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Book Part

Chapter 4.5 RASPerS: Prevalence of Occupational Stress and Associated Factors in RMA Professionals

Provided in Cooperation with:

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Reference: In: The Emerald Handbook of Research Management and Administration Around the World (2023). Emerald Publishing Limited, S. 373 - 383.
<https://doi.org/10.1108/978-1-80382-701-820231030>.
doi:10.1108/978-1-80382-701-820231030.

This Version is available at:

<http://hdl.handle.net/11159/670025>

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Chapter 4.5

RASPerS: Prevalence of Occupational Stress and Associated Factors in RMA Professionals

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Abstract

This chapter explores occupational stress in research managers and administrators (RMAs). Data gathered from RMAs in the USA, Great Britain, Europe, Australasia, and Canada through the Research Administrator Stress Perception Survey (RASPerS) are used to examine factors that are known stressors or outcomes from occupational stress. The purpose of RASPerS is to measure and raise awareness about occupational stress and its impact on health behaviour in RMAs. Using descriptive statistics, factors associated with occupational stress including increasing demands, hours worked, anxiety due to competing demands between work and home, and reported self-neglect due to occupational stress are examined. We also explore what RMAs report as being the top motivating factors for remaining in the profession despite high levels of stress.

Awareness of the impact of occupational stress can aid RMAs in maintaining a healthier lifestyle and assist RMA leaders in building work environments that foster employee retention.

Keywords: Occupational stress; work–life balance; RASPerS; work environment; employee retention; employee morale; sickness presenteeism; research administration

The Emerald Handbook of Research Management and Administration Around the World, 373–383



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Prevalence of Occupational Stress in RMAs

According to *The Scale of Occupational Stress*, any occupational group with 20% or more of the workforce reporting high or extremely high stress is considered a high stress population (Smith, 2000; Smith et al., 2000). Occupational stress awareness is important as long-term stress has been associated with chronic disease, injurious accidents, burn-out, family problems, low productivity, and poor mental health (Goh et al., 2015; National Institute for Occupational Safety & Health, 1999; Sohail & Rehman, 2015; Tabakakis et al., 2020).

The RASPerS was first conducted in 2007 in the USA in order to measure the level of occupational stress in the RMA community. Data from the 2007 RASPerS showed that 58.3% of $n=652$ RMA study participants reported high or extremely high levels of occupational stress (Shambrook & Brawman-Mintzer, 2007). This is far above the threshold set by *The Scale of Occupational Stress* which classifies any occupational group with 20% or more reporting high or extremely high stress as a high stress occupation (Smith, 2000). Data from the subsequent US-based RASPerS in 2010, 2015, and 2020 also showed greater than 50% of participating US-based RMAs reporting high or extremely high occupational stress (Shambrook, 2010, 2020c). However, as over 40% of the US workforce reports high or extremely high work-place stress (National Institute for Occupational Safety & Health, 1999), it was important to determine if RMAs in other parts of the world also reported high levels of RMA occupational stress. This would inform the community if occupational stress was associated with being an RMA or simply a factor in the US work environment.

In 2015, leaders in various RMA professional societies were contacted to query their interest in offering the RASPerS to members of their organisations. The goal was to gather information that could be disseminated to their various members in order to raise their awareness about stress. The aggregated information was shared at the Congress of the International Organisation of Research Management Societies (INORMS) held in Melbourne, Australia, in September 2016.

The European Association of Research Managers & Administrators (EARMA); Australasian Research Management Society (ARMS); BESTPRAC, a European Union network of research administration and management professionals who share best practices (and is now part of EARMA); and the UK-based Association of Research Managers and Administrators (ARMA) participated in the 2016 studies. The Canadian Association of Research Administrators (CARA) delegates at the 2016 INORMS Congress requested that the RASPerS study be conducted for their membership. The Canadian study was conducted in early 2017.

In this chapter, we examine data from each of the studies, with the exception of the 2007 and 2010 US-based studies. As these two earlier studies were less contemporaneous than the non-US studies, they are non-essential for this discussion. All US-based studies showed more than 50% of the RMA population was under high or extreme occupational stress, as previously reported (Shambrook, 2020c). US-based RASPerS data for both 2015 (pre-pandemic) and 2020 (early-pandemic) are made available to inform the community of how various factors were (or were not) affected during that time frame.

