LETTERS
of the Chiropractic Academy

May 2023
S02E02

Describe a major research challenge and how you overcame it – or not.

Letters of the Chiropractic Academy

Problem Solved!

Issue #2 - Solving Problems

A great start

The multifaceted nature of a researcher's job description cannot be overstated. In addition to being a fundraiser and a writer, they are also expected to be innovators and problem solvers. The ability to solve problems is perhaps the most frequently utilized skill in a researcher's daily routine, as they are required to address issues related to staffing, dissemination, time management, and upgrading, among others. Despite the ever-growing list of challenges that researchers face, finding effective solutions can be a daunting task. As a result, this issue of LOTCA is dedicated to sharing how members of our community have tackled similar problems in the hopes that their experiences will prove helpful to others. The fantastic content here covers a wide range of interesting issues with something here for everyone.

The new LOTCA website

We now have a website which makes submission of your letters super easy! Simply go to lotca.net and you will be able to create a sign-in, add your author information and submit your contribution. Even if you don't contribute a letter, signing up will guarantee that you will receive future issues of as they are released. And don't forget that if you have ideas for our community to discuss, you can submit those to any member of the advisory committee.

Our distribution is growing

As we continue to expand our distribution, we recognize that we may overlook some individuals who could benefit from our content. Therefore, we encourage our readers to share this issue with anyone who they believe may

be interested, using any of their preferred distribution channels such as email, social media postings, or SMS. Furthermore, to ensure accessibility and continuity of our publications, we have launched a new website where all previous issues of LOTCA will be available for reference.

Thank you

Thank you to everyone who contributed to our second debut issue. Thank you too for passing this current issue along to others. Whether you are a fellow researcher, a student, or simply curious about the inner workings of the research community, we hope that *Letters of the Chiropractic Academy* will be a valuable addition to your professional life. Thank you for joining us on this journey of discovery and intellectual exchange.

Our next topic

There is no shortage of research topics, but limited resources make it difficult to research everything all at the same time. With that, are we focusing enough of our time and people on topics directly related to chiropractic?

Why is there so little research that deals with chiropractic?

The deadline for submission is August 15, 2023. Instructions for submission are on our masthead page and can also be found at LOTCA.com. If you have an idea for a topic you'd like to see in LOTCA, simply forward it to our advisory group.

MASTHEAD

How to submit a contribution

Letters of the Chiropractic Academy is a collection of scholarly letters that address a single, specific question posed on a somewhat quarterly basis.

Goals

To build community and visibility for researchers through frequent and public discussion of important topics related to research, evidence and chiropractic practice.

Topic selection

Topics for discussion in upcoming issues can be nominated by anyone to a member of the steering committee who will keep a running list. The topic for the current issue, and the deadline for submission of contributions, will be selected after discussion by the steering committee.

Funding

Letters of the Chiropractic Academy does not receive funding, does not accept financial donations or allow advertising.

Contributors to LOTCA must have:

1. A PhD
2. Published at least 5 peer-reviewed papers over the past 5 years
3. An active appointment at an academic institution.
4. **Eligible contributors may nominate an unqualified contributor in the same issue.

How to contribute?

Contributions about the current topic should be no longer than 500 words. The contribution can be submitted to LOTCA.net. Create an account, then supply your author information and submit your contribution. The website will ask for

1. Your ~ 500-word letter
2. A current headshot
3. A text list of 5 citations (not papers) from the last 5 years
4. A self-written conflict of interest statement (e.g. https://www.biomedcentral.com/getpublished/writing-resources/competing-interests)

Submission deadline

The submission email must be received by the stated submission deadline. If nominating a guest contributor, the qualified contributor must submit their own materials together with the materials of the proposed guest.

Distribution

Issues of **Letters of the Chiropractic Academy** will be assembled by the advisory committee and then circulated back to contributors who are free to forward the issue to their colleagues and beyond.

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Describe a major research challenge and how you overcame it – or not.

Alan Jenks DC, PhD

Capilao University

How I Juggled Life, and (Occasionally) Research

A PhD is a major commitment that requires time, dedication, and effort. It is challenging with other commitments, such as work or family responsibilities. A major challenge I had was moving countries and having to find other work while trying to finish my PhD. I could only work on my PhD a day a week, which was not enough time to make significant progress.

The first step I took to overcome this challenge was to develop a schedule and stick to it. I knew that I needed every minute. I created a detailed schedule via Outlook that accounted for every hour of my day, including work, study hours, and personal time. I made sure to include breaks to avoid burnout and to stay focused and productive. I also had to learn how to manage my time effectively. This meant that I had to prioritize my tasks and focus on the most important ones first. I used an app called Nirvana. I made a list of all the tasks that I needed to complete for my PhD and then sorted them by priority. I tackled important tasks first, such as data analysis and writing, and moved on to the less important ones, such as organizing my notes and references. I also faced staying motivated and focused on my PhD while juggling other responsibilities. I found ways to stay motivated and inspired. I made a list of my long-term goals and reminded myself of them every day. I found that these small actions helped me stay focused and motivated even when things got tough.

