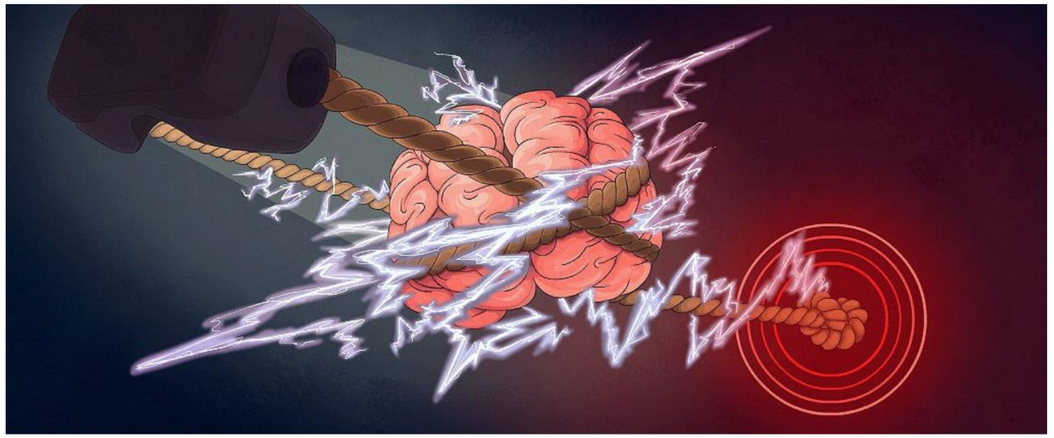

VIRTUAL REALITY WORKSHOP

APRIL 26, 2024

9:00AM - 3:00PM

Shriners Hospitals for Children-Canada
1003 Blvd Décarie, Montréal, Canada

Learn the ins and outs of using VR in child health settings.

Join us for our in-person, one-day VR workshop, where you will:

- learn about the evidence for VR in pain/anxiety management
- meet with VR companies and try out their products
- create a mobilization/implementation plan for VR integration.

Register using the link below:

mcgill.ca/VirtualRealityforChildCare/vr-workshop-registration

Fr

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Who We Are

What We Are Doing

What We Are Doing

We are building a virtual hub to disseminate resources, the latest research-based findings, and current events related to the use of virtual reality in child healthcare. Our goal is to build a community and connect individuals, organizations, and institutions that share the common interest of improving pediatric healthcare practice using the latest innovative technology.

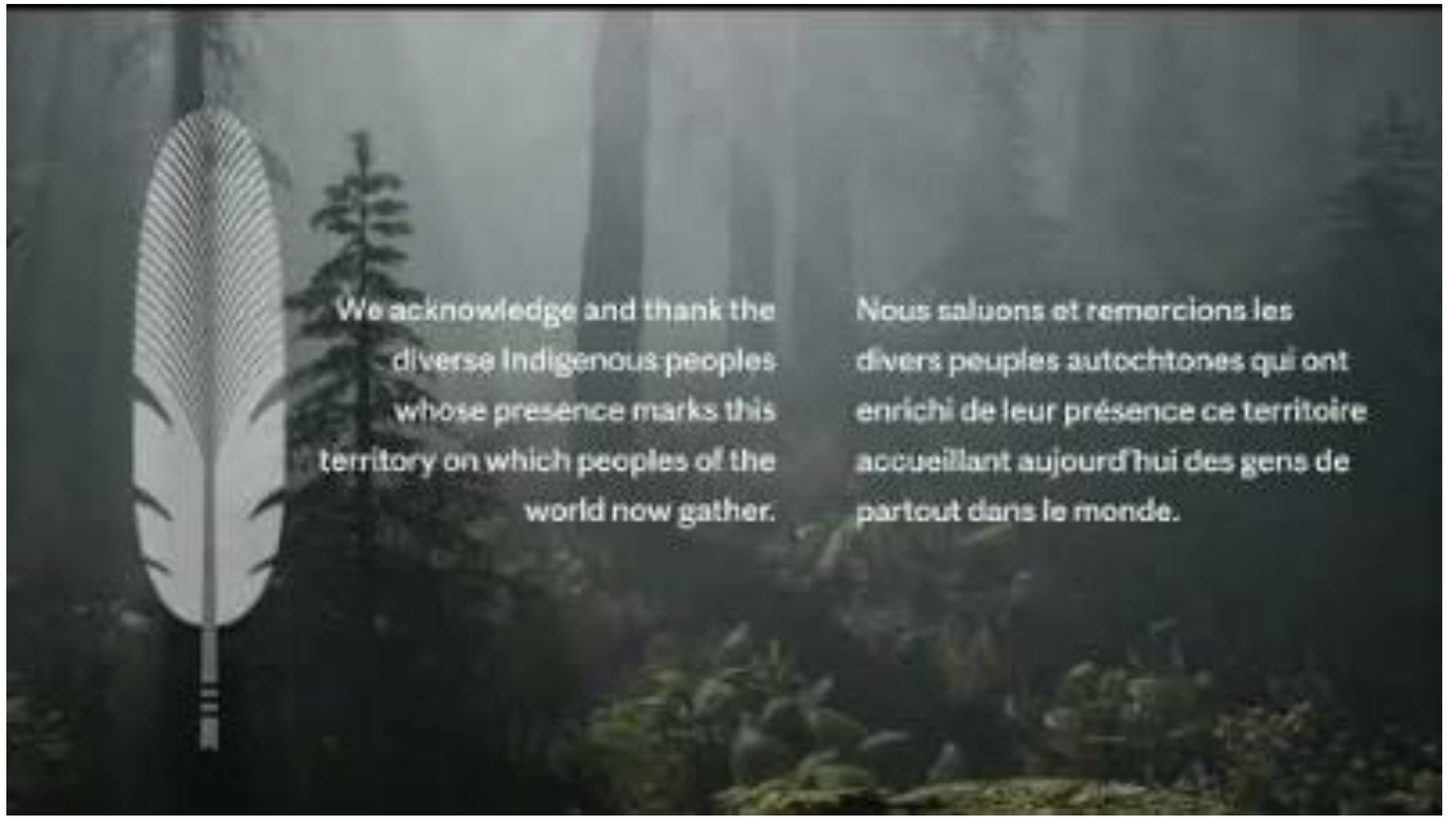
Research Study

We are conducting an infrastructure research study at the Ingram School of Nursing, funded by the *Réseau de santé buccodentaire et osseuse*. The study uses a hybrid approach for data collection and seeks to:

1. Understand the knowledge gaps regarding VR use in child healthcare;
2. Deliver a workshop to train decision makers and healthcare professionals to be VR champions;
3. Co-develop knowledge mobilization resources to facilitate VR implementation.

We are looking for decision-makers and healthcare professionals working in children healthcare settings to tell us about their knowledge needs and to participate in a workshop to learn about VR use. For more information, **complete this questionnaire** or scan the QR code below:

LAND ACKNOWLEDGEMENT



McGill University is on land which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous peoples whose presence marks this territory on which peoples of the world now gather.

INDIGENOUS VIRTUAL REALITY

To learn more how we may use virtual reality to learn of the history and present contexts of Indigenous Peoples in Canada, including efforts to revitalize and preserve Indigenous languages, introduce new teaching tools in the schools, and understand the diverse indigenous experiences, we invite you to follow the links below as a starting point:

- https://immersivelink.ca/
- https://barrie.ctvnews.ca/video/c2894240-indigenous-learning-virtual-reality-program
- https://www.georgiancollege.ca/blog/newsroom/new-georgian-partnerships-take-indigenous-language-vr-program-across-canada/
- Wallis, K., & Ross, M. (2021). Fourth VR: Indigenous virtual reality practice. *Convergence*, *27*(2), 313-329. https://journals.sagepub.com/doi/10.1177/1354856520943083

immersiveLink Powered by ORIGIN

LET'S WORK. TOGETHER.

https://immersivelink.ca/

Connection is Our Priority

ImmersiveLink VR technology delivers career training and Indigenous knowledge experiences to communities across Canada.

Powered by ORIGIN
LET'S WORK. TOGETHER.

- Our proprietary product ImmersiveLink is an industry-leading platform in career and cultural exploration.
- Our technology can be used to rekindle the bond between Indigenous youth and adults with traditional culture, while providing all peoples with a greater understanding of diverse Indigenous experiences.

Book a Discovery Call +

Hôpitaux Shriners pour enfants® Shriners Hospitals for Children®
Canada

New Georgian partnerships take Indigenous language VR program across Canada

Jan. 9, 2024

Students in Ontario and Saskatchewan will soon explore Indigenous language and cultures using virtual reality (VR) as part of their school curriculums thanks to new Georgian College partnerships involving its immersive learning technology.

The Simcoe County District School Board (SCDSB) and the Saskatchewan Indian Institute of Technologies are the first to sign memorandums of alliance with Georgian to allow their elementary, secondary and postsecondary students, respectively, access to the college's VR worlds that explore Indigenous language in the home, community, workplace, natural environment and more.

Left to right: Simcoe County District School Board Ojibwe language teachers Brent Roy, Laurie Smith and Jake King received virtual-reality training from Rob Theriault, Immersive Technology Manager at Georgian College.

The Barriers, Facilitators and Contextual Challenges of VR Use

Argerie Tsimicalis, RN PhD
Nurse Scientist, Shriners Hospitals for Children®-Canada
Associate Professor, Ingram School of Nursing, McGill University
Junior 2 Scholar – Fonds de recherche Québec-Santé

Illustration by Stephanie Smith, BFA

Hôpitaux Shriners pour enfants® Shriners Hospitals for Children® Canada

McGill University

Fonds de recherche Santé Québec

RSBO Réseau de recherche en santé buccodentaire et osseuse

I HAVE NO CONFLICTS OF INTEREST TO DECLARE.

CONTEXT

Virtual Reality (VR) Research and Implementation Lag

Evidence for VR

- Hoffman et al. (2000) introduced VR to relieve children from painful burn wound care procedures.[1]

SnowWorld melts away pain for burn patients, using virtual reality snowballs (GeekWire by Timothy Kenney, 2018)

A burn patient uses SnowWorld during a wound cleaning. The wide-view goggles, audio headphone, and simple hand controller help keep the patient from focusing on their pain. (Photo courtesy of Hunter Hoffman)

The cool blues and icy tundra of SnowWorld help reduce the pain a burn patient experiences by up to 50 percent. Patients can throw virtual snowballs at the penguins or just go along for the ride.(Photo courtesy of Hunter Hoffman)

CONTEXT

Virtual Reality (VR) Research and Implementation Lag

Evidence for VR

- Many studies have been published, establishing VR effectiveness to reduce procedural pain and anxiety in children.[2]

META-ANALYSIS

Systematic Review and Meta-analysis of Virtual Reality in Pediatrics: Effects on Pain and Anxiety

Robin Eijlers, MSc,* Elisabeth M. W. J. Utens, PhD,*†‡ Lonneke M. Staals, MD, PhD,§ Pieter F. A. de Nijs, MD, PhD,* Johan M. Berghmans, MD,*‖ René M. H. Wijnen, MD, PhD,¶ Manon H. J. Hillegers, MD, PhD,* Bram Dierckx, MD, PhD,* and Jeroen S. Legerstee, PhD*

BACKGROUND: Medical procedures often evoke pain and anxiety in pediatric patients. Virtual reality (VR) is a relatively new intervention that can be used to provide distraction during, or to prepare patients for, medical procedures. This meta-analysis is the first to collate evidence on the effectiveness of VR on reducing pain and anxiety in pediatric patients undergoing medical procedures.
METHODS: On April 25, 2018, we searched EMBASE, MEDLINE, CENTRAL, PubMed, Web of Science, and PsycINFO with the keywords "VR," "children," and "adolescents." Studies that applied VR in a somatic setting with participants ≤21 years of age were included. VR was defined as a fully immersive 3-dimensional environment displayed in surround stereoscopic vision on a head-mounted display (HMD). We evaluated pain and anxiety outcomes during medical procedures in VR and standard care conditions.
RESULTS: We identified 2889 citations, of which 17 met our inclusion criteria. VR was applied as distraction (n = 16) during venous access, dental, burn, or oncological care or as exposure (n = 1) before elective surgery under general anesthesia. The effect of VR was mostly studied in patients receiving burn care (n = 6). The overall weighted standardized mean difference (SMD) for VR was 1.30 (95% CI, 0.68–1.91) on patient-reported pain (based on 14 studies) and 1.32 (95% CI, 0.21–2.44) on patient-reported anxiety (based on 7 studies). The effect of VR on pediatric pain was also significant when observed by caregivers (SMD = 2.08; 95% CI, 0.55–3.61) or professionals (SMD = 3.02; 95% CI, 0.79–2.25). For anxiety, limited observer data were available.
CONCLUSIONS: VR research in pediatrics has mainly focused on distraction. Large effect sizes indicate that VR is an effective distraction intervention to reduce pain and anxiety in pediatric patients undergoing a wide variety of medical procedures. However, further research on the effect of VR exposure as a preparation tool for medical procedures is needed because of the paucity of research into this field. (Anesth Analg 2019;129:1344–53)

KEY POINTS

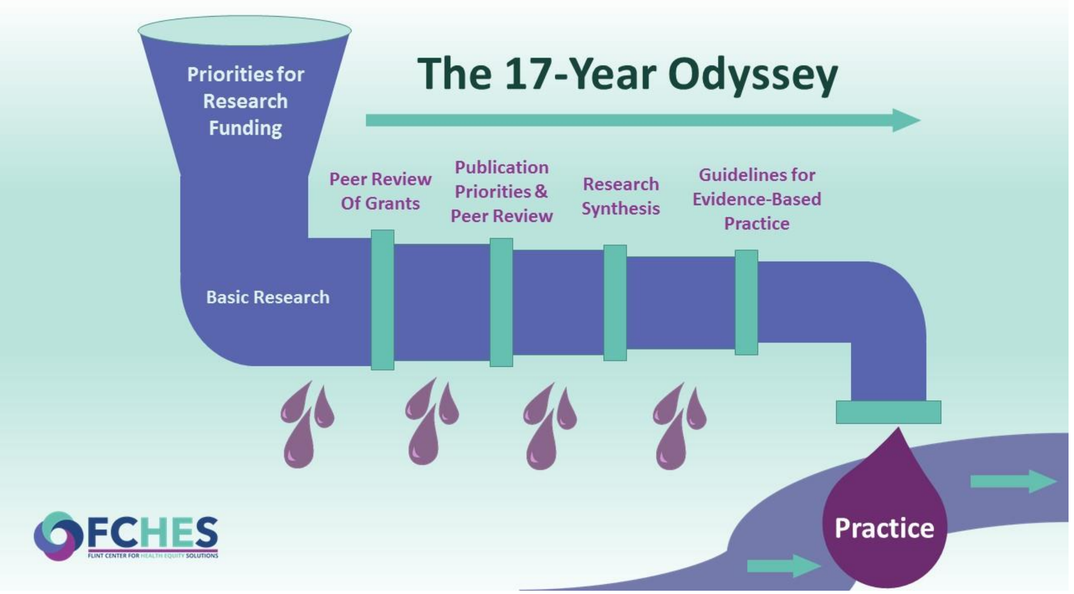
- **Question:** Is virtual reality (VR) effective in reducing pain and anxiety in pediatric patients undergoing medical procedures?
- **Findings:** VR was most often used as a distraction method during medical procedures and was found to be significantly more effective in reducing pain (14 studies) and anxiety (7 studies), with large effect sizes, than care as usual (CAU).
- **Meaning:** VR can be used effectively as a distraction method in clinical practice, but more research is needed to establish evidence on VR exposure as a preparation tool for medical procedures.