All study group participants were asked to rate their perceived level of work-related stress as either minimal, moderate, high, or extremely high. In Fig. 4.5.1, the percentage from each study group ranking their work-related stress as high or extremely high is shown in the table below the chart. The chart shows the combined percentage. As shown in Fig. 4.5.1, the range for the aggregate percentages was 34.8% for ARMA to

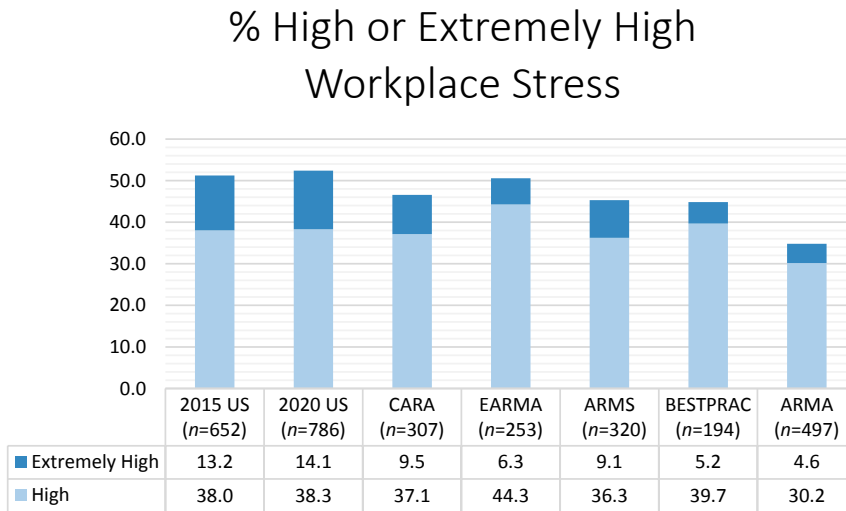


Fig. 4.5.1. Prevalence of Work-related Stress.

Study participants were asked to rate their perceived levels of occupational stress as minimal, moderate, high, or extremely high. Those reporting high or extremely high work-related stress are combined to create the aggregate percentage shown in Chart 1. All RMA groups show more than 20% report having high or extremely high work-related stress, indicating RMA is a high stress occupation.

52.4% for 2020 US. The mean for all RMAs was 46.6%. Both separately as individual groups, or collectively as a mean, the percentages are far higher than the 20% needed to deem RMA as a high stress occupation. From these data, we can conclude that RMA is a high stress occupation, despite the geographical location where it may be practised.

Prevalence of Perceived Increase of Demands on RMA Professionals

Now that we have established that RMA is a high stress occupation, we will consider what makes RMAs vulnerable to occupational stress. It has been well established that one of the major causes of work-related stress is high demands, especially when combined with low decision-making power (Karasek, 1979). The nature of the work being done by RMA professionals frequently is done with low control over workload volume, combined with unmoveable deadlines. With ever increasing regulatory demands from funding sources and research growth at individual institutions, it is not surprising that RMAs report perceptions that work demands are continually increasing.

The 2010 RASPerS data indicated that 90% of US-based RMAs either agreed or strongly agreed that their job was becoming more demanding (Shambrook, 2012). As shown in Fig. 4.5.2, this perception is consistent across all groups with a range of 82.0% for ARMA to 91.5% for 2020 US participants. The mean for all RMAs is 87.8%. Therefore, not only do RMAs feel they are under high or extremely high stress, but there is overwhelming agreement that demands are growing.

