



Rethinking What Research Looks Like

WHAT WE LEARNED ABOUT RESEARCH: OUR SUMMER AS HIGH SCHOOL RESEARCHERS

Many of us picture research as scientists in white lab coats performing complex and structured experiments in sterile labs. In reality, the world of scientific investigation takes many forms—often in ways that are far more diverse than most people imagine.

In this post, we share our experience doing research that turned out differently than we expected but was just as impactful as work done in a wet lab. By sharing our experience, we hope to encourage other young scientists to keep an open mind to the many types of research that exist out there.

The HYRS Experience

Research is something that many high school students are curious about, but few actually get the opportunity to explore. The Alberta Innovates High School Youth Researcher Summer (HYRS) Program gives Grade 11 students across Alberta the chance to work alongside university professors and contribute to innovative biomedical and health research.

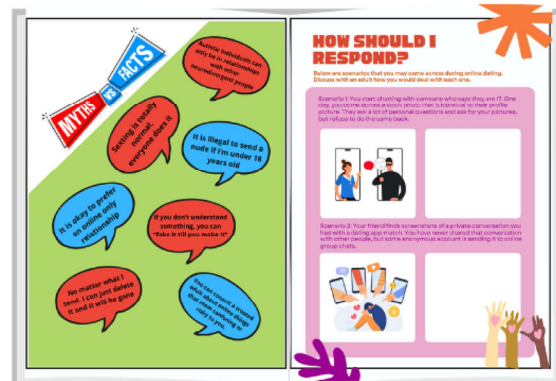
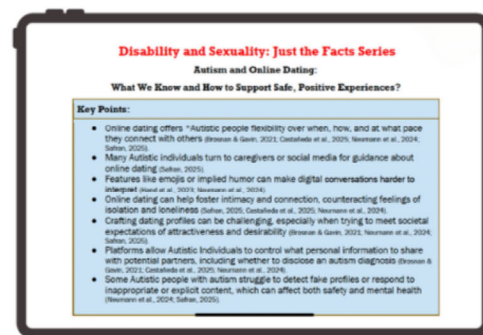
This year, we were two of thirty students selected to participate in the HYRS program at the University of Calgary. We were matched with Dr. Alan Martino's Disability and Sexuality Lab in the Department of Community Health Sciences (CHS), where the focus is on community-based research. This meant working on topics identified as priorities by the community, with many projects shaped by feedback from advisory groups, stakeholder workshops, and community partnerships.

Our biggest takeaway? Research is deeply rooted in collaboration, communication, and connection with the communities directly impacted by the work we do. To ensure that research is actually relevant to communities, it's crucial that these same communities are involved as partners in research.

Research Outside of the Typical Lab: Supporting Caregivers of Autistic People

As new researchers at the University of Calgary, we felt incredibly excited about the new learning opportunities and experiences that awaited us this summer. Some highlights of our time here include the freedom to be creative in translating research into resources and the opportunity to see our work shared back with the communities we were supporting.

One of the main projects we contributed to focused on co-developing evidence-based sexual health resources to support conversations between caregivers and autistic children and youth. Our role involved reviewing academic literature and incorporating input from an advisory board to identify key themes in this area, which we then used to develop accessible resources for the community. Through this project, we gained experience not only with fundamental research skills, such as conducting a literature review, but also with applied research, turning our findings into practical tools that can make real difference.



Looking Beyond the Numbers

When we first stepped into the world of qualitative research, we learned that data analysis was more than just a numbers game. Unlike quantitative approaches, qualitative research uses non-numerical data—like interviews, focus groups, and written documents—to explore people’s experiences, perspectives, and decision-making. This methodology digs into the “whys” and “hows” behind human behaviour, giving us a richer understanding of complex issues. It also opened the door for us to identify under-researched areas in our field of study, inspiring us to consider how we can use future research to address these gaps in knowledge.

An important concept that stood out to us was reflexivity, the practice of turning the lens back on ourselves as researchers. At its heart, reflexivity calls on us to hold a mirror up to our own assumptions and perspectives to recognize how they may affect the research we conduct. As part of this process, we reflected deeply on the ethical implications of doing research *with*, rather than *about*, disabled people, as well as the importance of ‘nothing about us without us’—the idea that research should not be conducted about disabled communities without their active involvement and leadership.

Another key part of our summer involved conducting qualitative coding, which consisted of identifying patterns and themes across excerpts of text. We quickly learned that there is a plethora of knowledge to be found when analyzing lines of text along with tone, diction, and context. This process gave us access to a depth of insight that numbers alone could never capture.

Mobilizing Knowledge for Real Impact

Research makes the most impact when it’s not confined to academic journals. Over the course of the program, we gained firsthand experience in translating evidence-based information into publicly accessible social media posts and interactive workbooks.

Every choice—from the wording to the colour palette and design—was intentional, designed to make information clear, engaging, and relevant to our audience. By ensuring that information can reach not only other researchers but also community members, we can effectively bridge the gap between scientific discovery and real-world impact. We just need to think creatively about how information is shared.

Looking Forward

Our summer in the HYRS program has taught us so much about teamwork, responsibility, and the many forms health research can take. It was a truly meaningful experience to work on impactful projects with such a supportive professor who encouraged us to approach each learning experience with confidence and creativity. This experience has no doubt reshaped the way we think about research.

If you’re a high school student thinking about research, our advice is simple: seek out opportunities to explore your research interests, even if they take you outside of your comfort zone. Whether you’re addressing an under-researched area, collaborating with peers and mentors, or creating resources for the public, the journey of personal growth and learning will be an undeniably rewarding experience.

About the authors:



Janice is a student from Sir Winston Churchill High School who joined the HYRS program to pursue her interest in health innovation and to explore how scientific research can be used to enhance patient-centered care.

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