CONTEXT

Virtual Reality (VR) Research and Implementation Lag

Implementation Lag

- Despite the accumulated evidence, VR lags in its integration into clinical practices.
- Consequence: children continue to experience unnecessary procedural pain and anxiety.[3,4]



skip solutions for kids in pain pour la douleur chez les enfants

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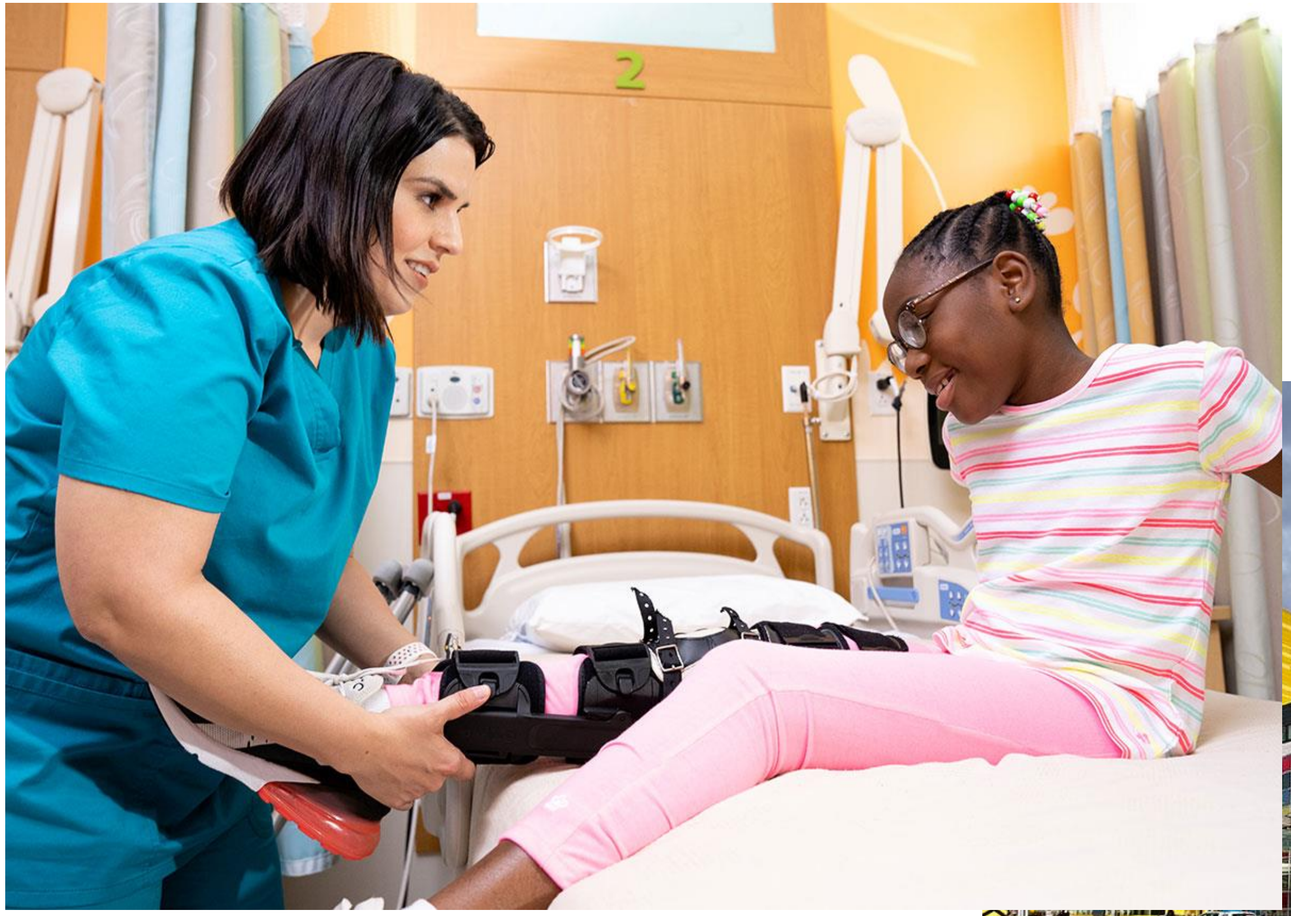
READINESS FOR VR ADOPTION

2017-present



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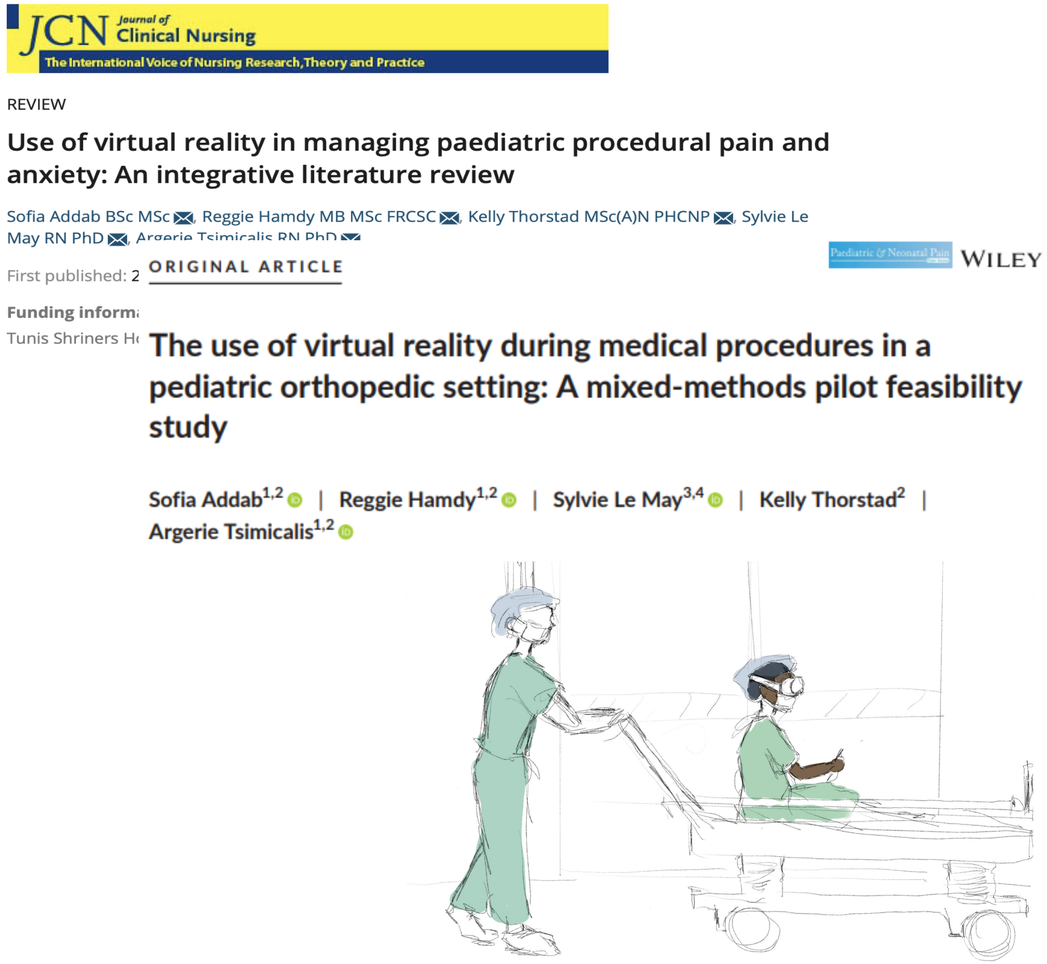
Canada

OVERVIEW OF VR EFFORTS AT SHRINERS


JCN Journal of Clinical Nursing
The International Voice of Nursing Research, Theory and Practice

REVIEW

Use of virtual reality in managing paediatric procedural pain and anxiety: An integrative literature review

Sofia Addab BSc MSc, Reggie Hamdy MB MSc FRCSC, Kelly Thorstad MSc(A)N PHCNP, Sylvie Le May RN PhD, Argerie Tsimicalis RN PhD

First published: 2

ORIGINAL ARTICLE

Paediatric & Neonatal Pain WILEY

Funding inform

Tunis Shriners H

The use of virtual reality during medical procedures in a pediatric orthopedic setting: A mixed-methods pilot feasibility study

Sofia Addab[1,2] | Reggie Hamdy[1,2] | Sylvie Le May[3,4] | Kelly Thorstad[2] | Argerie Tsimicalis[1,2]

Illustration by Yu Tong Huang, 4th year medical student

2017-2018
Stakeholder Engagement and Consultation

- Sought interest and buy-in from hospital staff

2019-2020
VR Research Studies

- Integrative literature review to synthesize evidence for VR use in pediatric patients.
- Pilot Feasibility Study: outpatient, inpatient

2020-2021
Pins RCT (PI Le May)

CHU Sainte-Justine Le centre hospitalier universitaire mère-enfant
Université de Montréal
INSTITUT TRANSMEDTECH MONTRÉAL LIVING LAB
CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

Recruitment site: VR vs iPad distraction during pin/suture removals.

2021-2023
Pilot Feasibility Study: Peri-Operative Setting

Is VR feasible, clinically useful, and tolerable in the peri-operative setting?

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OVERVIEW OF OUR VR EFFORTS

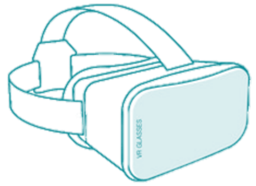
CLS and nurses using VR in the treatment center. Consent was obtained for photographs.

Investissement Québec

PAPERPLANE THERAPEUTICS

May 2022 – May 2023
Pilot Quality Improvement Project

We partnered with industry leaders to implement the use of VR at our hospital using governmental funds.



2022-Present
Major Structure Grant

RÉSEAU DE RECHERCHE EN SANTÉ BUCCODENTAIRE ET OSSEUSE

Understanding the barriers, facilitators, contextual challenges of using VR in clinical practice; hosting a workshop to train healthcare professionals; and co-developing knowledge mobilization tools to bridge usage gaps.

VR Council

Our team leading VR efforts at SHC-Canada.

Dr. Reggie Hamdy, FRCSC

Medical Executive

Kelly Thorstad, MSc(A)N, PHCNP

Nurse Executive

Argerie Tsimicalis, RN PhD

Nursing Research Lead

Alexandra de Almeida, RN MScN

Clinical Lead

Tina Athanasoulias, RN MScN

Clinical Lead

Katerina Bogdanov, RN

IT/SHCIS Lead

Angie Gugliotti, CLS

VR Champion

Sofia Addab, MSc

Research Consultant

FCCP

Family Centered Care Partnership

Patient/Parent Representatives

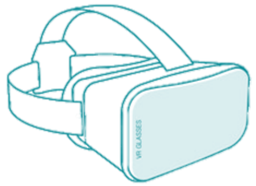
Family Centered Care Partnership

Patient/Parent Representatives

PLANETREE INTERNATIONAL

VR INFRASTRUCTURE

Creation of a Network of Local Experts, Champions and Trainees



RÉSEAU DE RECHERCHE EN SANTÉ BUCCODENTAIRE ET OSSEUSE

2022-Present
Major Structure Grant

Understanding the barriers, facilitators, contextual challenges of using VR in clinical practice; hosting a workshop to train healthcare professionals; and co-developing knowledge mobilization tools to bridge usage gaps.

Juliana Marulanda
DDS, PhD
Postdoctoral Fellow

Mitchel Bernstein
MD, FRSC (C)
Orthopedic Surgeon

Panagiotis Glavas,
MD, FRSC (C)
Orthopedic Surgeon

Thierry Benaroch MD,
MSC, FRSC (C)
Orthopedic Surgeon/
Chief of Sta

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Shriners Hospitals for Children®
Canada

Sylvie Le May, RN, PhD
Nurse Scientist

Raissa Passos dos Santos, RN, PhD
Postdoctoral Fellow

Gianluca Bertolizio, MD, FRCP (C)
Pediatric Anesthetist

Jenny Wang, RN, MA, PhD Student
Nursing

Beatriz Ferraz dos Santos, DDS, MSc
Pediatric Dentristry

Brandon Benchimol-Elkaim, MA, PhD Student
Counselling Psychology

Camille Costa, MD, MSc, FRCP (C)
Pediatrician: Physical Medicine and Rehabilitation

Dilek Sayik, RN, PhD
Postdoctoral Fellow

Shriners Hospitals for Children®
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Peter Joseph Mounsef

MDCM Candidate

Yu Tong Huang

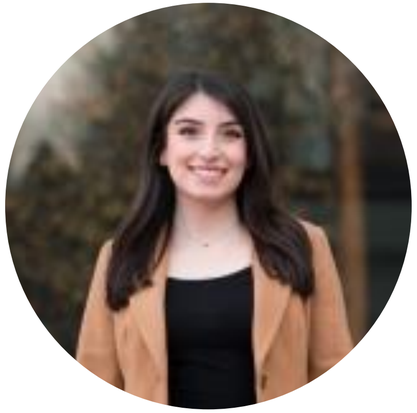
MDCM Candidate

Alisha Michalovic RN, MSc(A)

Faculty Lecturer

Jessica Ding RN, BNI

Graduate Student



Sarah Moussa

MDCM Candidate

PRESS LAUNCH

Pilot project culminated in a press launch, fostering future collaborations.