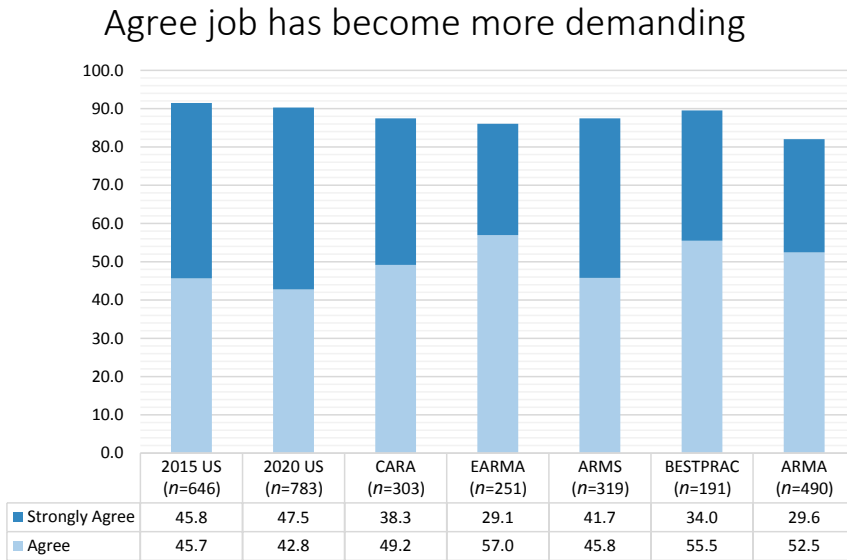


Fig. 4.5.2. RMA Job Demands Are Increasing.

This chart shows the combined percentages of RMAs who indicated they either Agree or Strongly Agree their job has become more demanding over the past few years.

Prevalence of Work–Life Balance Challenges in RMA Professionals

RMAs with high or extremely high occupational stress are more likely to report challenges with work–life balance (Shambrook, 2010). With most RMAs reporting their jobs are becoming more demanding, working additional hours to keep up with those demands appears to be a chosen solution for many RMAs. Participants were asked to indicate the number of hours usually worked in a work-week. The range of responses showed that 31.0% of ARMA participants to 65.2% of 2015 US participants usually worked more than 40 hours per week. Overall, 47.6% of all participants usually worked more than 40 hours per week (Table 4.5.1). For RMAs on fixed salaries, these excess hours are without additional compensation.

Although working more hours to meet increasing demands at work may be a viable option, the hours spent at work are hours that are not spent in meeting other obligations. Increased work time can contribute to increased challenges for work–life balance (Netemeyer et al., 1996). Study participants were asked to indicate the level of stress they experienced due to anxiety from the competing demands of work and home. Participants were asked to rate their level of anxiety as minimal, moderate, high, or extremely high stress from competing demands of work and home. Those indicating high or extremely high stress from competing demand anxiety ranged from 33.8% for ARMA to 43.2% for BESTPRAC (see Fig. 4.5.3).

The 2020 US survey was conducted during the early 2020 COVID pandemic quarantine period, which may be a factor in the increase between 2015 US (41.0%) and 2020 US (42.9%), with many RMAs working from home at that time. It is perhaps

Table 4.5.1. Hours Normally Worked Per Week.

| Normal Work Week Hours | Less Than 40 | Usually 40 | 40–50 | More Than 50 |
|----------------------------|--------------|------------|-------|--------------|
| 2015 US (<i>n</i> = 653) | 4.3 | 30.5 | 52.1 | 13.2 |
| 2020 US (<i>n</i> = 791) | 4.8 | 32.9 | 46.7 | 15.7 |
| CARA (<i>n</i> = 312) | 26.6 | 29.8 | 33.3 | 10.3 |
| EARMA (<i>n</i> = 259) | 18.9 | 32.8 | 40.5 | 7.7 |
| ARMS (<i>n</i> = 325) | 28.3 | 31.1 | 32.6 | 8.0 |
| BESTPRAC (<i>n</i> = 203) | 19.2 | 38.9 | 32.0 | 9.9 |
| ARMA (<i>n</i> = 516) | 42.1 | 26.9 | 25.6 | 5.4 |

Note: RMA study participants from each group were asked how many hours they normally work each week.