One of the most important things was to seek help and support from others. I reached out to my professors and colleagues for advice and guidance. I joined a support group for PhD students, where I shared my experiences and challenges with others going through similar situations. This support group provided me with a sense of community and helped me stay motivated and inspired. Despite the challenges, I am completing my PhD and achieving my goals. I learned from the experience and developed skills that helped me in my personal and professional life. Here are tips that I would give to anyone who is facing a similar challenge: Develop a strict schedule and stick to it as much as possible. Learn how to manage your time effectively by prioritizing your tasks. Stay motivated and inspired by reminding yourself of your long-term goals and finding ways to stay focused. Seek help and support from others. In conclusion, working on a PhD can be challenging and rewarding. When faced with the challenge of working on my PhD a day a week, moving countries and finding other work, I developed strategies to overcome these obstacles. By developing a strict schedule, managing my time effectively, staying motivated and inspired, and seeking help and support from others, I was able to complete my PhD and achieve my goals.

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Describe a major research challenge and how you overcame it – or not.

Andrée-Anne Marchand DC, PhD
Martin Descarreaux DC, PhD

Université du Québec à Trois-Rivières

Writing in English for Scientific Output

When Martin and I sat down to write this piece about "a major challenge in our research and how we overcame it – or not" we came up with a list of trials and tribulations we have faced in our respective careers but quickly realized that, throughout the years, our students, our peers and ourselves have been facing a much subtler struggle… the fact that English is not our first language. It probably took us 50% more time to write these 500 words and for some colleagues writing in English may take 2 to 3 times longer.

English is the dominant language of scientific research and publishing, and the ability to communicate effectively in English is a crucial factor in the success of researchers worldwide. However, not having English as a first language can have a significant impact on a researcher's productivity and its ability to contribute to the scientific discourse. Indeed, it can limit the opportunities available to researchers as most scientific journals, conferences, and funding opportunities require researchers to submit their work in English.

The dominance of English as the language of scientific communication has a significant impact on the accessibility of knowledge and the practice of open science. One of the most underappreciated impacts of English being the lingua franca is that it creates barriers for researchers who are not proficient in the language.

The dominance of English in science can also limit access to knowledge for people who do not speak English or do not have the resources to translate scientific texts. This impedes the dissemination of research and hinders the spread of scientific knowledge globally, especially in low-income countries with fewer resources.

Can artificial intelligence (AI) help?

AI has the potential to attenuate the impact of language barriers on research inclusiveness and knowledge translation by facilitating multilingual communication and translation. Indeed, AI-based natural language processing (NLP) tools can help researchers overcome language barriers in scientific communication. These tools can translate scientific publications into multiple languages, making them more accessible to non-English-speaking communities.

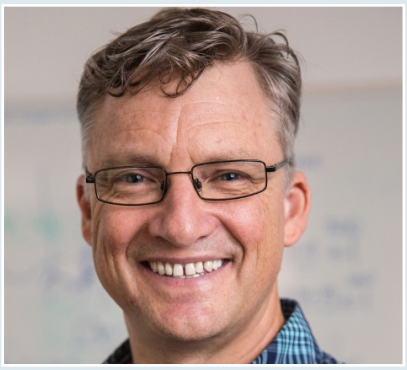
AI-based language models can also improve the accuracy and efficiency of translation efforts. While these tools may not always provide perfect translations, they can help bridge the language gap between researchers and facilitate multilingual communication. Furthermore, AI-based language models can facilitate the development of multilingual scientific communication tools. For example, AI-based chatbots can be developed to provide scientific information and support in multiple languages, enabling researchers to communicate more effectivly in different languages.

To sum it up, (human) efforts are required in order to promote open science principles to overcome the challenge of language barriers. While AIs are becoming more efficient and integrated into our daily lives and have proven to be quite convenient at times, we wouldn't want them to speak for ourselves, or would we?

Describe a major research challenge and how you overcame it – or not.

Aron Downie BSc, MChiro, MPhil, PhD

Macquarie University



Solving Problems Early in my Research Career

Challenge

One theme early in my PhD candidature was to better understand the patient journey after an episode of low back pain. My experience as a clinician suggested that recovery amongst patients varied greatly even when presenting with a similar clinical picture. Therefore, studying the population mean recovery (as many of my colleagues had used) was unlikely to deepen my understanding of the clinical course at the level of the individual. However, my supervisory team and local research group had not previously applied person-centred approaches to recovery.

Opportunity and ignorance

By chance, in 2013 a visiting international scholar had previously used latent variable modelling in the field of psychology and suggested that this may be suitable for my research. The concept of recovery patterns that were “hidden” within population data fascinated me. Excited by the potential of this approach, I presented latent modelling methods to our weekly research group meeting and in doing so, quickly became aware of how little I knew on this topic!

Hard work and kindness

To overcome my ignorance, I studied texts by Nagin, Muthén and Vermont on latent class analysis, latent growth analysis and a generalized approach named growth mixture modelling. I purchased, then taught myself to use two different software packages (LatentGold, Mplus). Whilst this gave me some basic understanding of modelling, it was through meeting researchers at international conferences that focused this approach on recovery from back pain. I was inspired by researchers Kate Dunn, Iben Axén, Alice Kongsted, Peter Kent, and others. Their kindness, patience and expertise were astounding and became an exemplar for how I would assist others later in my career. In hindsight, I should have reached out earlier.