CTV NEWS MONTREAL

Virtual reality tech to help pediatric patients manage pain at Montreal hospital

DAYBREAK WITH SEAN HENRY

WEEKDAYS 5:30AM

CBC RADIO ONE 88.5FM | #CBCLISTEN

ICI TÉLÉ 2023

HÔPITAL SHRINNERS : LA RÉALITÉ VIRTUELLE POUR ATTÉNUER LES CRAINTES

L'hôpital Shriners pour enfants fait appel à la technologie pour aider ses patients à traverser des épreuves. Les soignants utilisent la réalité virtuelle pour distraire les enfants et ça marche! Reportage de Normand Grondin.

LE DEVOIR

L'actualité


PAPERPLANE
THERAPEUTICS

Headset Usage Overview

PAPERPLANE THERAPEUTICS

Overview
Inspire
Imagine
Dream
Dream Eye
Logout

Headset #1
Fezzy 1

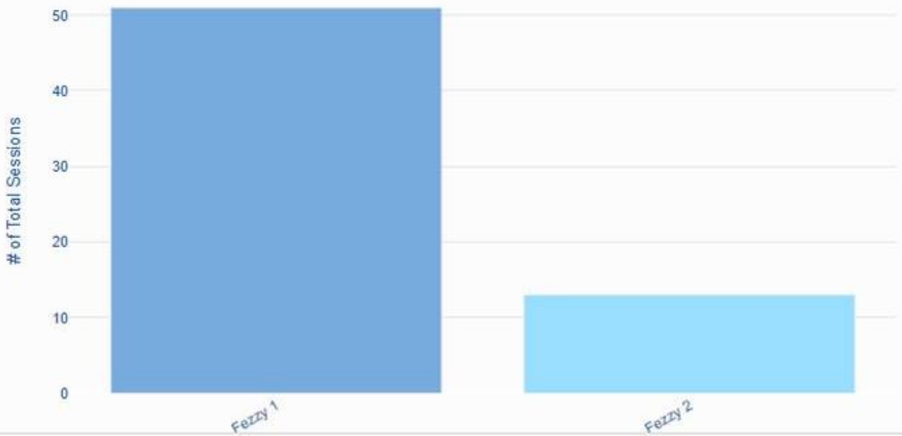
Headset #2
Fezzy 2

# of Sessions Recorded by Fleet
64

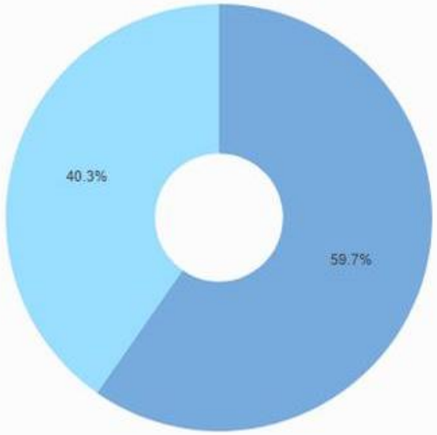
Avg Session Duration
10.25 min

Total Sessions Over Time

# of Sessions by Headset ID



Total Device Usage by Headset ID



VIRTUAL REALITY FOR CHILD CARE KNOWLEDGE MOBILIZATION HUB

Assessing Barriers, Facilitators, and Contextual Challenges for Use of Virtual Reality
Offering Collaborative Solutions and Resources for Implementation

Hôpitaux Shriners pour enfants® Shriners Hospitals for Children® Canada

RÉSEAU DE RECHERCHE EN SANTÉ BUCCODENTAIRE ET OSSEUSE

Fonds de recherche Santé Québec

OBJECTIVES

Physician, nurse, and CLS using VR during Botulinum toxin injections. Consent was obtained for photographs.

ASSESS READINESS

To assess the barriers, facilitators, and contextual challenges currently experienced in the use of VR in a healthcare setting.

TRAINING

To train healthcare professionals and trainees across Québec on the use of VR for procedural pain and anxiety management.

DEVELOPING RESOURCES

To develop resources to disseminate research evidence for VR and facilitate safe VR integration in healthcare settings.

METHODS

- We are conducting an organizational participatory research design guided by the Knowledge-to-Action Framework.

ASSESS READINESS

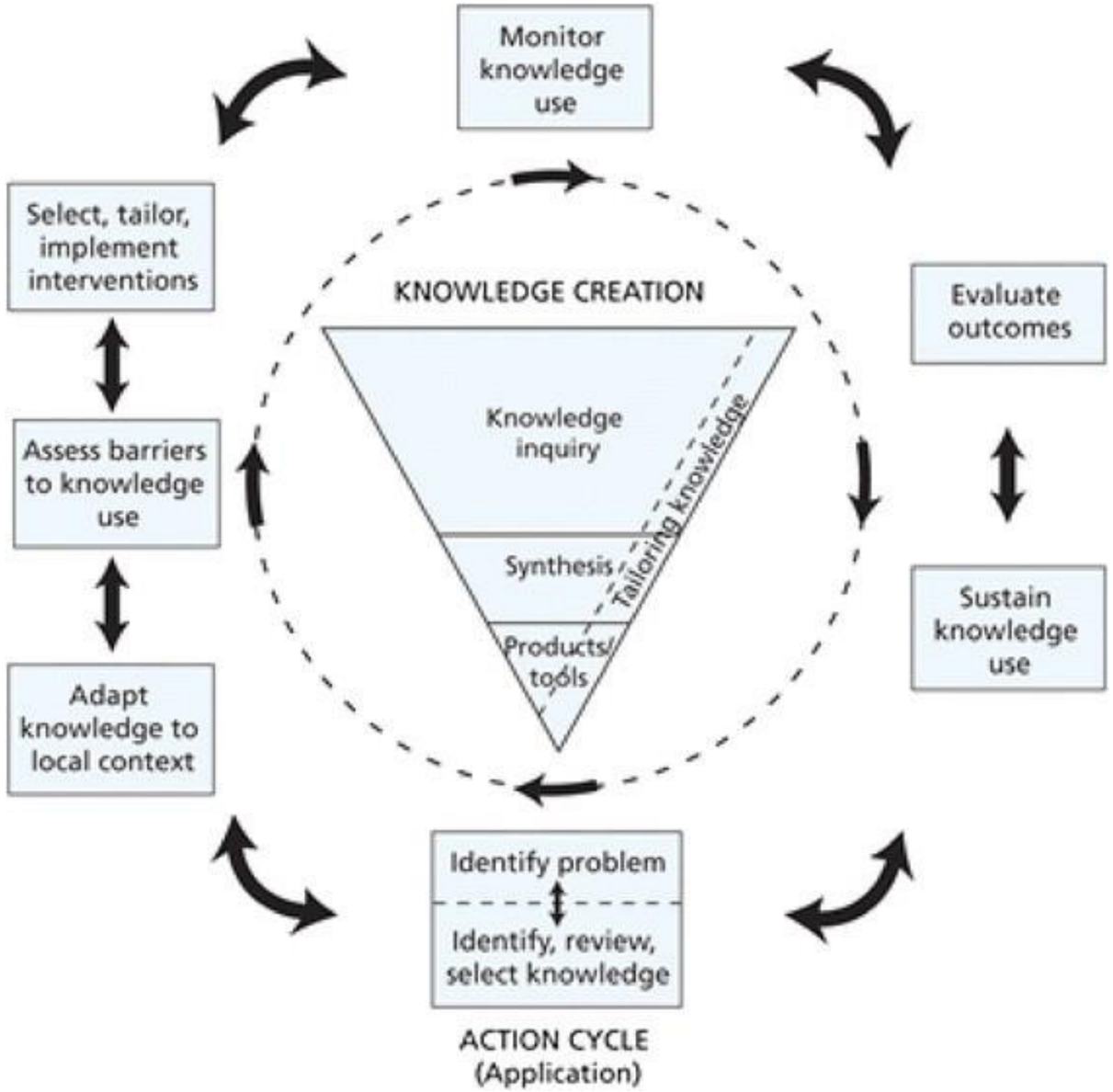
Online, ADOPT-VR2 survey to healthcare professionals across Québec to assess determinants of prospective take-up of VR.

DEVELOPING RESOURCES

Based on survey and workshop, we will co-develop KM resources to support VR dissemination and use. Resources are published on the VRCC website.

TRAINING

Based on survey feedback, we will host a workshop to train healthcare professionals in VR use, targeting specific barriers and contextual challenges.



The Knowledge to Action Framework. From Graham I, Logan J, Harrison M, Strauss S, Tetroe J, Caswell W, Robinson N: Lost in knowledge translation: time for a map? *The Journal of Continuing Education in the Health Professions* 2006, 26, p. 19.

METHODS

ADOPT-VR2 Survey (Glegg, 2016)

- Assessing Determinants of Prospective Take-up of Virtual Reality
- 54 Likert-scale items, rated from 1-9
- 3 dimensions, with a total of 11 constructs
    - **Attitude (3)**
        - Perceived usefulness (3)
        - Perceived ease of use (3)
        - Compatibility (2)
    - **Social norms (2)**
        - Client Influence (1)
        - Peer influence (2)
        - Superior influence (2)
    - **Perceived behavioural control (4)**
        - Facilitating conditions and barriers (15 +3 open-ended)
        - Self-efficacy (14 + 1 open-ended)
        - Behavioural intention (3 + 2 open-ended)

Games Health J. 2017 Aug;6(4):217-228. doi: 10.1089/g4h.2016.0089.

Virtual Reality and Active Videogame-Based Practice, Learning Needs, and Preferences: A Cross-Canada Survey of Physical Therapists and Occupational Therapists

Danielle Levac [1], Stephanie Glegg [2 3], Heather Colquhoun [4], Patricia Miller [5], Farzad Noubary [6 7]

Affiliations + expand

PMID: 28816511 DOI: 10.1089/g4h.2016.0089

Abstract

Objective: Describe the clinical use of virtual reality (VR)/active videogaming (AVG) by physical therapists (PTs) and occupational therapists (OTs) in Canada, identify usage barriers and facilitators, evaluate factors that predict intention to use VR/AVGs, and determine therapists' learning needs.

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What We Are Doing

We are building a virtual hub to disseminate resources, the latest research-based findings, and current events related to the use of virtual reality in child healthcare. Our goal is to build a community and connect individuals, organizations, and institutions that share the common interest of improving pediatric healthcare practice using the latest innovative technology.

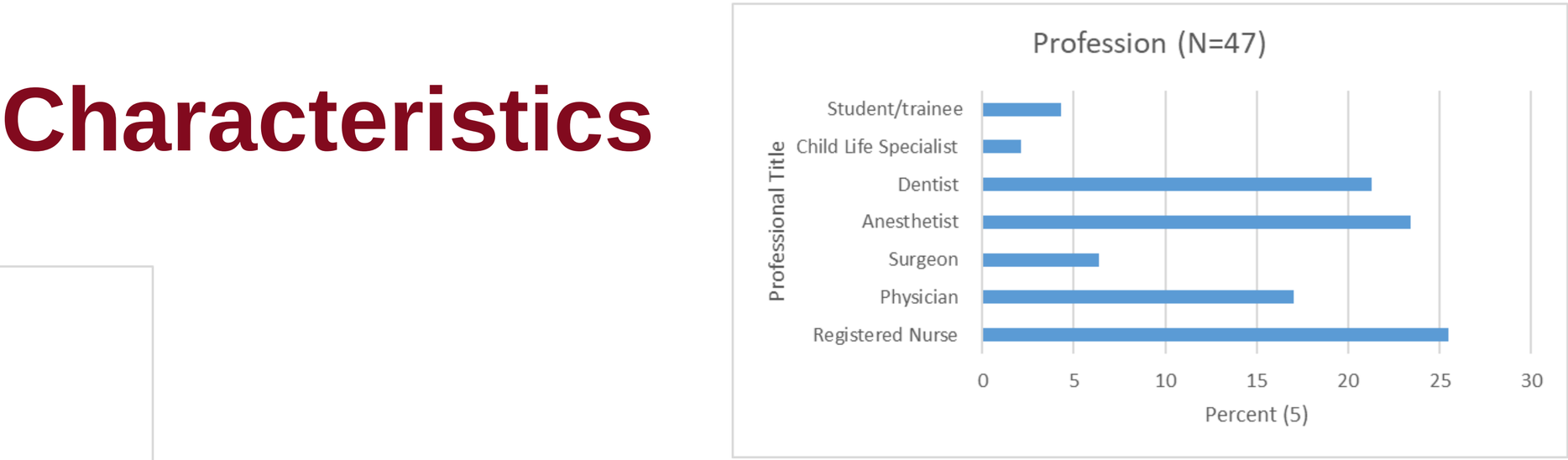
Research Study

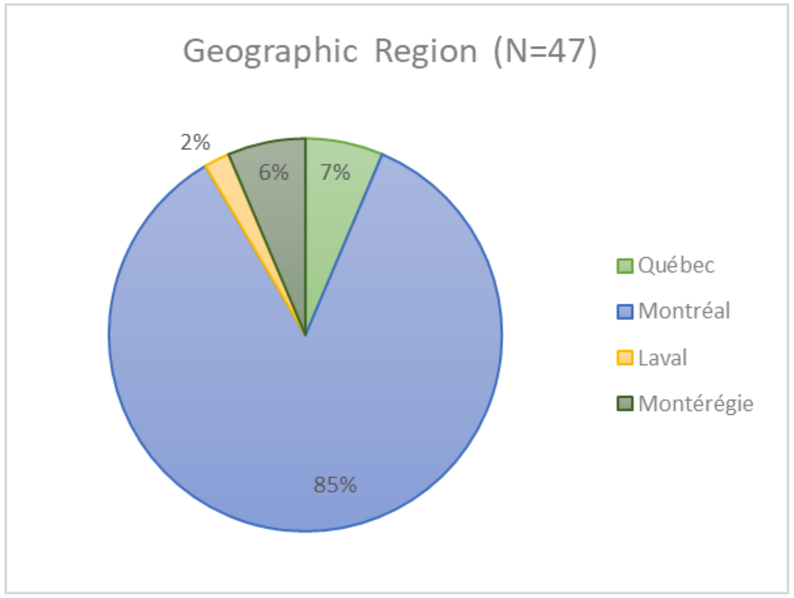
We are conducting an infrastructure research study at the Ingram School of Nursing, funded by the *Réseau de santé buccodentaire et osseuse*. The study uses a hybrid approach for data collection and seeks to:

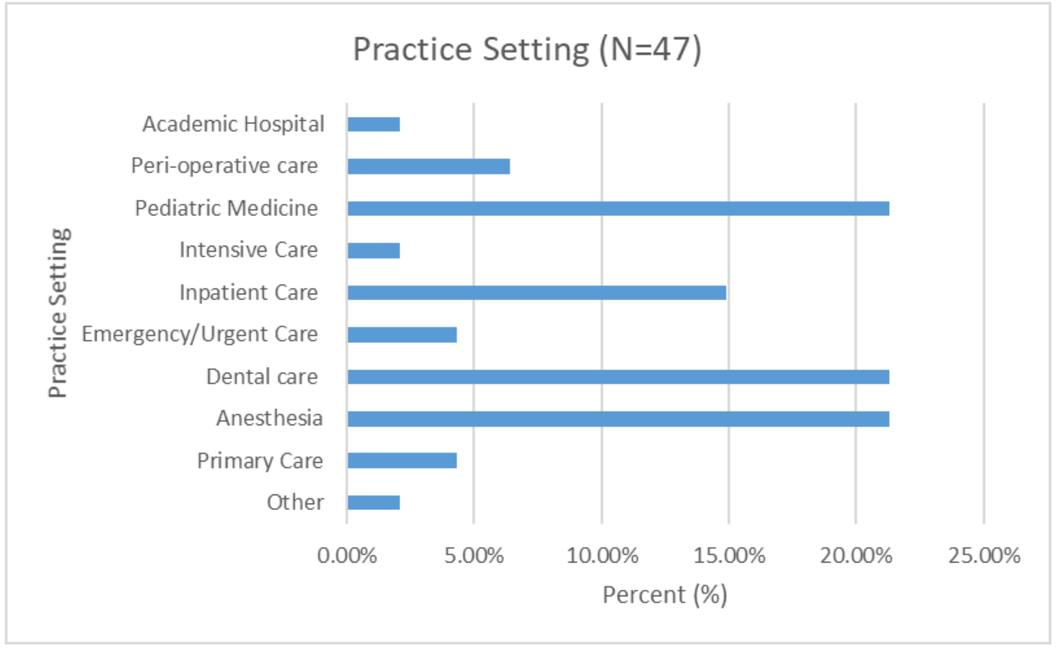
1. Understand the knowledge gaps regarding VR use in child healthcare;
2. Deliver a workshop to train decision makers and healthcare professionals to be VR champions;
3. Co-develop knowledge mobilization resources to facilitate VR implementation.

We are looking for decision-makers and healthcare professionals working in children healthcare settings to tell us about their knowledge needs and to participate in a workshop to learn about VR use. For more information, **complete this questionnaire** or scan the QR code below:

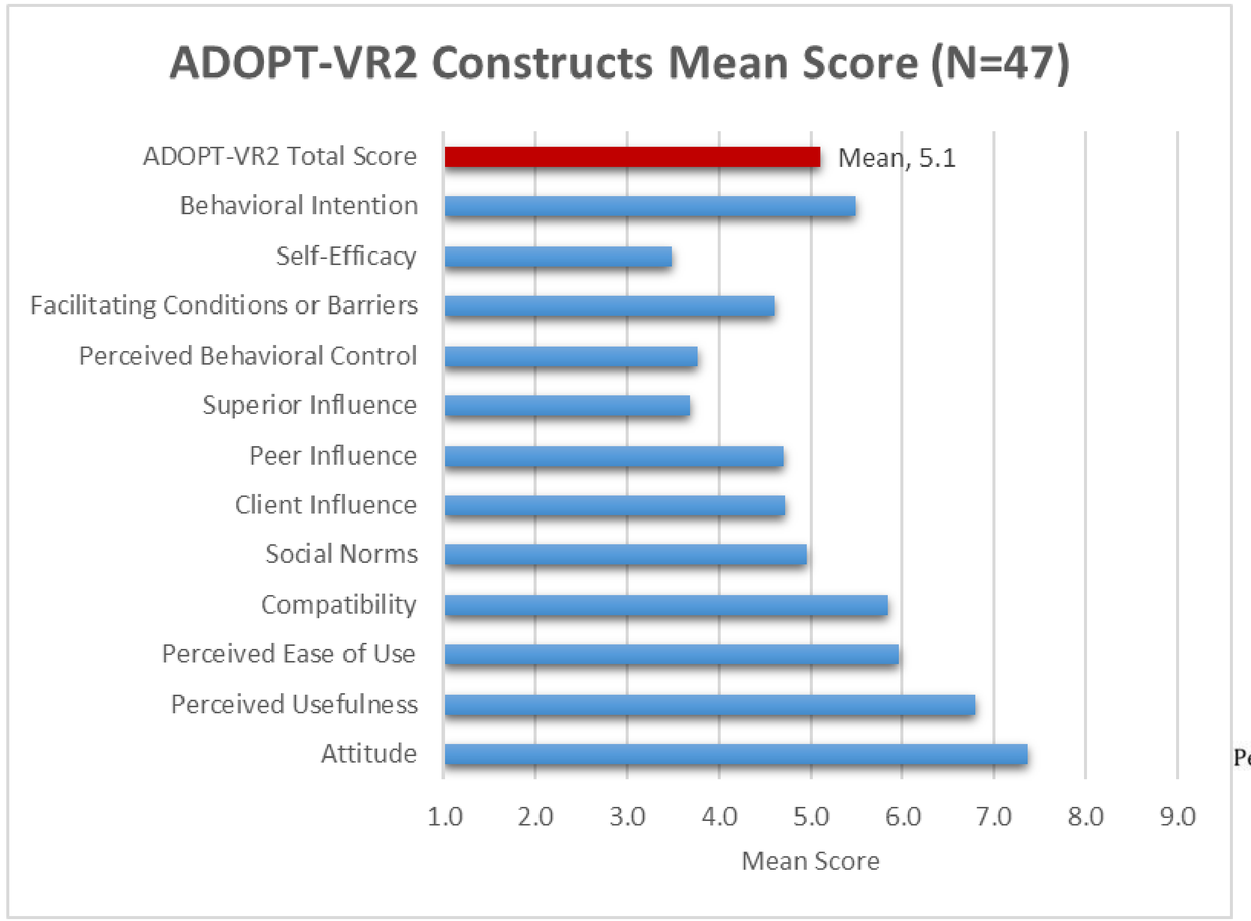
Sample Characteristics

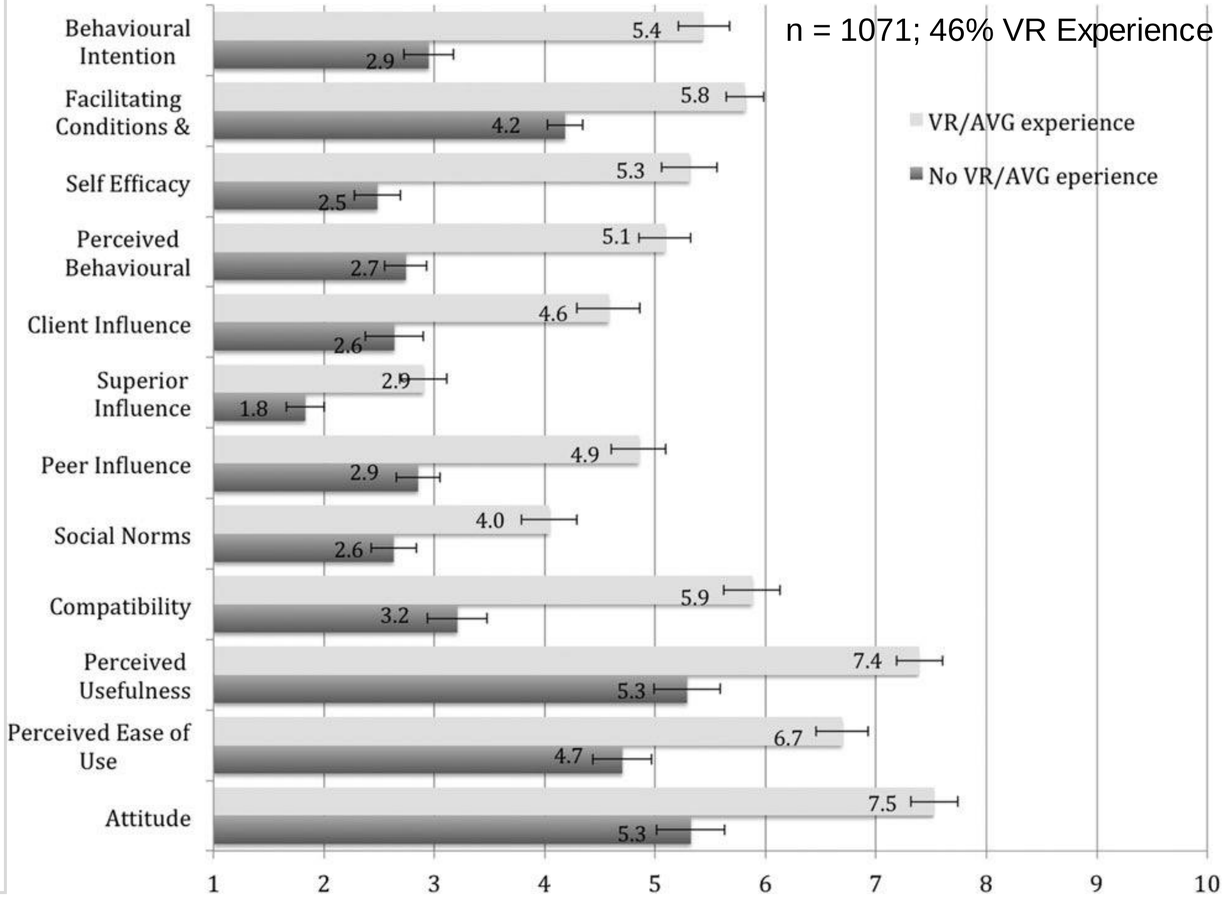






ADOPT-VR2: Preliminary Results

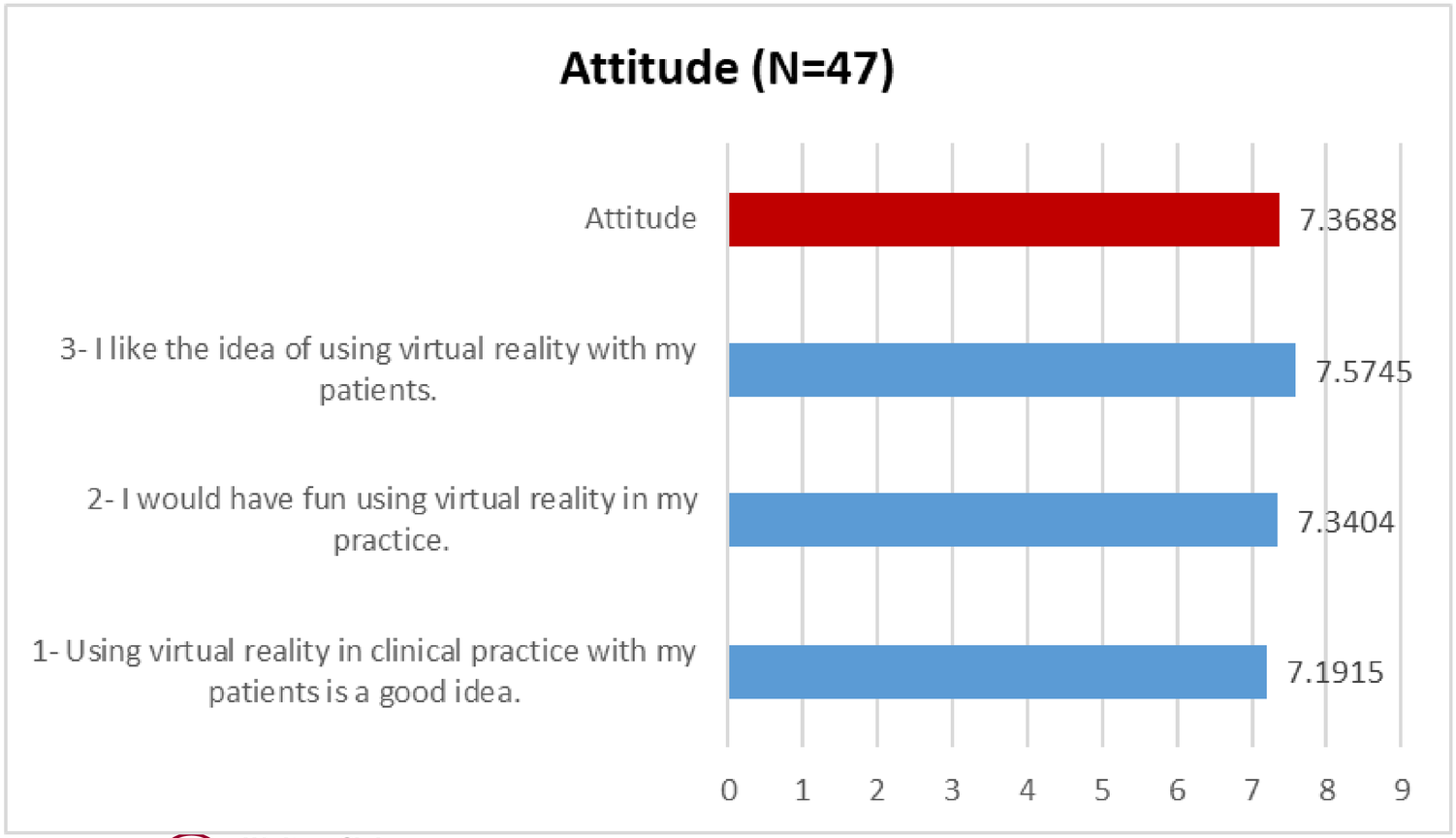




https://www.liebertpub.com/doi/pdf/10.1089/g4h.2016.0089

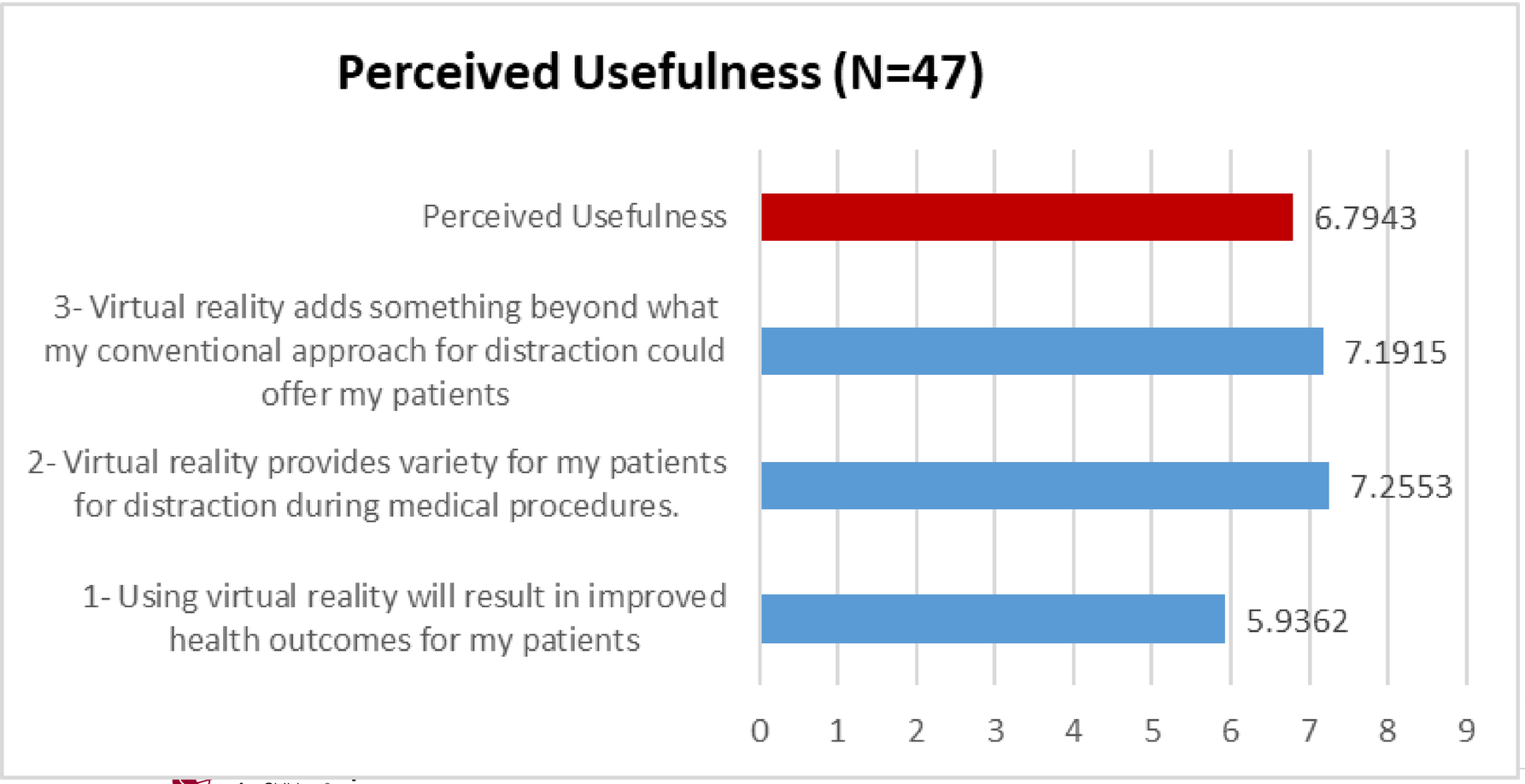
ADOPT-VR2: Preliminary Results

ATTITUDE



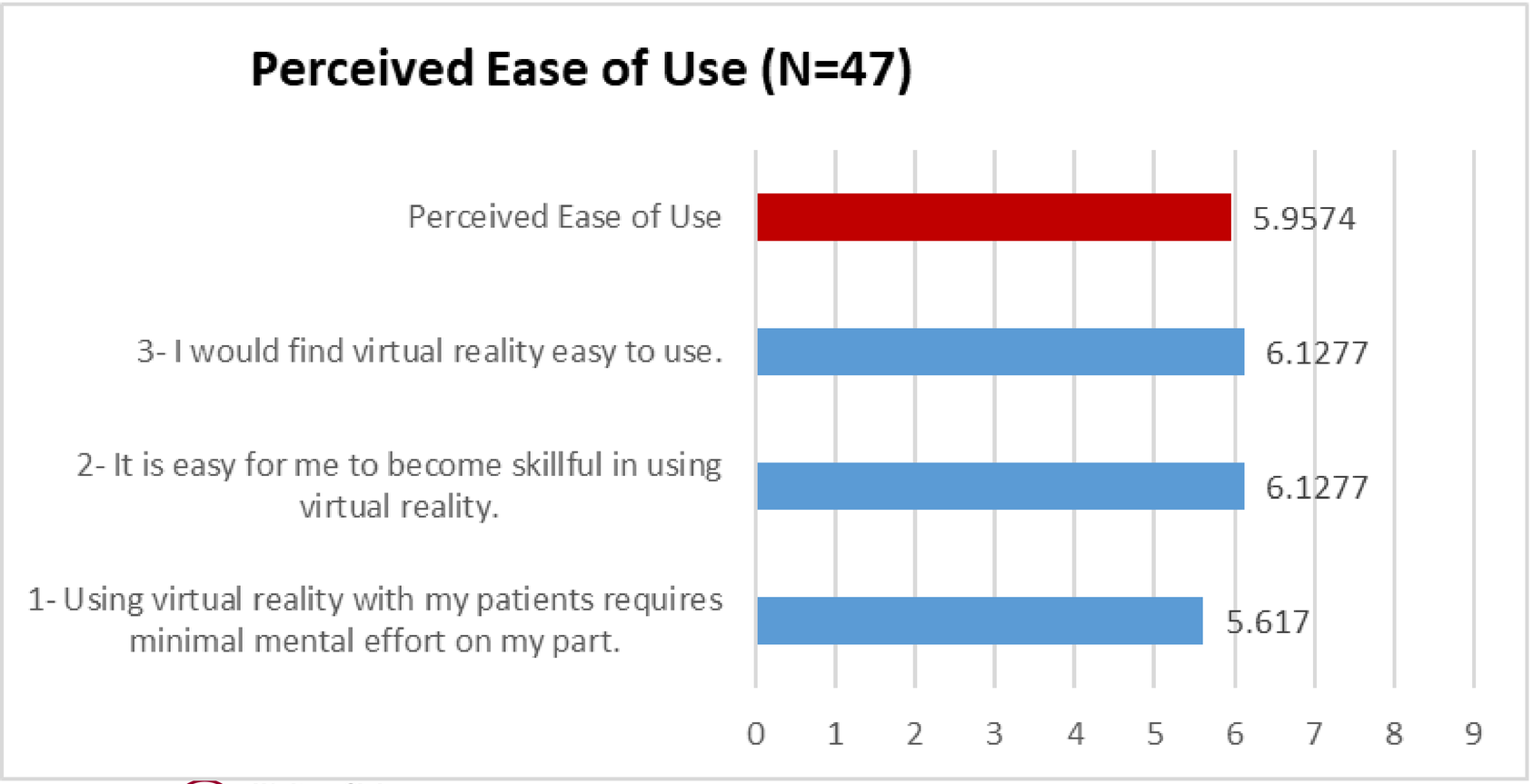
ADOPT-VR2: Preliminary Results

PERCEIVED USEFULNESS



ADOPT-VR2: Preliminary Results

PERCEIVED EASE OF USE

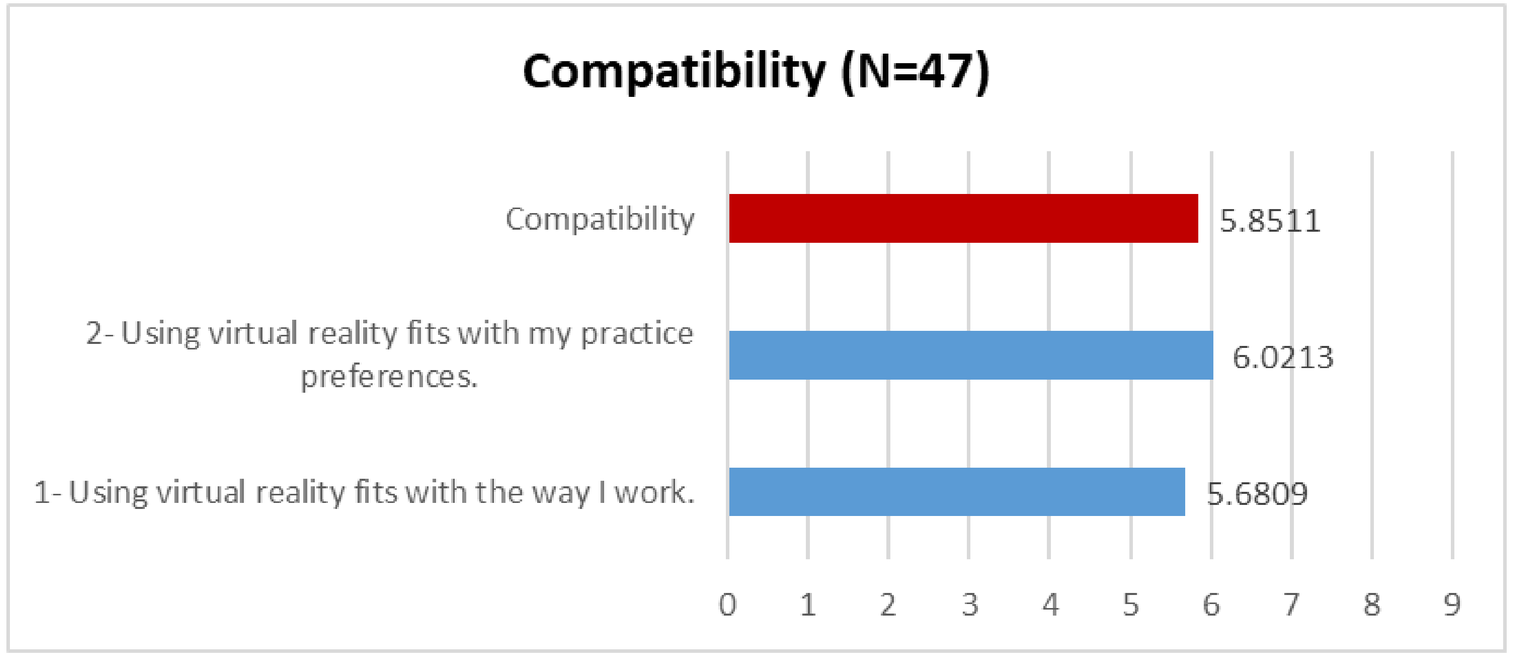


Hôpitaux Shriners pour enfants® Shriners Hospitals for Children® Canada

Facility: CANADA		
Department \ Service name: NURSING AND PATIENT CARE SERVICES		
Virtual Reality for Procedural Pain and Anxiety Management		
☐ Policy ☐ Procedure **X Policy and procedure** ☐ Protocol	☐ Guidelines ☐ Collective order ☐ Manual	☐ Plan ☐ Form ☐ Annex
Document No:		