RMA's reporting high or extreme stress anxiety due to competing demands of work and home

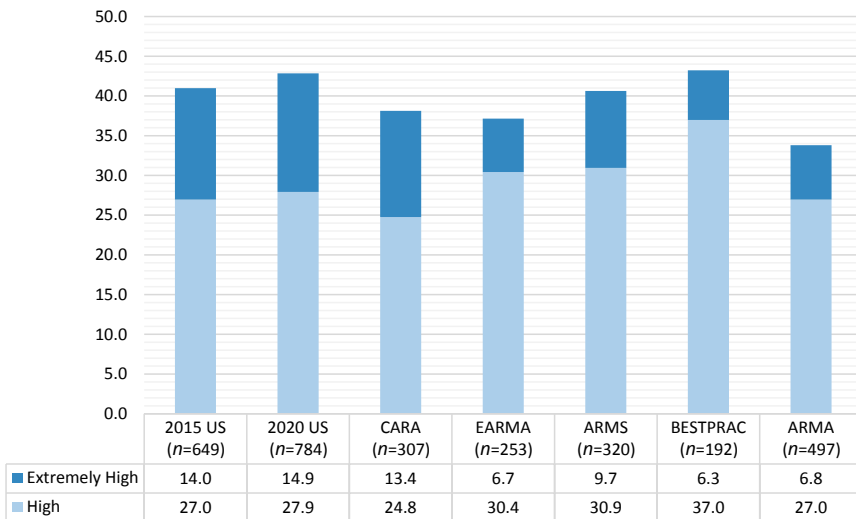


Fig. 4.5.3. High Stress Anxiety from Competing Demands of Work and Home. Study participants were asked to rate their level of stress as minimal, moderate, high, or extremely high due to anxiety from the competing demands of work and home. Shown here are the aggregate numbers of those ranking their stress as high or extremely high. Collectively, over one-third of RMA's experience high stress due to competing demands of work and home.

interesting to note that the BESTPRAC study participants reported the highest levels of stress (43.2%) from competing demands in 2016, prior to the extra strain placed on working parents during the pandemic.

Table 4.5.2. Frequency of Family and Social Relationship Neglect Due to Work Demands.

| In Order to Meet the Demands of Your Job, Do You Feel You Have Neglected Your Family or Social Relationships? | Never | Only on Rare Occasion | Yes, But Not Often | Yes, Frequently |
|--|--------------|------------------------------|---------------------------|------------------------|
| 2015 US (<i>n</i> = 648) | 12.5 | 26.1 | 37.4 | 24.1 |
| 2020 US (<i>n</i> = 783) | 9.2 | 29.3 | 39.0 | 22.6 |
| CARA (<i>n</i> = 306) | 12.1 | 29.7 | 37.3 | 20.9 |
| EARMA (<i>n</i> = 253) | 8.7 | 30.0 | 40.7 | 20.6 |
| ARMS (<i>n</i> = 321) | 8.4 | 26.8 | 38.9 | 25.9 |
| BESTPRAC (<i>n</i> = 193) | 10.4 | 36.3 | 35.2 | 18.1 |
| ARMA (<i>n</i> = 496) | 14.7 | 33.7 | 35.7 | 15.9 |

Note: Level of frequency RMA survey participants felt that in order to meet the demands of their job they had neglected their family or other social relationships.

To better understand anxiety from the competing demands of work and home, RMAs were asked to indicate the level of frequency they felt they neglected their family or social relationships in order to meet the demands of work. The means were again calculated for each group and collectively. An average of about 1 in 10 RMAs (11.0%) collectively report they never neglect family or social relationships in order to meet the demands of work, while about 9 out of 10 report varying levels of neglect. Around 7 out of 10 reported neglect either rarely (30.3%) or not often (37.7%). Around 2 out of 10 (21.2%) reported frequent neglect of family or social relationships in order to meet the demands of work. Thus, on average, looking at all RMAs, twice as many report frequent neglect than those who report never neglecting family or social relationships (Table 4.5.2).

Prevalence of Self-care Challenges in RMA Professionals

Data from the 2010 RASPerS study were analysed to determine the association between level of occupational stress and poor health behaviours. These data show high association between high stress and poor self-care. Poor self-care outcomes were associated with high and extremely high occupational stress such as failure to obtain preventive screenings, unhealthy body weight, poor diet, poor sleep habits, unhealthy levels of alcohol consumption, tobacco use, and reporting to work while sick (Shambrook, 2010).