Pay it forward

I have since assisted other researchers to apply latent modelling techniques to investigate recovery from back pain, multi-site arthritic pain, knee arthritis, stroke recovery, and improving survey design (factor analysis). In conclusion, I am grateful to my PhD supervisors for not providing me with answers to my problems, and to the strong community of researchers for their kindness and expertise early in my research journey.

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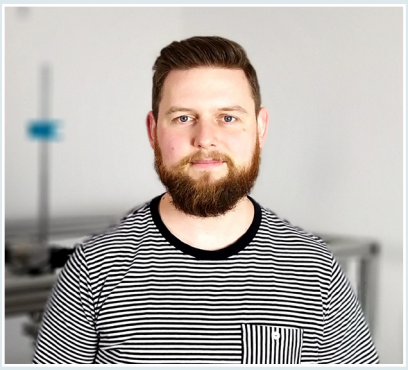
Describe a major research challenge and how you overcame it – or not.

Casper Nim MSc, PhD

University of Southern Denmark



Beating Self-Doubt as a Chiropractic Researcher

I knew early on that I wanted to dive into research. However, at this point, I was midway through my Master's education in chiropractic (the default in Denmark), which had a significant focus on clinical tools rather than academics. I was a lone Ph.D. student in a clinical department when I began my research career. One of the major challenges I faced in my research was doubting myself and my abilities, partly due to the clinical focus in my education and the fact that I, actually, was a semi-decent clinician. I found it difficult to trust that my work was sufficient and that I could make meaningful contributions to the field. I also struggled as the lack of close peers meant I only compared myself to the "do-it-all people" on Twitter.

This lack of confidence and self-belief impacted my productivity and motivation (i.e., did I really want to spend most of my life in a job where I consistently doubted myself). However, I had outstanding mentorship early on, and I was determined to overcome this hurdle and establish myself as a competent and successful researcher. To do so, I began by focusing on the areas where I felt most confident and comfortable, slowly building up my skills and knowledge in other areas over time. I also sought feedback and mentorship from colleagues and peers, including other Ph.D. students, learning from their experiences and using their advice to improve my work.

Ultimately, I found that the key to overcoming my self-doubt was simply to keep working hard, even when it felt like my efforts were falling short. By prioritizing my research and pushing myself to improve as a researcher, I gradually developed the confidence and belief I needed to carry on. And now, it's rewarding to see that my hard work is paying off - In fact, someone recently referred to me as a "do-it-all person," just like the ones I admired on Twitter, a stark contrast from the self-doubting student I once was. Looking back, I'm grateful for the challenges I faced, as they pushed me to become the researcher I am today.

Describe a major research challenge and how you overcame it – or not.

Dein Vindigni OAM, BAppSc (Chiro), MasterMedSc, PhD

RMIT University

Including Diverse Perspectives

In 2014 I completed a PhD in Indigenous Health at the University of Newcastle. The title of the thesis was "Promoting the musculoskeletal health of Indigenous Australians Living in rural and remote communities".

My interest in this area came about through a patient who introduced me to Uncle Paul Gordon, a senior Ngemba Lore man from Brewarrina who lived at Wollombi (north of Newcastle) at the time.

It was Uncle Paul who strangely suggested that I enrol in a PhD to help "tell the story about the needs musculoskeletal health of rural and remote Indigenous Communities….as well as culturally sensitive and respectful solutions." Uncle Paul believed in "bringing together the best of both Aboriginal and non-Aboriginal approaches to health care" and to "speak the language that decision-makers and funding bodies understood in order to support the integration of hands-on health care such as chiropractic, osteopathy and myotherapy into Indigenous health care settings.

So, the underlying motivation for pursuing postgraduate studies in Indigenous health was not an academic pursuit as such, but mainly motivated by a passion for better understanding both the challenges and collaborative solutions to the musculoskeletal health needs of Indigenous Australians.

Before embarking on the PhD, an experienced academic shared a sobering thought that there would undoubtedly be challenges along the research journey and advised that I hold onto and continually revisit the original motivating passion for beginning this journey which was to better understand some of the challenges and collaborative solutions to promote the musculoskeletal health of Indigenous Australians.

On returning to live in Melbourne, I recall receiving a call from the Dean of the School of Medicine at the University of Newcastle who was surprised to learn that I was left with little or no supervision for the project and even more surprised that I hadn`t brought this to anybody`s attention! So, he kindly arranged for a Principal and two Associate Supervisors to help complete the study.

Because of the uncertainties and challenges in the research, a colleague collaborating on a large health promotion project at the Durri Aboriginal Corporation Health Service strongly advised that I consider publishing the findings emerging from the musculoskeletal study. Also, he advised that the recommendations arising from a Community Advisory Group to develop, deliver and evaluate an Aboriginal Health Worker train-the-trainer program in response to the high prevalence of musculoskeletal conditions in the Community be implemented.

At least by publishing the research regardless of whether the PhD came to be completed or not, some findings of value might be used as small steps to making a worthwhile collaborative contribution.

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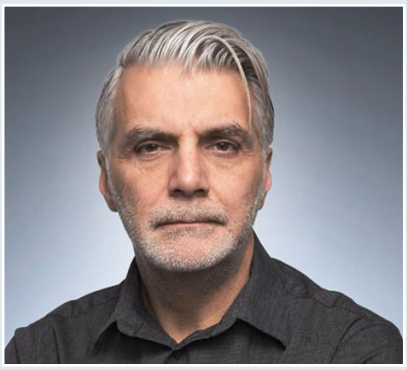
Describe a major research challenge and how you overcame it – or not.

