

# Comparisons of the 2007 and 2010 Research Administrator Stress Perception Surveys

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## Introduction

The Research Administrator Stress Perception Surveys (RASPerS) were conducted in 2007 and 2010. During the interval between 2007 and 2010, there was significant change in the research funding landscape with an end to the U.S. National Institutes of Health budget doubling and the downturn in the U.S. economy. With decreased research funding and state dollars, many research institutions were forced to reduce staffing in research administration. Added to that, the American Recovery and Reinvestment Act created a need for rapid response to apply for grant dollars followed by extremely labor intensive reporting requirements. As shown in Figure 1, the 2010 RASPerS data show that research administrators report their jobs have become more and more demanding over the past few years.

## Objectives

The purpose of this study is to compare the results of the 2007 and 2010 RASPerS to see the possible impact of the events affecting the research administration community during this time span. This will be done by comparing data from the two studies in the areas of level of perceived work stress (PWS), working in excess of 40 hours per week, reporting to work when sick, work/family life balance, and feeling valued by colleagues.

## Limitations

The 2007 RASPerS was designed specifically for use with the research administrator population. The 2010 RASPerS used general population survey instruments which were validated for the research administration population. Thus while the questions were similar and measured the same factors, they were not identical.

## Methods

Sampling and collection methodology for the original surveys is previously described (Shambrook & Brawman-Mintzer, 2007; Shambrook, 2010). Questions were selected from each survey to compare the variables of interest.

Binary outcomes were observed for each question of 2007 and 2010 surveys respectively. Response rates for each question were estimated corresponding to years 2007 and 2010. The test for difference of proportions was done in StatXact 8 to explore if there was a significant change in how the questions were answered in year 2007 and 2010. Asymptotic 95% confidence intervals for difference of proportions between 2010 and 2007 were obtained from StatXact 8 using the method of Miettinen and Nurminen (1985).

## Results

Table 1 shows estimated response rate, p-value and 95% CI for the difference of proportions between 2010 and 2007 for each question in survey. A significant change has been observed between the 2007 and 2010 responses for all aspects of life at work. Perceived level of stress, appreciation and respect, workplace presenteeism, and work/family life balance had been significantly increased in 2010 than in 2007. But adequate resources to work 40 hour work-week had been decreased significantly in 2010 than in 2007. The 95% CI provides range for the difference in response rate of two years for each question. Figures 2 through 6 show descriptive data for each variable.

Factors from RASPerS 2007 & 2010	Estimated Response Rate		P-value	95% Confidence Interval
	2007	2010		
Perceived level of stress extremely high	0.16	0.23	0.0014	(0.025, 0.101)
Feel highly appreciated and respected at work	0.033	0.142	<0.0001	(0.083, 0.135)
Workplace presenteeism (working when sick)	0.39	0.65	<0.0001	(0.206, 0.302)
Work/family life balance difficulties	0.45	0.57	<0.0001	(0.069, 0.169)
Adequate resources to work 40 hour work-week	0.29	0.24	0.032	(-0.092, -0.004)

Table 1. Statistical analysis of the 2007 and 2010 Research Administrator Stress Perception Surveys. All factors show change between years at high levels of significance. (N varies)

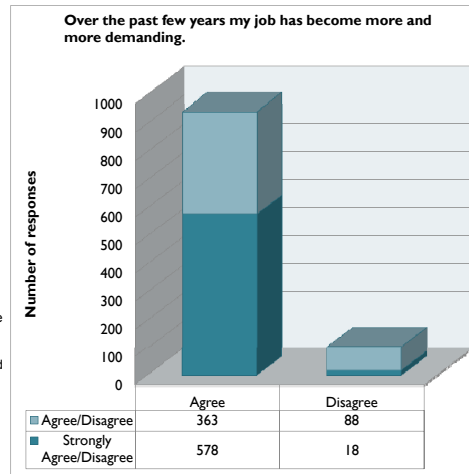


Figure 1. 2010 RASPerS data show approximately 90% of the 1,047 research administrators responding to this question report their jobs have become more demanding over the past few years.