The importance of RMA self-care has been recognised by many of the RMA professional organisations. The National Council of University Administrators (NCURA) has begun an ongoing series of articles on self-care in the *NCURA Magazine* (Shambrook, 2020a, 2020b, 2020c). US-based organisations, such as NCURA, the Society of Research Administrators International (SRAI), INORMS, and the Florida Research Administrators Conference (FRAC) have provided platforms for the dissemination of RASPerS data, in order to raise awareness of the danger of self-care neglect for RMA professionals working under high stress.

RMA professionals in each group were asked about the frequency they had neglected their physical health in order to meet the demands of their job. As shown

Table 4.5.3. Frequency of Self-neglect of Physical Health Due to Work Demands.

| In Order to Meet the Demands of Your Job, Do You Feel You Have Neglected Your Physical Health? | Never | Only on Rare Occasion | Yes, But Not Often | Yes, Frequently |
|--|-------|-----------------------|--------------------|-----------------|
| 2015 US (<i>n</i> = 650) | 7.6 | 21.4 | 33.5 | 37.5 |
| 2020 US (<i>n</i> = 784) | 6.0 | 19.9 | 35.8 | 38.3 |
| CARA (<i>n</i> = 307) | 7.8 | 19.5 | 36.2 | 36.5 |
| EARMA (<i>n</i> = 253) | 7.9 | 24.5 | 34.8 | 32.8 |
| ARMS (<i>n</i> = 321) | 3.1 | 18.1 | 37.1 | 41.7 |
| BESTPRAC (<i>n</i> = 192) | 12.5 | 23.4 | 31.8 | 32.3 |
| ARMA (<i>n</i> = 496) | 12.5 | 24.6 | 32.1 | 30.8 |

Note: Percentage of RMA survey participants that felt that in order to meet the demands of their job they had neglected their physical health.

in Table 4.5.3, the range of RMAs reporting frequent physical health self-neglect was 30.9% (ARMA) to 38.3% (2020 US). In looking at the mean for all groups, only 8.2% reported never neglecting their physical health in order to meet the demands of work. This is a stark contrast to the 35.7% reporting that they frequently neglect their own physical health in order to meet the demands of work.

Further evidence of neglect of physical health is shown in Fig. 4.5.4 which shows the frequency RMAs report having gone to work while sick. This health behaviour has been identified as *sickness presenteeism* by Aronsson et al. (2000) and is highly associated with occupational stress (Aronsson et al., 2000; Shambrook, 2020b; Szymczak

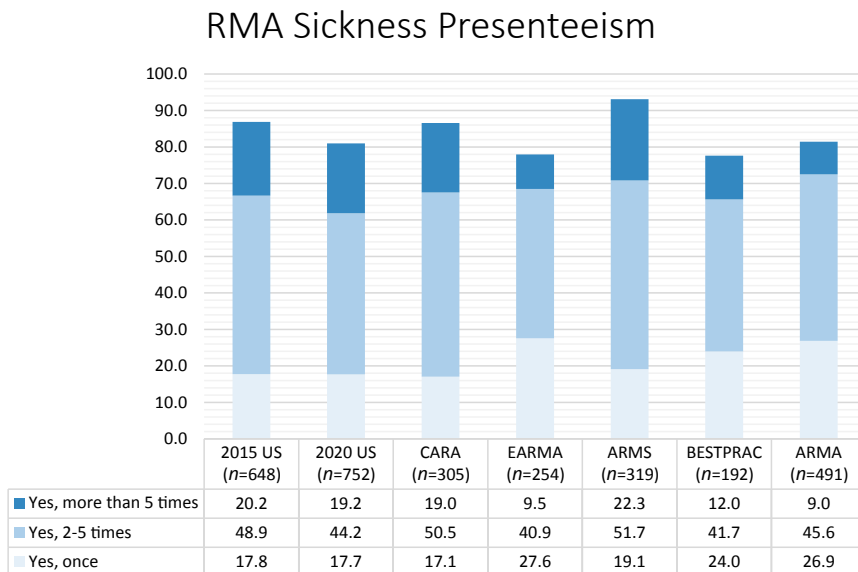


Fig. 4.5.4. Frequency of Self-neglect Evidenced Through Working While Sick. RMAs reporting sickness presenteeism.

et al., 2015). Reporting to work while sick can prolong or worsen illness. Moreover, sickness presenteeism is not only detrimental to the health recovery of the individual reporting to work while sick, but also may expose co-workers to infectious disease.