Greg Kawchuk BSC, DC, MSc, PhD

University of Alberta



Ask a Non-expert - For the Win!

"Ancient grammatical puzzle solved after 2,500 years by PhD student."

"A total amateur may have just rewritten human history with bombshell discovery."

"Two high school students discover "impossible" proof of the pythagorean theorem."

We've all seen headline like this. Someone who is not expected to solve a big problem – actually does. The reason that headlines like these are surprising is that when solving problems, we usually do so by acquiring specific knowledge ourselves or finding someone else who possesses this specific knowledge. Far less common is seeking out the opinions of non-experts. Why bother? Chances are they have no idea of how to help you or to solve the challenge at hand.

But, in fact, running problems past non-experts can be a powerful tool when you're facing a stubborn challenge. Experts in a field may be limited by their own assumptions and biases, while non-experts may approach the problem from a completely different angle.

This approach has certainly paid off for me in my work as a researcher. One memorable occasion was when we were trying to name a mentoring program for early career investigators interested in chiropractic. The other founders of the program (Jan Hartvigsen and Jon Adams) and I went through the usual gymnastics trying to find a catchy name. Most were quite bland and were just collections of "official" sounding words. But it was when I asked my family for their input that they came up with a winner that became the memorable name for the program: CARL – the Chiropractic Academy of Research Leadership.

Another instance was when we were re-designing the tip of our indentation device that measures spinal stiffness. We had worked through a number of possibilities to improve participant comfort, none of which were meeting our design criteria. We happened to bring this matter up in front of our summer students during a lunch break and one of them had an immediate answer that checked all the boxes – a technology he had hands-on experience with!

So the next time you're faced with an unsolvable problem, don't be afraid to seek out the opinions of non-experts (or people who you might mistakenly think are non-experts). You may be surprised by the insights they provide. And, of course, always give credit where credit is due and don't forget to ask a Large Language Model like ChatGPT. :)

Describe a major research challenge and how you overcame it – or not.

Iben Axen DC, PhD

Karolinska Institutet

A Common Challenge in Research

One acknowledged challenge in clinical research is recruitment. A study (and its conclusion) depends on its participants. The gold standard of random sampling in observational studies often leads to very low response rates, which affects the validity of the study. I have three suggestions that I have found helpful to achieve good participation, hence a better chance for good data that may be used to inform practice.

Conducting research in a chiropractic setting is obviously dependent on the active participation of chiropractors. In most of my work, we have involved clinicians, already at the planning stages. This ensures that the research questions are relevant to clinicians, that the study procedures are feasible, that the workload is acceptable, and that the timeframe is realistic.

Establishing a Practice-Based Research Network (PBRN) is, therefore, an important step to ensure that relevant and sufficient numbers of participants are recruited to the study. A PBRN consists of clinicians who are interested, willing and able to participate in clinical research. They may have some basic training in the importance of consecutive enrolment, randomization, and systematic data collection, and will typically be enthusiastic and happy to help. Of course, there is potentially some bias in a PBRN; are these interested clinicians representative of the large body of clinicians? Are they perhaps the “best” in the profession, those that already understand the importance of creating evidence to inform practice? I would argue that this uncertainty is the trade-off to get sufficient data in a study.

Finally, no clinical study involving clinicians will be completed without personal engagement from the research team. People (not just clinicians) need reminding, encouragement, and motivating messages in order to perform. Personal contact cannot be emphasized enough. In our digital world, a telephone call is still superior to an email, SMS, and other types of messages. For those interested in reading more, please see the articles below.

Recruiting in intervention studies: challenges and solutions. Axén I, Björk Brämberg E, Galaasen Bakken A, et al. BMJ Open 2021;11:e044702 https://bmjopen.bmj.com/content/11/1/e044702

Conducting practice-based projects among chiropractors: a manual. Axén I, Leboeuf-Yde C. Chiropr Man Therap. 2013 Feb 1;21(1):8. http://www.chiromt.com/content/21/1/8

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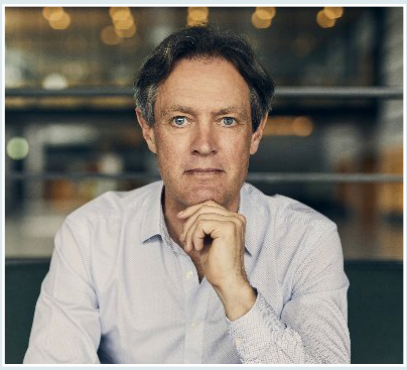
Describe a major research challenge and how you overcame it – or not.

Jan Hartvigsen DC, PhD

University of Southern Denmark



Getting Started is the Hardest Part

As with most tasks, getting started is also the hardest part in research – and the biggest challenge I have had to overcome. Persistence, help from senior colleagues, a generous profession, and pure luck came together at the right time.