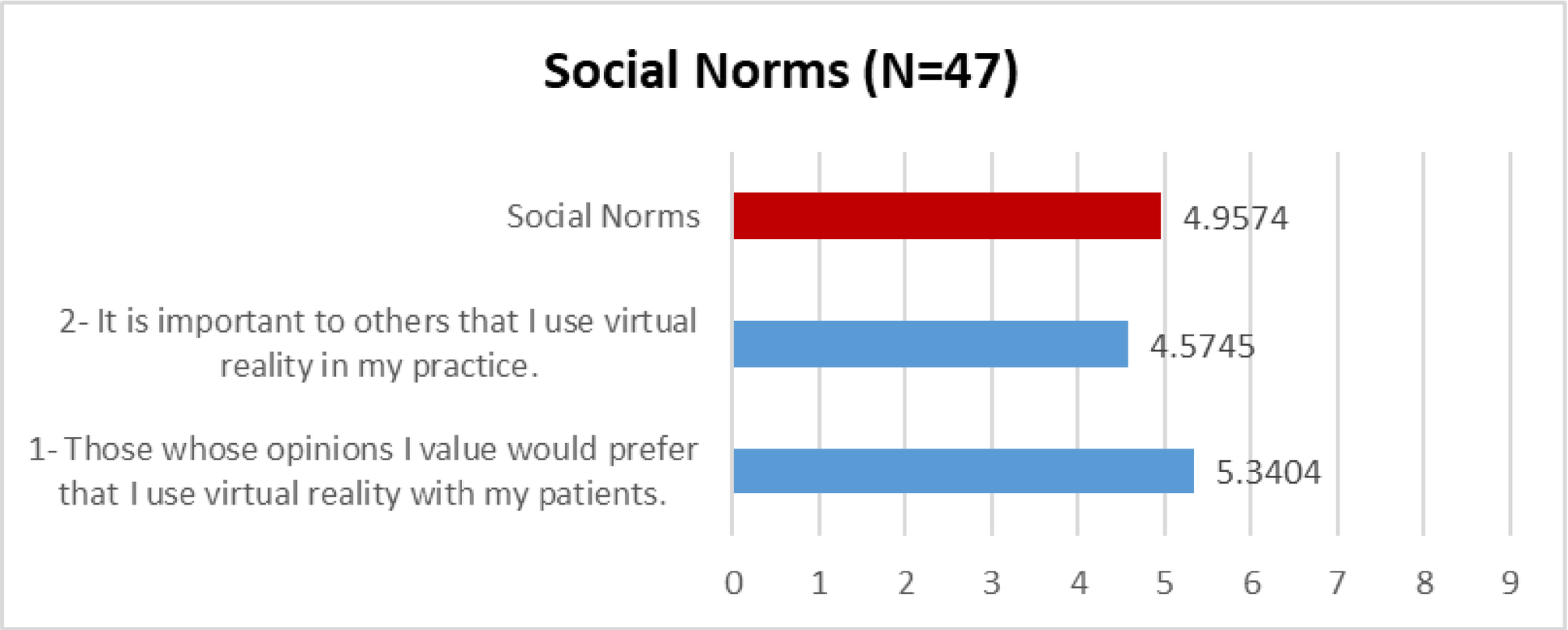
ADOPT-VR2: Preliminary Results

COMPATIBILITY



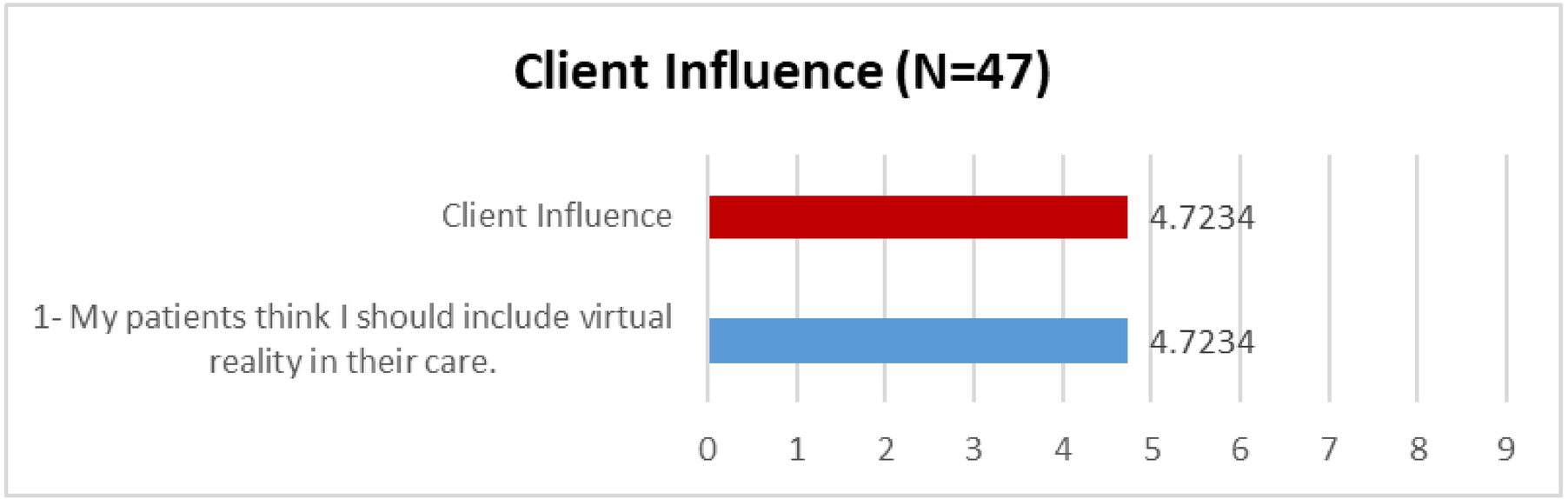
ADOPT-VR2: Preliminary Results

SOCIAL NORMS



ADOPT-VR2: Preliminary Results

CLIENT INFLUENCE



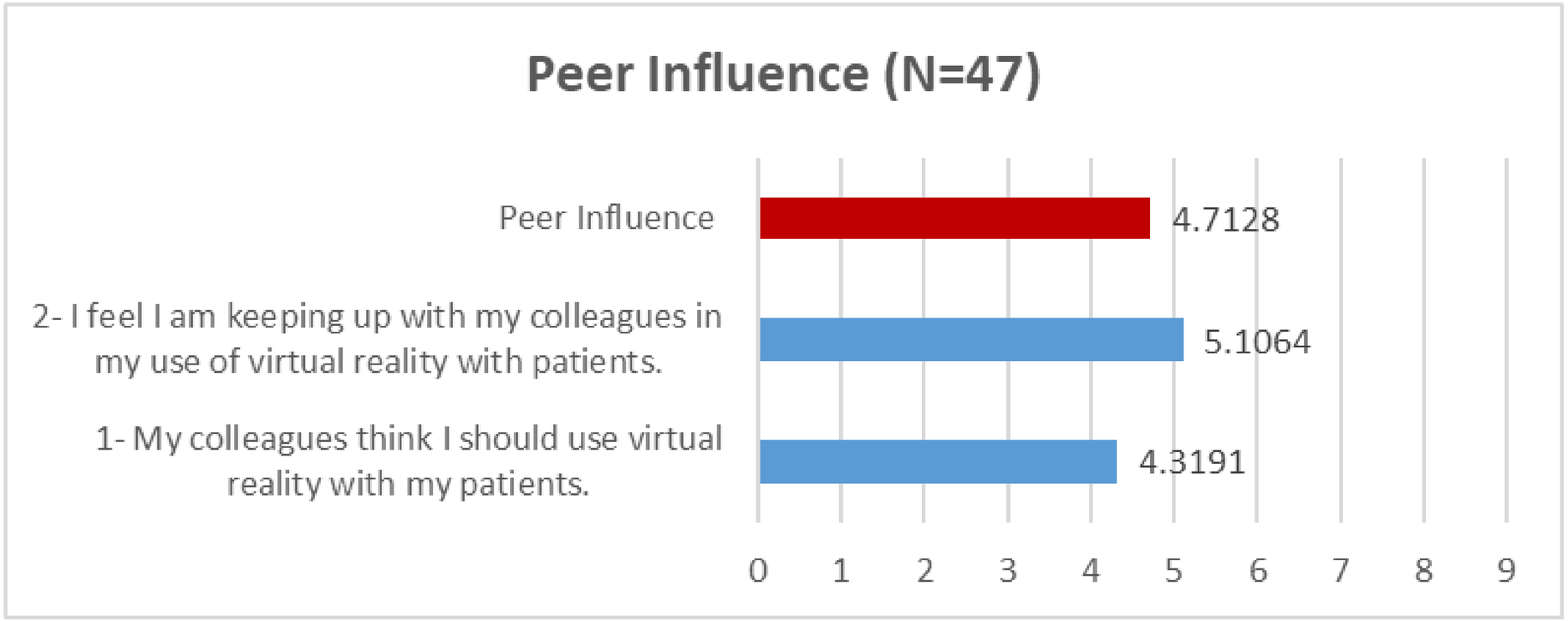

Téléjournal Montréal
Hôpital Shriners : la réalité virtuelle pour atténuer les craintes
Hôpitaux Shriners
pour enfants®
Shriners Hospitals
for Children®
Canada
HÔPITAUX SHRINERS
ALAB AGUILA
Avec la réalité virtuelle, c'est tellement plus facile d'oublier la douleur et surtout l'anxiété.
01:17
02:27
Hôpital Shriners : la réalité virtuelle pour atténuer les craintes


Téléjournal Montréal
Hôpital Shriners : la réalité virtuelle pour atténuer les craintes
HÔPITAUX SHRINERS
JOANNE AGUILA
Le fait de savoir à l'avance qu'il va se sentir mieux durant l'intervention et être plus calme,
01:26
02:27
Hôpital Shriners : la réalité virtuelle pour atténuer les craintes