RMAAs were asked to describe how often they reported to work despite feeling they should have taken sick leave due to the state of their health. The choices were: no, never; yes, once; yes 2–5 times; or yes, more than 5 times. The desired choice here is ‘no, never’. The range reporting sickness presenteeism was 78.0% (EARMA) to 93.1% (ARMS) with an overall mean for all groups of 91.8%.

The range for those reporting sickness presenteeism more than 5 times in the last 12 months was 9.0% for ARMA to 22.3% for ARMS, with an overall mean for all groups of 15.9%. One cannot help but wonder if the high frequency of sickness would be lower if neglect of physical health were lower, or exposure from co-workers was less. In comparing the 2015 US and 2020 US, there is a drop from 86.9% in 2015 to 81.0% in 2020 during the height of the pandemic. There is insufficient information to know if the participants were sick less often, or simply engaged in sickness presenteeism less frequently. There has been heightened awareness of the importance of reducing sickness exposure to others as a result of the pandemic. Further data collection for other groups would be necessary to determine if there is also a post-pandemic reduction in sickness presenteeism for other groups around the globe.

Occupational stress in RMAAs is also highly associated with neglect of mental and spiritual health (Shambrook, 2010). RMAAs were asked to indicate the level of frequency they felt they had neglected their mental or spiritual health due to work demands. They were asked to choose from one of the following answers: never; only on rare occasion; yes, but not often; or yes, frequently.

As shown in Table 4.5.4, the range of RMAAs reporting never neglecting their mental or spiritual health in order to meet the demands of work was 5.3% for ARMS to 12.6% for ARMA, with a mean for all groups of 9.5%. As in the data shown for physical self-neglect in order to meet the demands of work, this is in stark contrast to those reporting frequent self-neglect of mental or spiritual health. The range for frequent self-neglect was 24.1% for ARMA to 40.5% for ARMS. The mean for all groups reporting frequent self-neglect was 33.5%.

Table 4.5.4. Frequency of Self-neglect of Mental or Spiritual Health Due to Work Demands.

| In Order to Meet the Demands of Your Job, Do You Feel You Have Neglected Your Mental or Spiritual Health? | Never | Only on Rare Occasion | Yes, But Not Often | Yes, Frequently |
|---|-------|-----------------------|--------------------|-----------------|
| 2015 US (<i>n</i> = 650) | 9.2 | 20.9 | 34.9 | 34.8 |
| 2020 US (<i>n</i> = 782) | 7.2 | 19.7 | 36.5 | 36.7 |
| CARA (<i>n</i> = 307) | 10.4 | 18.6 | 32.9 | 38.1 |
| EARMA (<i>n</i> = 253) | 9.1 | 25.7 | 37.6 | 27.7 |
| ARMS (<i>n</i> = 321) | 5.3 | 18.1 | 35.8 | 40.5 |
| BESTPRAC (<i>n</i> = 191) | 12.5 | 23.4 | 31.8 | 32.3 |
| ARMA (<i>n</i> = 496) | 12.6 | 25.1 | 38.2 | 24.1 |

Note: Percentage of RMA survey participants that felt that in order to meet the demands of their job they had neglected their mental or spiritual health.

Workforce Retention Motivators for RMA Professionals

Given that RMAs are working under high or extreme stress, which can have serious negative consequences for health and social relationships, it is important to determine why individuals stay in the profession. Do they feel trapped or are they motivated by something else? Are the answers similar when comparing groups from different geographic areas?

RMAs were asked to select the best option to complete the sentence ‘I stay in research administration because...’. Possible reasons included positive options such as ‘I find it interesting’ and negative options such as ‘It is too late for me to change careers’.