In 1997, After 8 years in clinical practice, I was ready to become a PhD student. I had my dream project designed in collaboration with competent people: A randomized clinical trial comparing the effectiveness of spinal manipulation versus surgery for patients with lumbar disc herniations. This was a patient group I was passionate about, and where I felt I had a lot to offer as a chiropractor. After some persuasion, I convinced my wife Lisbeth to move with me from a very comfortable life in Copenhagen to Odense, where we knew no one to start a new life. Long story short, on my first day at work the whole project collapsed with no prospect of becoming a reality. In a gloomy mood, I decided to go for a walk to clear my head. Here I bumped into Charlotte Leboeuf-Yde, who had that year acquired a PhD herself. We hardly knew each other, but I told her about my troubles, and she immediately started to outline a project she had been thinking of. I was desperate, so frankly she could have sold me any project. Consequently, we agreed to pursue her idea, and I was able to think straight again (and I had something to tell Lisbeth when I got home!).

Several good things came together over the following days and weeks that formed the basis for the next 25 years.

- My PhD was at the Department of Epidemiology in a multidisciplinary and highly productive environment.
- Senior researchers in Epidemiology, General Practice, and Occupational Medicine all helped me by making themselves available throughout the following four years and ensured that I was productive and that my research was relevant and of good quality.
- The chiropractic profession in Denmark generously supported me through the Danish Chiropractic Research Fund
- The Faculty of Health Sciences at the University of Southern Denmark started to see potential in me and in clinical musculoskeletal research. SDU eventually employed me as Professor. Over the years we were able to employ many chiropractors as researchers and together we built the largest and most productive musculoskeletal research group in Denmark and in chiropractic globally.

I hear many stories about difficulties in academia and may deal with the early days: Defining good projects, finding good supervisors and mentors, and seeking funding. With persistence, help from good people, and a little luck many have succeeded.

And by the way, that clinical trial comparing SMT to surgery still needs to be done!

Describe a major research challenge and how you overcame it – or not.

Martha Funabashi BSc, MSc, PhD

Canadian Memorial Chiropractic College

Reach Out for Support

As we all know, research is not easy. Regardless of the field and type of research, there are many challenges we have to overcome. From participant recruitment, protocol adherence, compliance and attrition in clinical research to equipment calibration, synchronization, signal quality and processing in basic science, just to name a few.

But something that many of us face that I believe is not talked about enough are the emotional challenges. Many of us struggle with juggling all the academic activities such as teaching, serving as reviewers and/or committee members on top of the many research projects we are leading, collaborating on or overseeing, grant applications, manuscript writing, presentations and student supervision. This struggle can result in feelings of being pressured, overwhelmed, burnout and the never-ending search for a good work-life balance, with many of us trying to deal with all those complex feelings on our own.

Personally, one of my biggest emotional challenges was the internal struggle of using animal models. While I (rationally) loved the questions our studies were answering, emotionally I felt very different. I felt guilty, distressed and that I was contributing to animal cruelty. Of course, I didn't accept those feelings right away and kept ignoring them, believing that they would go away. But things didn't turn out the way I anticipated and it got to the point that, every single night, I was having nightmares of animals being investigators using me as their model (i.e., pigs doing to me what I was doing to them – drilling bone pins into my vertebrae).

As a student, at the time, I didn't want to bother anyone with my own issues, but I was fortunate to have a supportive and attentive supervisor who read between the lines, took the initiative and found me assistance. My supervisor found a psychologist who helped me understand what I was feeling and why I was feeling that way. Beyond that, he helped me find strategies that were meaningful and worked for me to cope with that specific research protocol. As a result of this process, I am now a vegetarian (almost vegan) and an organ donor (initially, I didn't know how to become one in Canada).

Although I told myself back then that I wouldn't do animal studies again, I came to accept that every study, both with animals and (living) humans, has its emotional challenges. I also realized that I am constantly learning and developing new strategies to cope with the research-related roller coaster of emotions. So, not only having close friends/colleagues to share all these struggles and get support from, but the professional guidance has been fundamental in dealing with the emotional challenges in a way that works and is meaningful to me.

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Describe a major research challenge and how you overcame it – or not.

Michael Swain BChiroSc, MChiroprac, MPhil, PhD

Macquarie University

What does it really mean to take care of yourself?

In recent years the university sector has undergone many 'transformations', not all have resulted in positive experiences. Newspaper articles written by or quoting an "anonymous academic" outline some of the challenges. These include intensification of workloads, reduction and casualisation of the workforce, and a rise in managerialism whereby performance management is emphasized, competition encouraged, and resource availability is reduced.

People who serve on early and mid-career researcher committees (EMCR) will have likely observed work stress being discussed by EMCRs. Issues facing EMCRs across disciplines include feelings of overburden & fatigue, poor work/life balance, low work satisfaction, and burnout. Conversations often progress to solutions and initiatives on how EMCRs can individually or collectively maintain their physical and mental well-being.

Here are some tips I've picked up attending leadership courses and via peer mentors:

1. Know your values so you can quickly identify and manage the times when work behaviours become incongruent. Your values are your 'why'. Why you do what you do. They are related to your sense of satisfaction and well-being. At times, work performance/demands may encroach on your values. For example, you might value fitness and so you run twice a week, and this makes you feel clear and confident. However, you've been tasked with convening an extra unit on top of existing demands. To get the work done you stop running for a time. Knowing your values will help you understand the cause of the pending dissonance and help prevent it in the future.

2. Have a plan and align your goals and values. Without a plan, you may find yourself reacting. Carve out some dedicated time to plan your research goals.

