA regional conferences. An article will be submitted to the Research Management Review for publication consideration. There are also additional opportunities to present results at venues at the University of Central Florida to research administrators and faculty.

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APPENDIX A: QUESTIONNAIRE

Measurement items

Variable	Questionnaire items (7-point scales, 1=strongly agree; 7=strongly disagree) (R)=reverse scored
Turnover intention	1. I will probably look for a research administration position in a <i>different research organization</i> in the next year.
	2. I intend to take steps in the future to secure a position in research administration at a different organization.

	3. I often think about leaving my current organization for a job at a different research organization in the next year.
	4. I plan to be with this organization 5 years from now. (R)
Profession/Job Satisfaction	1. Overall, I am satisfied with the <i>kind</i> of work I do as a research administrator.
	2. I often think about changing to a different job outside the area of research administration.
	3. I would be satisfied to remain in the field of research administration until I retire.
Work exhaustion	Scale range: 0=never; 1= almost never; 2=rarely; 3= sometimes; 4= often; 5= nearly all the time; 6=daily
	1. I am emotionally drained from my work.
	2. My job cause unreasonable amounts of stress in my life.
	3. I am emotionally energized when I leave my job at the end of the work day. (R)
Autonomy	1. I exercise a good amount of independent thought and action in my work based on my level of experience.
	2. The job allows me to make a lot of decisions on my own.
	3. This job allows me to make my own decisions about how to schedule my work.
Job feedback	1. This job provides me feedback itself and clues about how well I am doing—aside from any feedback co-workers or supervisors may provide.
	2. After I finish a task, I know whether I performed it well.
	3. The work activities themselves provide direct and clear information about the effectiveness of my job performance (e.g., quality and quantity) of my job performance.

Job significance	1. The job itself is very significant and important in the broader scheme of things.
	2. I am doing something worthwhile as a research administrator.
	3. The job has a large impact on people outside the organization.
Task identity	1. The job involves completing a piece of work that has an obvious beginning and end.
	2. The job is arranged so that I cannot complete an entire piece of work from beginning to end. (R)
	3. The job provides me the chance to completely finish the pieces of work I begin.
Skill variety	1. My job requires me to do many different functions at work, using a variety of my skills and talents.
	2. The job requires the performance of a wide range of tasks.
	3. Overall, my tasks are simple or repetitive. (R)
Professional Support	1. In our work group, people freely discuss various topics important to our team.
	2. It is easy for any member of our group to ask for information from any member of the group.
	3. I receive support and guidance from my colleagues.
Trust in senior management	1. The quality of top leadership within the research administration division is very high.
	2. Overall, we have very capable and proficient senior management.
	3. I believe senior management cares enough to act in my personal best interest.

Structural fairness	1. No matter what other group members do on joint assignments, I believe my efforts will be rewarded fairly.
	2. Overall, the rewards I receive here are quite fair.
	3. I think my level of pay is fair.
Job opportunities	1. My place of employment offers me continued long term career opportunities.
	2. In the future I see many opportunities for advancement in this organization.
	3. I have opportunities through professional conferences to expand my knowledge and expertise in research administration.
Workplace Security	1. This organization offers me continued long term security.
	2. Most people doing this job within this organization have long term security.
	3. I worry about losing my job in my current work place.
Ethical Climate	1. In this organization, it is expected that you will do what is right for the researchers and the public good.
	2. In this organization, leadership sends a clear message that professional ethical standards are to be followed.
	3. In this organization, the law or ethical code of the profession is a major consideration even above efficiency.
Time in position	How long have you been working in research administration? #Years: ____ #Months: ____

Open-Ended Questions:

Briefly describe why do you want to stay or leave the field of **research administration**?

Briefly describe why do you want to stay or leave your present **research organization**?

Standard demographic information:

- **Age:**
 - 18-29
 - 30-49-
 - 50-64
 - 65 or older
- **Education:**
 - High school or less
 - Bachelor's degree
 - Master's degree
 - Doctoral degree
- **Gender**
Male Female
- **Ethnicity**
 - White
 - Black or African American
 - American Indian or Alaska Native
 - Asian
 - Native Hawaiian or Pacific Islander
 - Hispanic or Latino
 - Other

- **Household composition**
 - Married couple no children
 - Married couple with children
 - Single no children
 - Single with children
 - Other household with children

- **Type of research institution**
 - private/public research university
 - private/public independent research organization
 - hospital
 - Primarily Undergraduate Institute
 - Other

- **Name of Research Organization employed:** _____ (the names of research organizations is confidential and will not be reported, it is only used to identify Carnegie Classification).