Table 4.5.5 provides a ranking for the top motivators for remaining in RMA in each group. The percentages for each group were gathered, then ranked by group with the answer choice with the highest percentage being ranked as number 1 and the answer choice with the lowest percentage being ranked as number 13. Finally, the answers were ranked for all groups combined and are displayed by rank in Table 4.5.5.

The most frequent answers were very similar between groups, with the top three answers being enjoyment of the environment, feeling of contribution, and interesting work. It was interesting to see ‘I enjoy my co-workers’ which was ranked as number 8 of 13 overall rise from 11th in the 2015 US survey to 5th in the 2020 US survey. Heightened co-worker appreciation may be another positive outcome of the pandemic.

Conclusions

From these data, we can conclude that RMA is a high stress occupation irrespective of geographic location. The demands upon RMAs are growing, and this may result in working longer hours in order to compensate for those demands. RMAs report stress anxiety from the competing demands of work and home. RMAs also frequently report feeling they are neglecting family, social relationships, physical health, mental, or spiritual health in order to meet the demands of work. Self-neglect can manifest itself in negative health behaviours, such as reporting to work while sick.

Despite the strain placed upon RMAs by this high stress occupation, these professionals are motivated to stay in the profession by the environment, the contribution they make, and the interesting nature of the work. Few RMAs reported feeling trapped or planning to leave the profession.

The purpose of the RASPerS studies is to raise the awareness in the RMA community so that as individuals, co-workers, or leaders, efforts can be made for positive change. Creation of reasonable personal boundaries fostering good self-care and work-life balance begins with individual RMAs. Setting a positive example for co-workers or subordinates can help facilitate positive change upon the factors associated with a high stress occupation.

High occupational stress is to be expected in a deadline-driven profession with ever-increasing demands. Awareness of the negative effects that can be the outcomes of high occupational stress is the first step towards improved work-life balance, good overall health, and better social relationships for those important to us. We may even find that with those better outcomes, our overall resilience to occupation stress is also improved (Shambrook, 2022).

Table 4.5.5. Top Motivating Factors for Staying in Research Administration in Order of Preference.

| Overall Rank | I Stay in RMA Because: | 2015 US (n = 618) | 2020 US (n = 741) | CARA (n = 284) | EARMA (n = 239) | ARMS (n = 305) | BESTPRAC (n = 182) | ARMA (n = 455) |
|--------------|---|----------------------|----------------------|-------------------|--------------------|-------------------|-----------------------|-------------------|
| 1 | I enjoy the university environment | 2 | 1 | 1 | 3 | 1 | 1 | 1 |
| 2 | I feel I am making an important contribution | 1 | 2 | 2 | 1 | 2 | 3 | 3 |
| 3 | I find it interesting | 5 | 3 | 3 | 6 | 3 | 2 | 2 |
| 4 | I am constantly learning something new | 4 | 4 | 4 | 2 | 10 | 4 | 6 |
| 5 | I enjoy doing something different every day | 7 | 6 | 7 | 4 | 7 | 5 | 4 |
| 6 | I love the challenge | 6 | 7 | 5 | 7 | 8 | 7 | 8 |
| 7 | I enjoy working with brilliant people | 13 | 8 | 8 | 5 | 5 | 6 | 5 |
| 8 | I enjoy my co-workers | 11 | 5 | 6 | 9 | 12 | 8 | 7 |
| 9 | I don't know how to do anything else for this level of compensation | 3 | 10 | 10 | 12 | 4 | 12 | 9 |
| 10 | Other | 8 | 12 | 11 | 8 | 6 | 13 | 11 |
| 11 | I enjoy working with faculty | 12 | 9 | 9 | 10 | 13 | 10 | 10 |
| 12 | It is too late for me to change careers | 9 | 11 | 12 | 11 | 11 | 11 | 12 |
| 13 | I am not staying, I am looking for another job now | 10 | 13 | 13 | 13 | 9 | 9 | 13 |

Note: Ranking of RMA responses in each study group as how they would complete the sentence 'I stay in research administration because ...'.

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