Explore

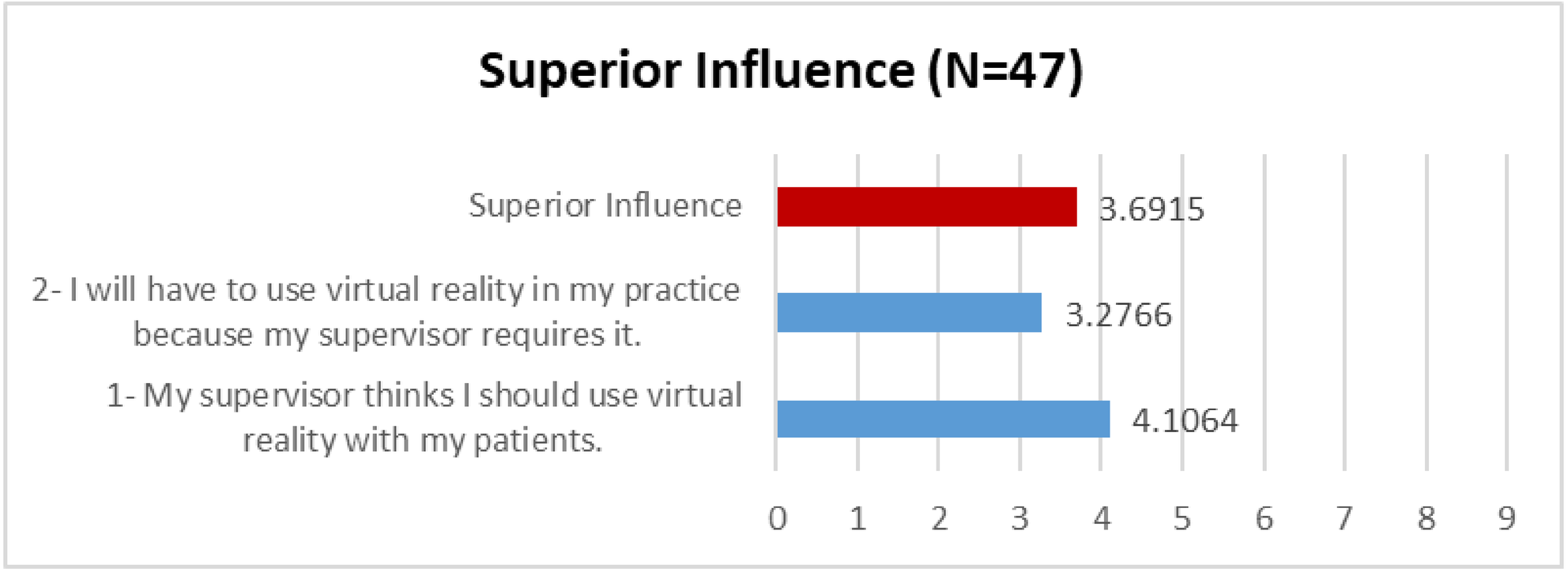
ADOPT-VR2: Preliminary Results

PEER INFLUENCE



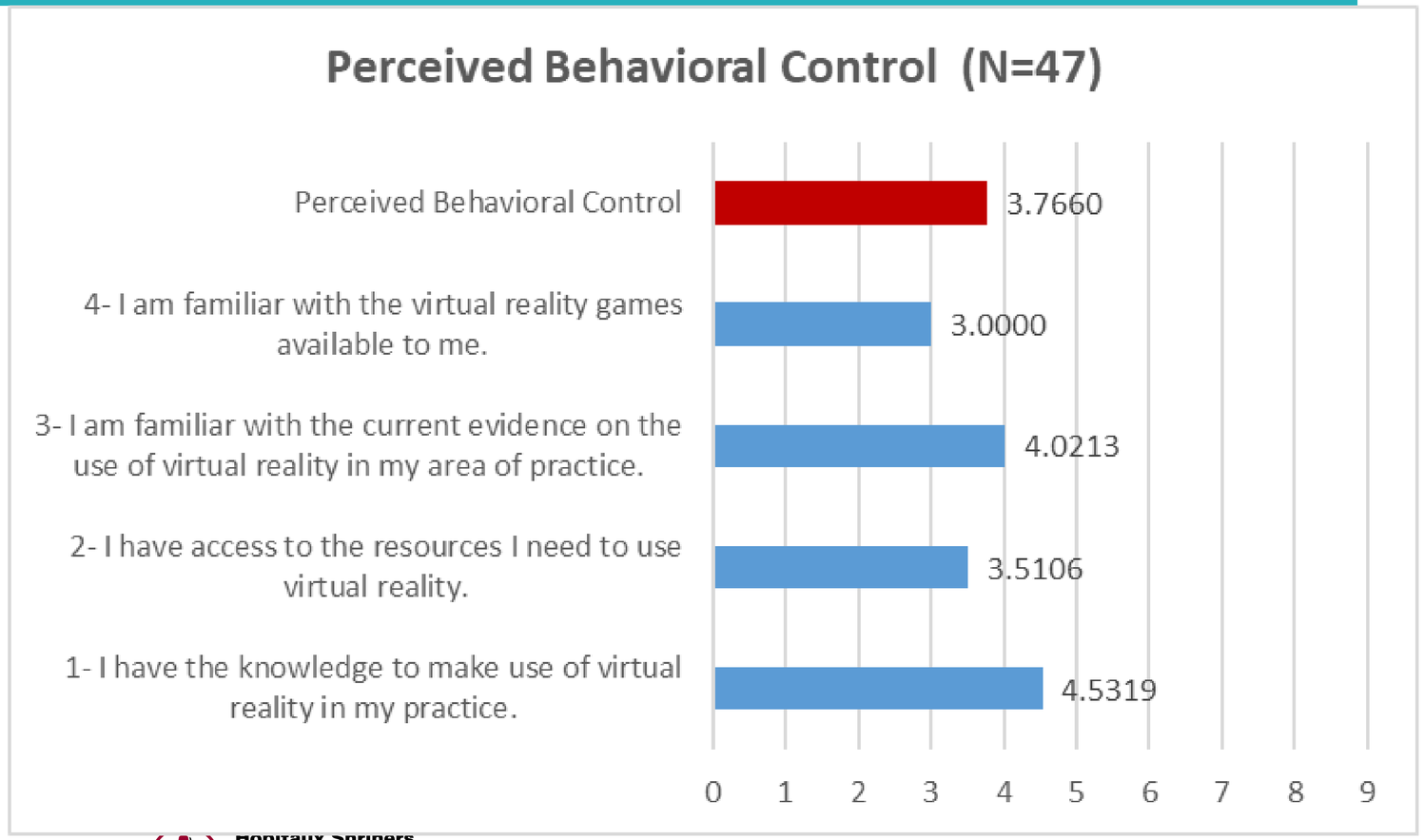
ADOPT-VR2: Preliminary Results

SUPERIOR INFLUENCE



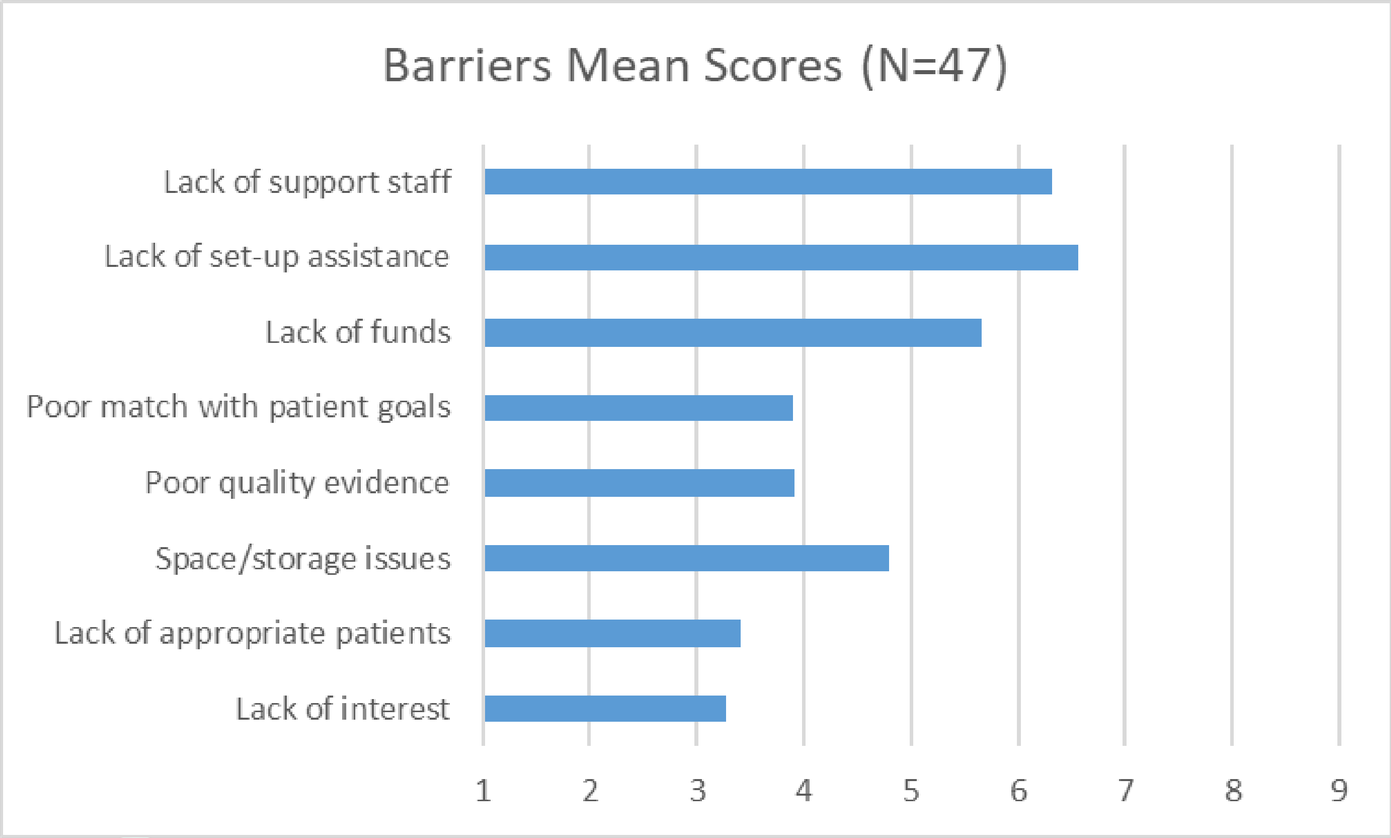
ADOPT-VR2: Preliminary Results

PERCEIVED BEHAVIOURAL CONTROL



ADOPT-VR2: Preliminary Results

BARRIERS



ADOPT-VR2: Preliminary Results

BARRIERS

Other barriers:

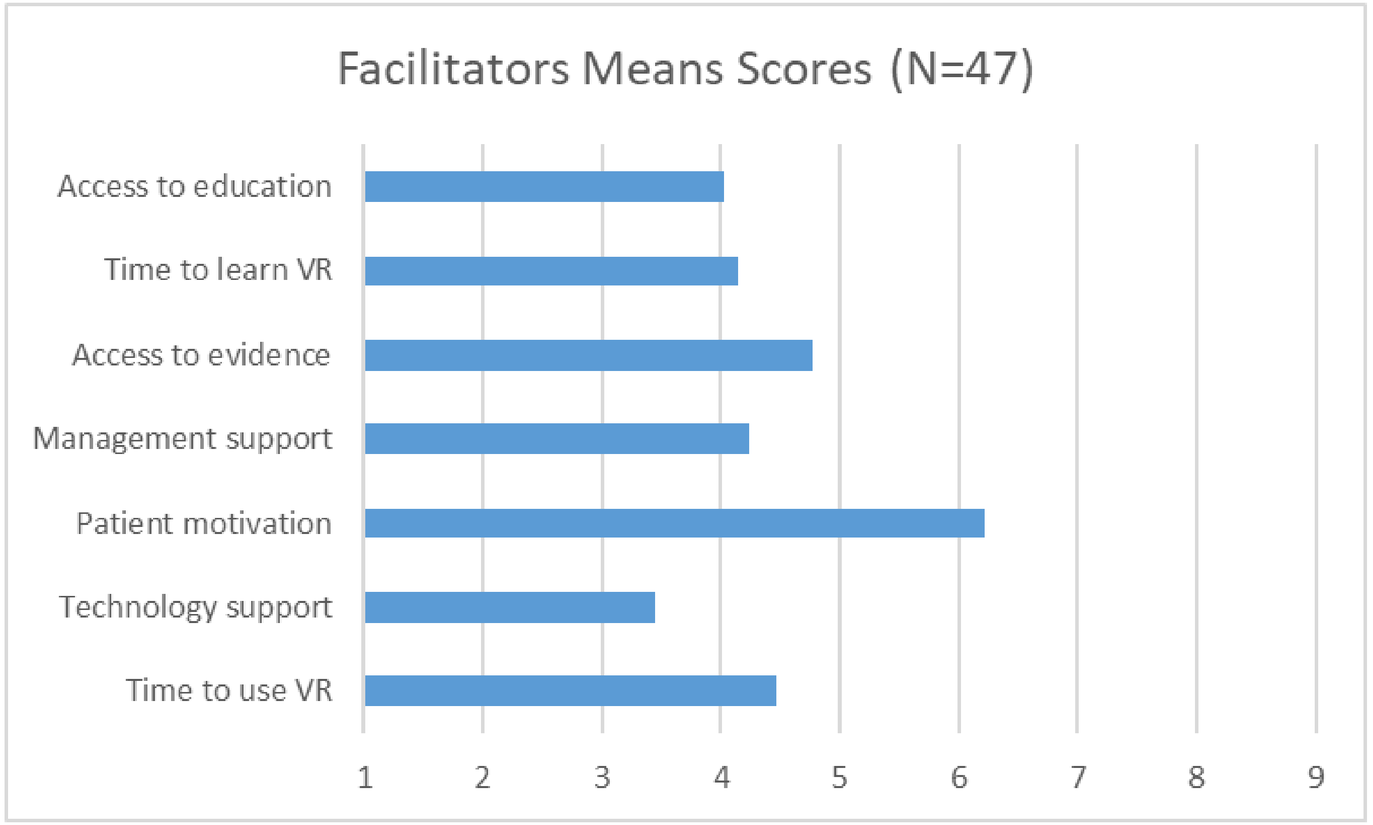
- Discipline/field specific VR programs
- Designing RCT studies (blinding)
- Other distractions are less costly and less time consuming
- Patient and staff expectations
- Compatibility with specific procedures (i.e. mask induction)
- Involuntary patient movements during VR
- Technical issues during use; requires back up tools
- Patient unavailable during treatment

Most significant barriers:

- Lack of training (n=2)
- Finding appropriate patients (n=2) i.e. neurodivergent patients
- Finding the right procedure
- Financial resources (n=2)
- Access to technology (n=3)
- Lack of evidence/knowledge transfer (n=2)
- Lack of support staff (n=2)
- Lack of training
- Involuntary patient movements during VR

ADOPT-VR2: Preliminary Results

FACILITATORS

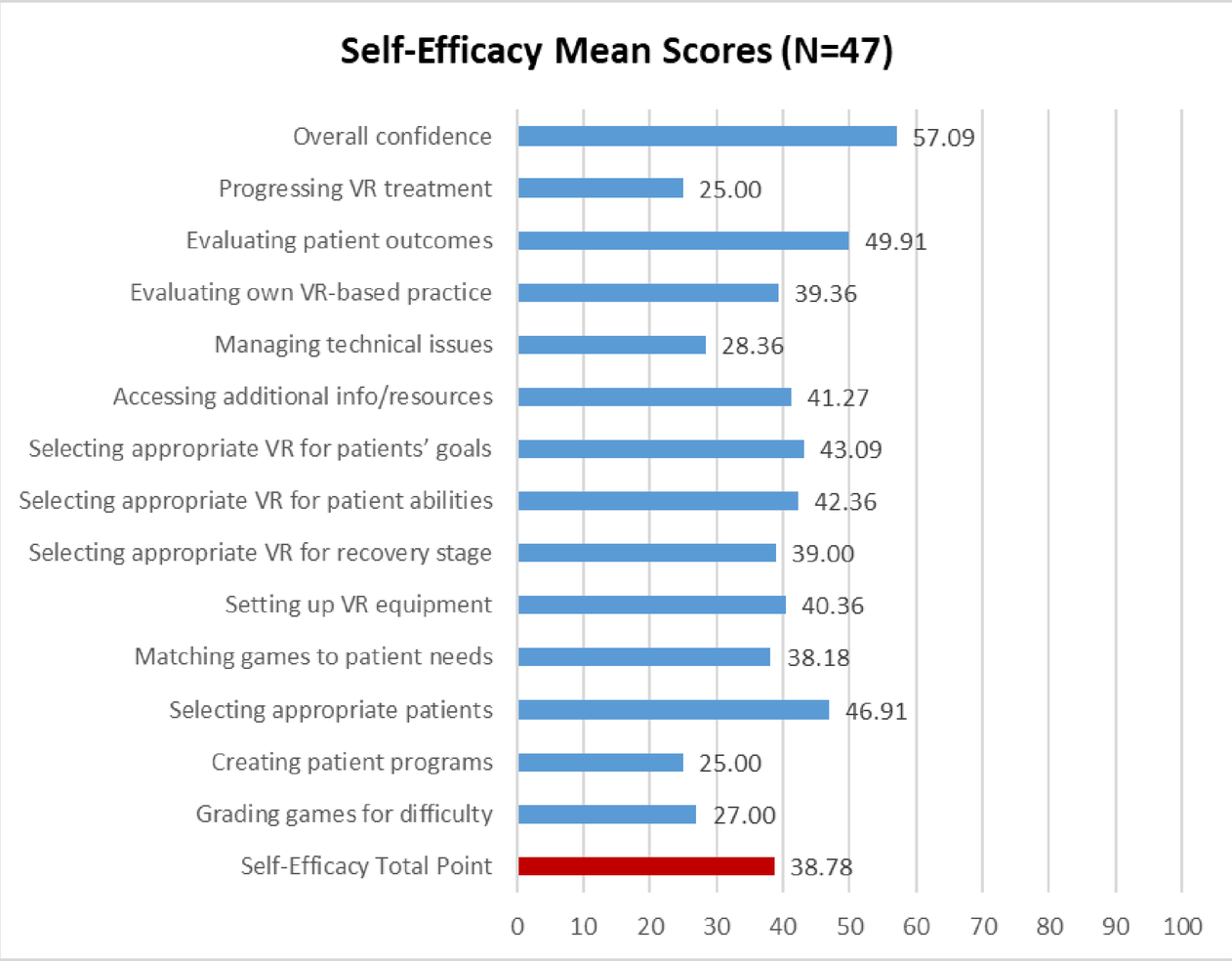


What has helped you to incorporate virtual reality into your practice?

- Research study (n=3)
- Patient wellbeing

ADOPT-VR2: Preliminary Results

SELF-EFFICACY



Other areas where lacking confidence

- Hardware
- Specific training on VR equipment available in facility
- Need support from CCLS
- Use of VR in adults
- Tech troubleshooting
- Adapting games based on patient needs
- Identifying good candidates
- Need to know about age appropriate games
- Not sure

Virtual Reality Hardware Guide

A guide to help you understand the key hardware components important for a safe and immersive VR experience.

Central Processing Unit (CPU)

- The control center that processes and interprets what is going on in VR and executes instructions, allowing to run a smooth VR experience.