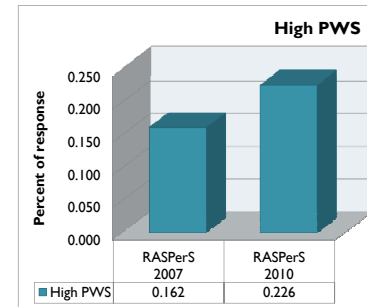


Figure 2. Respondents reporting extremely high perceived work stress. RASPerS 2007 data show 102 of a total of 631. RASPerS 2010 data show 246 of a total of 1,089.

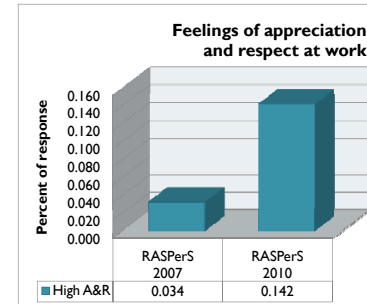


Figure 3. Respondents reporting positive feelings of appreciation and respect in the workplace. RASPerS 2007 data show 21 of a total of 626. RASPerS 2010 data show 149 of a total of 1,046.

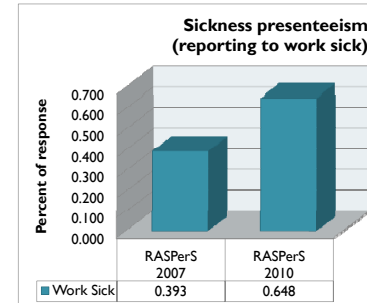


Figure 4. Respondents reporting routinely reporting to work when sick. RASPerS 2007 data show 238 of a total of 606. RASPerS 2010 data show 708 of a total of 1,093.

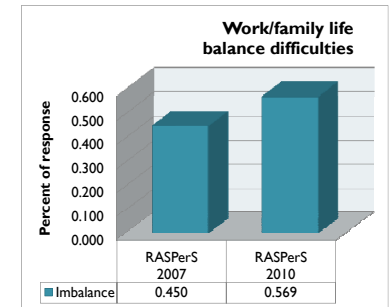


Figure 5. Respondents reporting difficulty handling family responsibilities due to work. RASPerS 2007 data show 271 of a total of 602. RASPerS 2010 data show 592 of a total of 1,040.

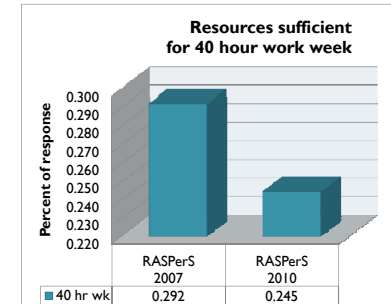


Figure 6. Respondents reporting they were able to routinely work a 40-hour work week. RASPerS 2007 data show 177 of a total of 606. RASPerS 2010 data show 281 of a total of 1,048.

## Conclusions

Almost 90% of the respondents in the 2010 RASPerS reported their work had become more demanding over the past few years (Fig.1). Data comparison from the 2007 and 2010 RASPerS show that a higher percentage of research administrators are experiencing extremely high levels of perceived work stress (Fig. 2). A higher level of research administrators are also routinely reporting to work when sick (Fig. 4) and are experiencing difficulty with work/family life balance (Fig. 5). A lower percentage of research administrators have sufficient resources at work to enable them to hold to a 40 hour work week (Fig. 6). The positive news is that there are also a higher percentage of research administrators reporting that they are feeling appreciated by their colleagues at work (Fig. 3). All findings were statistically significant (Table 1).

While work has become more demanding over the past few years for research administrators, this is accompanied by higher levels of perceived appreciation and respect by colleagues.

## References

- Shambrook, J. & Brawman-Mintzer, O. (2007). Results from the 2007 RASPerS. *Research Management Review* Vol. 15, No. 2, pp. 41-52.
- Shambrook, J. (2010). Health behavior, occupational stress, and stress resiliency in research administrators working in the academic environment. *Dissertation Abstract International*, AAT 3412291
- Miettinen OS, and Nurminen M (1985). Comparative analysis of two rates. *Statistics in Medicine*, 4: 213-226.