3. Develop strategies to get things done. Invest time into tasks that will pay dividends later. For example, develop a strategy to overcome the tyranny of email. Or invest time into keeping your CV up to date. Check out the analogy of the woodsman 'sharpening the saw'.

4. The topic of work stress relates to workload and individual capacity. Hence, it is a shared responsibility between individual EMCRs and their managers. EMCRs should acknowledge that they are in part responsible for addressing the problem. Albeit it is remiss of managers to dismiss this issue as simply a matter for EMCRs. Given the hierarchical nature of universities, managers and professoriates have significant influence over workplace operations and culture, as well as EMCR development and career trajectories. An important skill for EMCRs to learn is the initiation of respectful conversations to discuss career development activities and appropriate workload allocation with their managers.

Describe a major research challenge and how you overcame it – or not.

Michele Maiers DC, MPH, PhD

Northwestern Health Sciences University

Research and Gender Diversity

During a recent conference, a platform presenter shared their research. To describe participant demographics, they quipped that they collected "male, female, and other—because I guess that's the politically correct thing to do". Their tone was offhanded, and I was caught off-guard by the flippant statement.

As a conference attendee I debated the "right" thing to do about these dismissive gender comments. My initial instinct was to publicly shame the researcher during Q&A, as an ally to gender minority populations and others who feel ignored, marginalized, or falsely dichotomized. I was dissuaded from this by an even-tempered colleague seated next to me, who wisely advised the approach was unlikely to be persuasive.

Did anyone else consider themselves allies? Was a non-binary attendee present, and feeling belittled? Also… who resonated with the comment? Were there rolled eyes over "woke" culture? Would I make colleagues uncomfortable if I spoke up?

The constructs of gender, gender identity, and gender fluidity are dynamic and multidimensional. Gender is expressed through behavior and appearance to signal gender identity to others, and is influenced by cultural expectations and norms. While challenges to collecting gender identity information for research are well documented, researchers' bias or ignorance toward gender is rarely discussed.

Gender minority populations include individuals who identify as transgender, queer, intersex, Two-Spirit (indigenous populations), and those who don't identify with binary constructs of gender and/or sex. The Institute of Medicine recognized gender identity data collection as a best practice standard in health care a decade ago. The National Academies recently issued more specific research guidance. Recommendations include collecting data on both sex assigned at birth and gender identity, with free-text response options to avoid "forced choices". Further, data on gender is more relevant than sex as a biological variable, particularly when assessing diversity and inclusivity in research.

By the time I finished my internal debate, the conference session had already concluded. I approached the researcher afterward for a semi-private, earnest discussion about gender inclusivity. Although I'm unsure whether I changed their perspective, I communicated:

1. As scientists, we have an ethical obligation to conduct inclusive research.
2. Best practices (U.S.) for collecting demographic data include both gender and sex.
3. As leaders in our profession, our responsibility is to model best practices in research, create inclusive environments, and be allies.

While the conference is past, my hope is that this commentary creates greater awareness of and guidance for research inclusivity within chiropractic research.

Describe a major research challenge and how you overcame it – or not.

Sasha Aspinall, BSc (Hons), BChiro, PhD

Murdoch University

Recruitment Failure and Success

During my PhD, I planned to run two separate (but similar) randomized controlled trials, each recruiting 80 participants. As is often the case, we had significant difficulties reaching our target for the first trial. I used lots of recruitment methods including Facebook advertising, letterbox flyers, posters around the campus and noticeboards, announcements to university staff and students, and local radio ads. But alas, after seven months we had recruited only 20 participants. Since the timeline for my PhD was marching on, we made the decision to stop the trial.

This was, of course, very disappointing. With my supervisors' advice, we decided to salvage what we could from the project. There were too few participants and unbalanced group allocation to use the primary data to attempt to answer the original research questions. But we knew that I had another trial and, with the failure of the first, it was critical that the second one was successful.

So I dove into analyzing the recruitment data – which recruitment avenues seemed most successful? Which offered the most "bang for the buck," and which were very low cost and effort? I was lucky that I had records of all potential participant contact and recruitment sources, so I was able to map out the recruitment outcomes in detail.

I also explored the literature on recruitment failure and reassessed the trial design to identify what may have contributed to poor recruitment. There were several likely factors, including that the study involved inducing pain (sensory tests), the incentive was minimal, and there was a bit of a mismatch between the participant's condition (had to have both neck and low back pain) and the intervention (either cervical or lumbar manipulation, but not both). One factor was modifiable (the incentive), while the others would have required major changes to the research questions/criteria/ outcome measures.

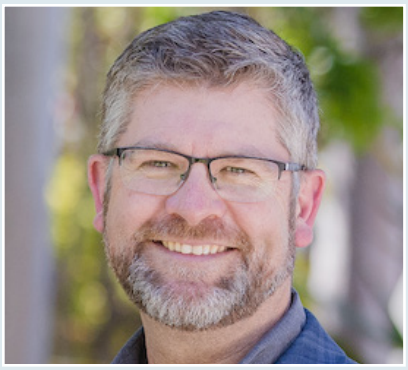
This process had two important outcomes. First, this analysis became a chapter in my thesis. Second, it directly resulted in changes to the second trial. In particular, we increased the incentive to participate and targeted the recruitment strategy to those that were cost-effective (higher cost and higher yield, or low cost/effort). I am pleased to report that the second trial was successful, reaching 81 participants within 10 months.

I think I both did and didn't overcome the challenge. The original research questions were abandoned, so from this perspective, we didn't overcome the challenge with recruitment. But some very valuable things arose from the trial and it led to success in the next one. This story is one of my favourite parts of my thesis because it shows that I was able to accept a failure, adapt, and make use of it anyway.

Describe a major research challenge and how you overcame it – or not.

Simon French PhD, MPH, BAppSc(Chiro)

Macquarie University



The Ongoing Challenge of a Lack of Time

I have a major challenge in my research career every day, and that is a lack of time. Too many commitments, too many distractions. Work finishes when I walk out the door of my office, but some projects feel like I could keep working indefinitely and never complete them. At times I am overwhelmed by the sheer number of tasks needing to be done. Finding the time to write this piece was a perfect example. When do I fit this into my busy schedule?

To overcome this challenge over a perceived lack of time, I have two tools I refer to. These are nothing new or groundbreaking, but using them regularly over the years of my career has helped to keep my work on track.

The first tool is writing lists. I have lists everywhere, both electronic and handwritten. I need to write things down to get them out of my head and into action.

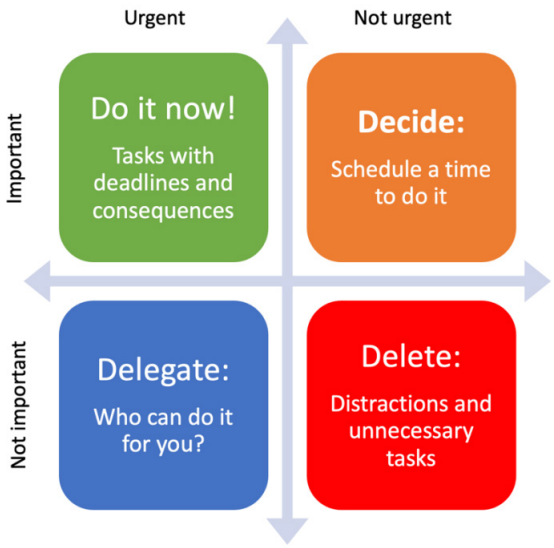
Some things on my lists are major tasks that could take years to complete; others are tasks that I can complete in a matter of minutes. But if I do not write them down, I am unlikely to get them done. After tasks are written on the list, I then prioritize.

The second tool is a priority-setting tool. A research mentor in the early stage of my career introduced me to a simple time management matrix. There are many versions available of this diagram, and apparently, this approach stems from a quote attributed to former US President Dwight Eisenhower: “I have two kinds of problems, the urgent and the important. The urgent are not important, and the important are never urgent”.

See below for an example of the version I use. The idea is to map your tasks, and then prioritize accordingly.

Simple but powerful.

At times everything seems like it needs to be done immediately, and done by you, but the matrix helps to prioritize and delegate where appropriate. I hope you find it helpful too.



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Describe a major research challenge and how you overcame it – or not.

Søren O'Neill Bsc(Chiro), MRehab, PhD

University of Southern Denmark

Dealing with Misinformation as a Married Man

A few years ago, I would have broken my pencil, blown a fuse, and ... just ARGH! Not anymore. Now it makes me laugh, albeit nervously. What am I talking about? "She Stopped Falling in Love with Married Men", that's what.

A friend and colleague shared an internet 'case story' from chiroeurope.com - you might have seen it already. It detailed how chiropractic treatment had cured a young woman of falling in love with older, married men. Maybe it's just me, but I did not see that one coming. It did remind me of related research we performed.

One might expect Danish chiropractors to be a relatively homogeneous band of musculoskeletal-focused (MSK) mainstream practitioners unburdened by the dogma of the Palmer's version 1 and 2. However, in 2020 we looked at a sample of Danish chiropractic websites and found that, in fact, more than half mentioned non-MSK disorders (none mentioned a predilection for specific romantic arrangements, however). At closer scrutiny, a quarter of the web pages did, in fact, mention non-MSK conditions in such a manner that it could be construed as misleading to patients.

Concerned not to overlook any deeper points omitted in brief and often stale web pages, we decided to follow up the study with interviews -- eight agreed to take part. Interview results indicated a number of different themes, one of which we labelled 'Positive side effect': Several interviewees mentioned observing or asking about positive side effects on non-MSK disorders when SMT was provided for MSK disorders.

In the paper, we discussed how this 'Positive side effect' theme - was not really fundamentally different from the (subluxation) 'Conviction' theme, but rather a 'light' version with no added sugar. The specifics and terminology of a subluxation-based paradigm was adroitly avoided, and the interviewees were quite clear that they considered chiropractic treatment to be relevant to MSK disorders. However, at the same time, they retained an expectation that SMT could somehow positively affect non-MSK disorders, but that this was 'unexplained' and 'uncertain' but also 'worth a try'.

Now, the story from Chiroeurope is what it is -- realistically, nothing is going to shift that paradigm, with or without peer review. I wonder about the larger group of mainstream chiropractors, however. Are they trying to have their cake and eat it too? Are they tempted by the benefits of integration, status, and acceptance knowing that it is contingent on professional accountability, but also hesitant to abandon an alluring paradigm where you can do no harm, but apparently endless good with your hands? Can anyone predict what side mainstream chiropractors will come down on, if forced to choose? And should those of us who are older, married men be concerned about our wives getting spinal adjustments?

Letters of the Chiropractic Academy

Topical. Uncensored.

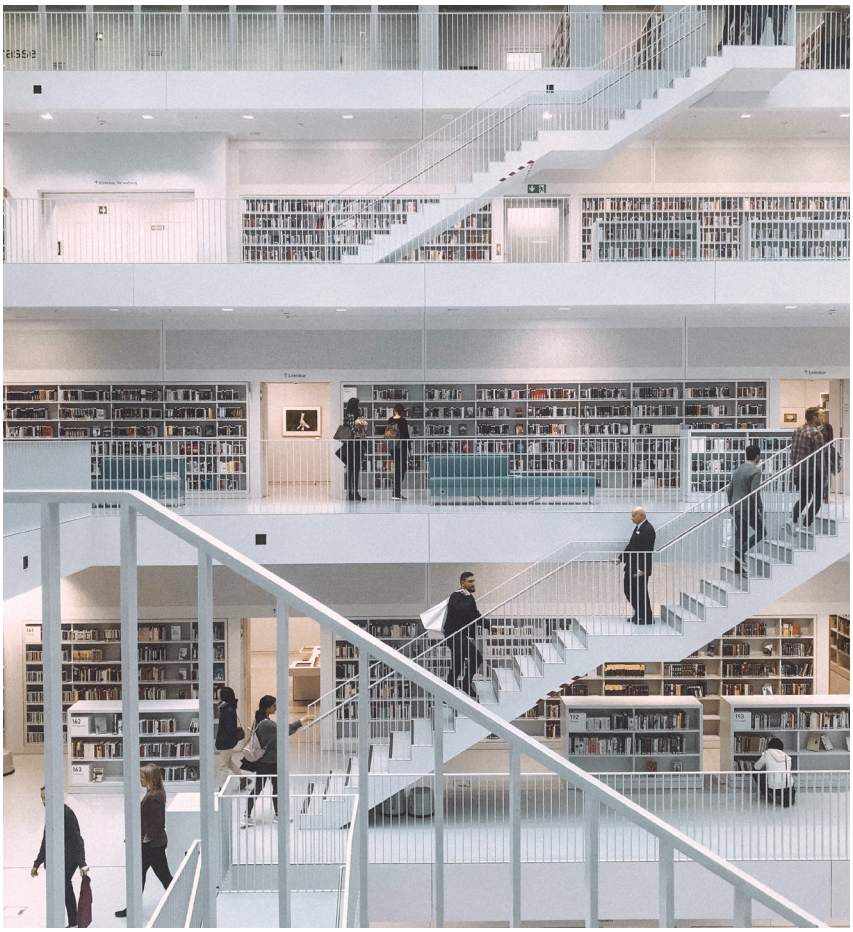
Rapid. Collegial.

Why Letters?

We love a good discussion...
One of the most stimulating activities in research is scientific debate. When colleagues get together and discuss matters of methodology, inference or clinical application, sparks fly. However, time and opportunity for scientific debate is limited, especially with researchers outside our immediate teams.

But how?
You might counter and say that we have many ways to communicate. What about Letters to the Editor (LTE). While a classic avenue for discussion, LTEs occur at a snail's pace and always with the approval of the editor. Not the best way to have an important conversation on a rapidly evolving topic. What about conferences? Well, the magic of hallway conversations evaporates quickly and they seldom benefit more than a few. Panel discussions tend to be on topics set by others and are limited to just a few questions before the session goes overtime. And don't forget, you need the time and resources to attend in the first place (and wait a few years in the meantime).

Finally, a place for us.
What we lack is a place where we can discuss topics of our own choosing, to do so in a timely manner, without censorship, and to let the resulting dialogue be available to anyone. But we used to have that. Previously, scientists exchanged handwritten letters with each other. The resulting exchanges created deep relationships that then formed a research community centred on debate, discussion and decorum. Somewhere along the way, we've skipped this step.



A new take on a traditional concept

This initiative intends to take that step and resurrect, yet modernize, this scientific tradition by creating an international forum, open to researchers, where different points of view can be shared openly and responded to, in a scholarly way. No pressure. No censorship. Just the opportunity to engage in topics that are relevant to our community.

How it works

Each quarter, *Letters of the Chiropractic Academy* will post a discussion topic which will always, always, always, originate from inside our own community. Then, unlike any other forum, we will publish submissions from all eligible contributors. Long overdue, the result will be a mosaic of opinions, perspectives and viewpoints. Because that is what a research community does. Create a place where its people have a voice. Not only a home, but an academy.

Here we go!

We hope you like the sound of this. We are sure you'll think it is fun, stimulating and a pleasure to take part in. Welcome to *Letters of the Chiropractic Academy.*

OUR NEXT TOPIC

Our next topic....

Why is there so little research that deals with chiropractic?

Submission due

August 15, 2023

Topic ideas

Have an idea for a topic? Just send it to one of the members of the advisory panel (last page).

LETTERS

of the Chiropractic Academy

Advisory panel (alphabetical)

Charlotte Lebeouf-Yde
Greg Kawchuk
Iben Axen
Jan Hartvigsen
Martin Descarreaux
Pierre Côté
Silvano Mior
Simon French
Soren O'Neill