Display Resolution

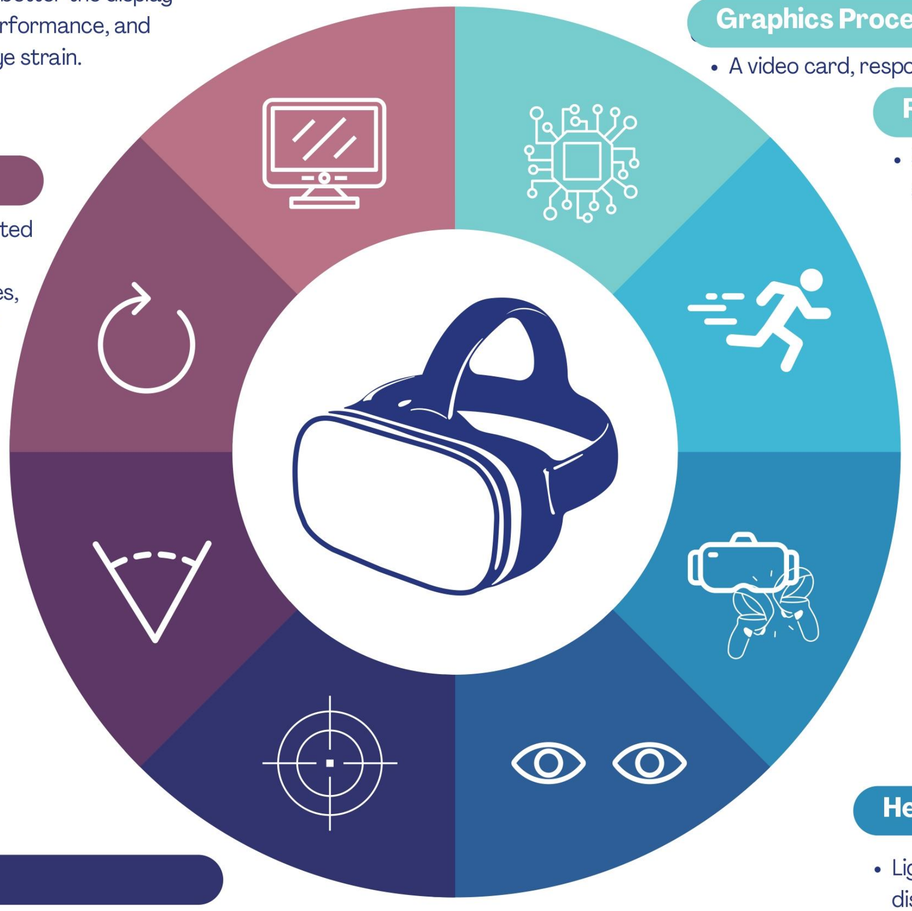
- The higher the pixel density, the better the display resolution, improving gaming performance, and reducing motion sickness and eye strain.

Graphics Processing Unit (GPU)

- A video card, responsible for rendering realistic graphics in VR.

Random Access Memory (RAM)

- Short-term memory of VR which minimizes lags and interruptions in the VR experience (min 8GB).



Refresh Rate

- A higher refresh rate means images are updated more frequently, minimizing the discrepancy between head movements and display updates, reducing motion sickness, enhancing sense of presence, realism, and comfort.
- Ranges between 75 Hz to 120 Hz for VR.

Motion Tracking

- Sensors monitor the movement and position of the user's head (and/or controllers) within the VR environment.
- Establishes a reliable connection between the user and the VR world, enhancing realism, ensuring safety, and reducing motion sickness.
- A higher ***tracking frequency*** (Hz) reduces the perceived lag between user actions and virtual responses, reducing cybersickness.
- ***Degrees of Freedom*** (DoF) refer to the number of ways you can move in 3D space.
  - 3DoF: conducive to static VR experiences.
  - 6DoF: suited for interactive VR experiences.

Field of View (FoV)

- The wider the FoV, the more of the VR world you can see without turning your head or eyes, increasing sense of immersion and realism, and reducing motion sickness, nausea, and disorientation.
- VR FoV ranges from 90 to 110 degrees.

Headset and Controller Design

- Lightweight headset with balanced weight distribution, adjustable straps, cushioned padding, and built-in wireless/Bluetooth connectivity.
- Foam face mask or silicone mask for easy disinfection between uses.
- Capacitive buttons for those with limited hand strength/dexterity.

Foveated Rendering

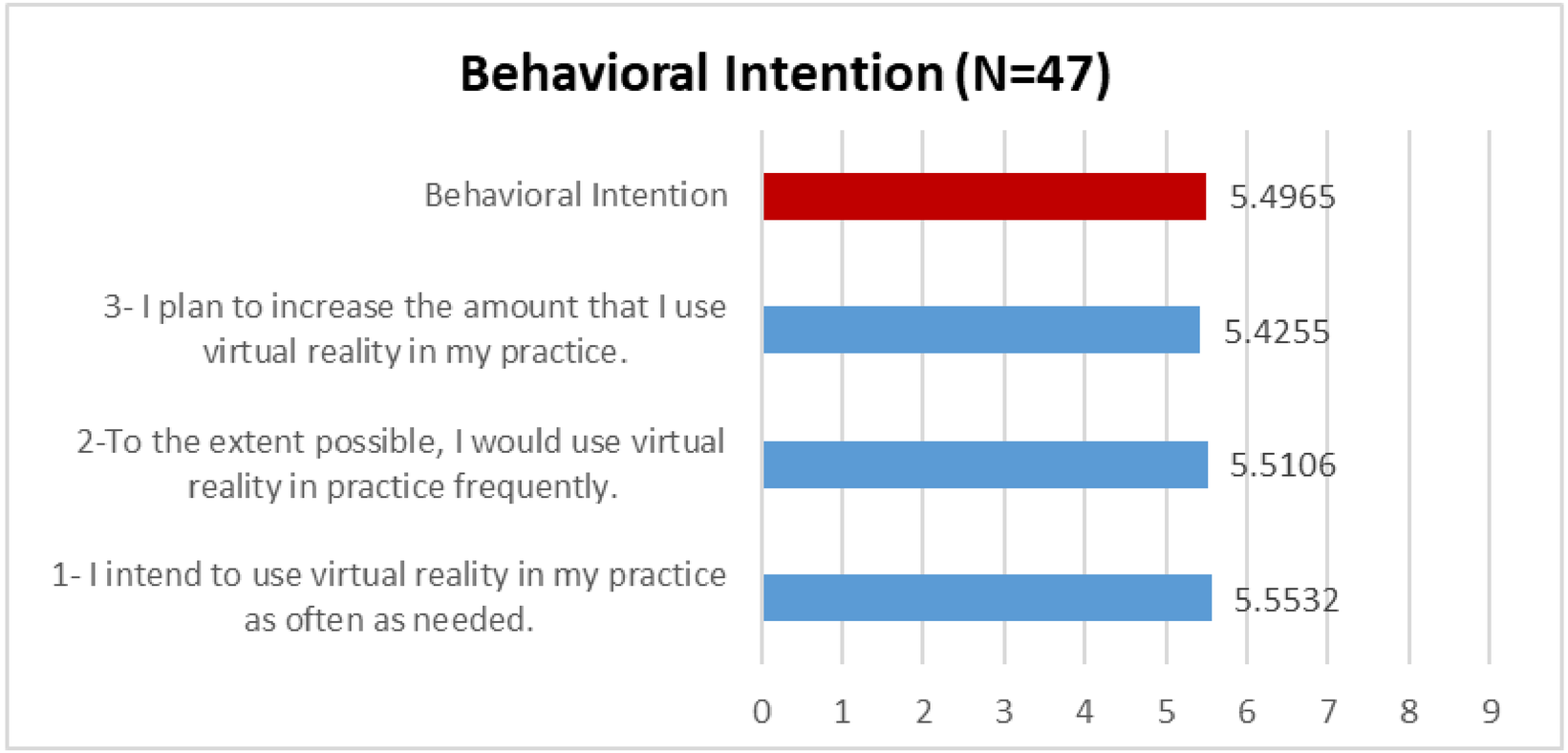
- High resolution at gaze focus, with gradually decreasing resolution towards the periphery improves performance and reduces cybersickness by 66%.

Interpupillary Distance (IPD)

- The distance between a person's pupils (IPD) must match the VR headset IPD to avoid visual discomfort, poor depth perception, eye strain, and distorted image.

ADOPT-VR2: Preliminary Results

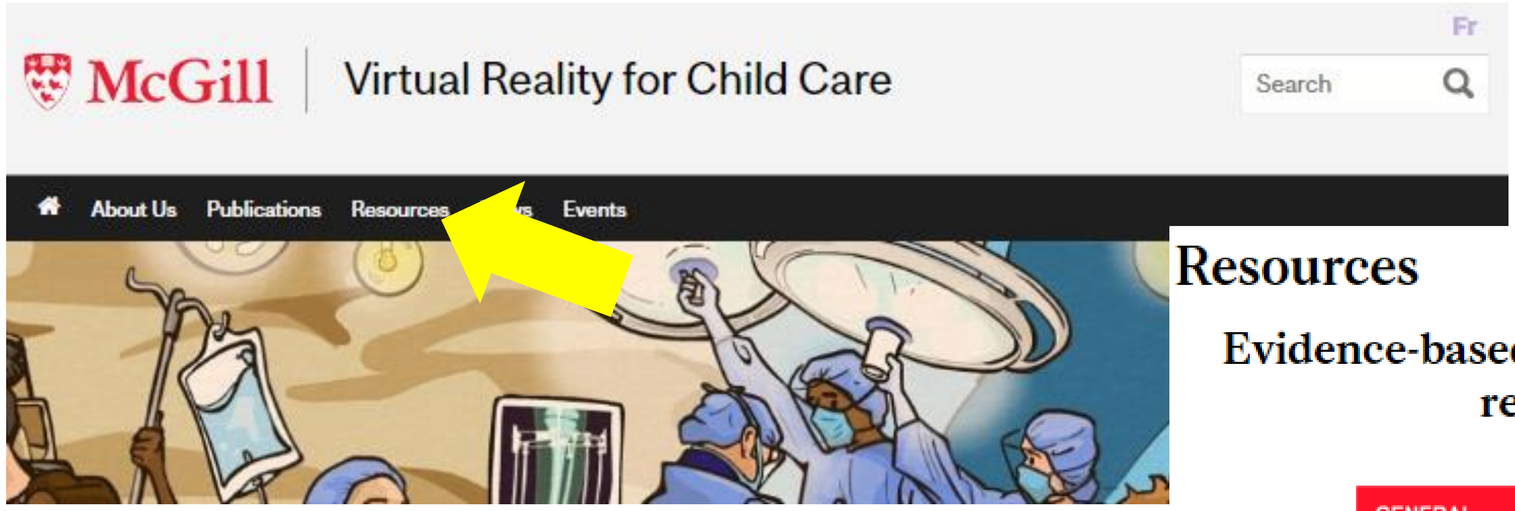
BEHAVIOURAL INTENTION

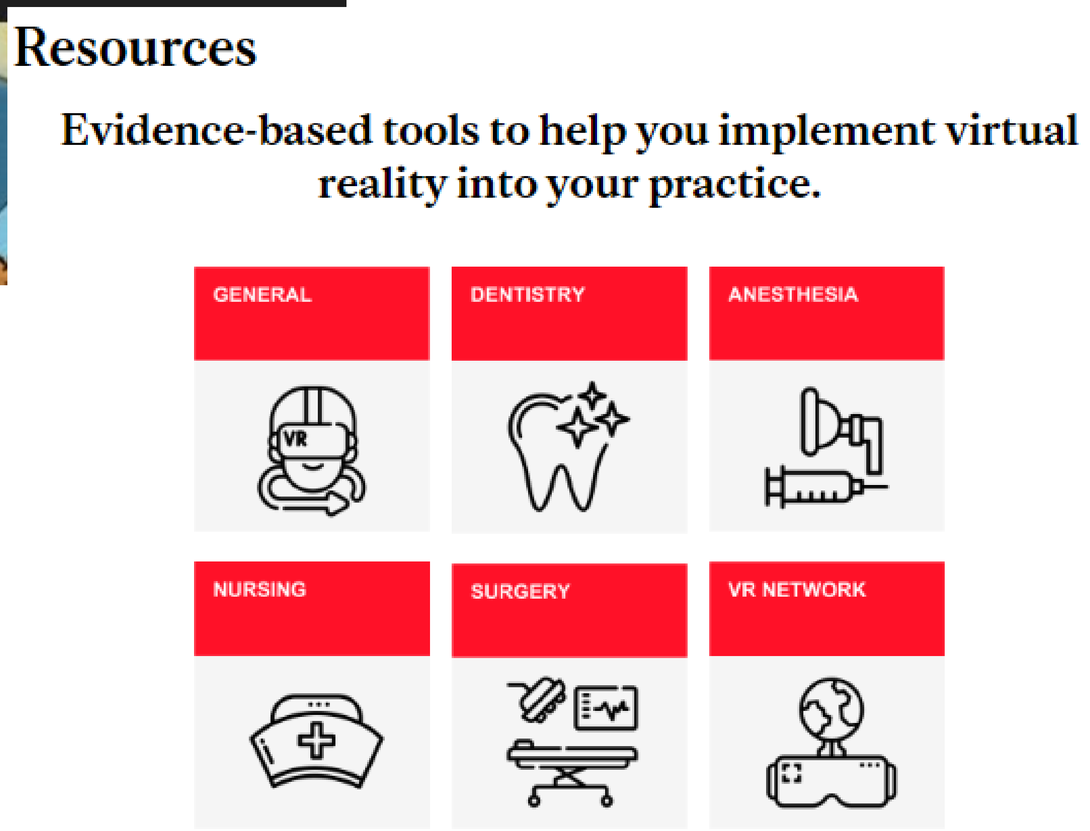


Co-Development of Resources

DEVELOPING RESOURCES

- Based on preliminary survey analysis and previous implementation project, we have co-developed resources to disseminate research findings about VR and facilitate VR use



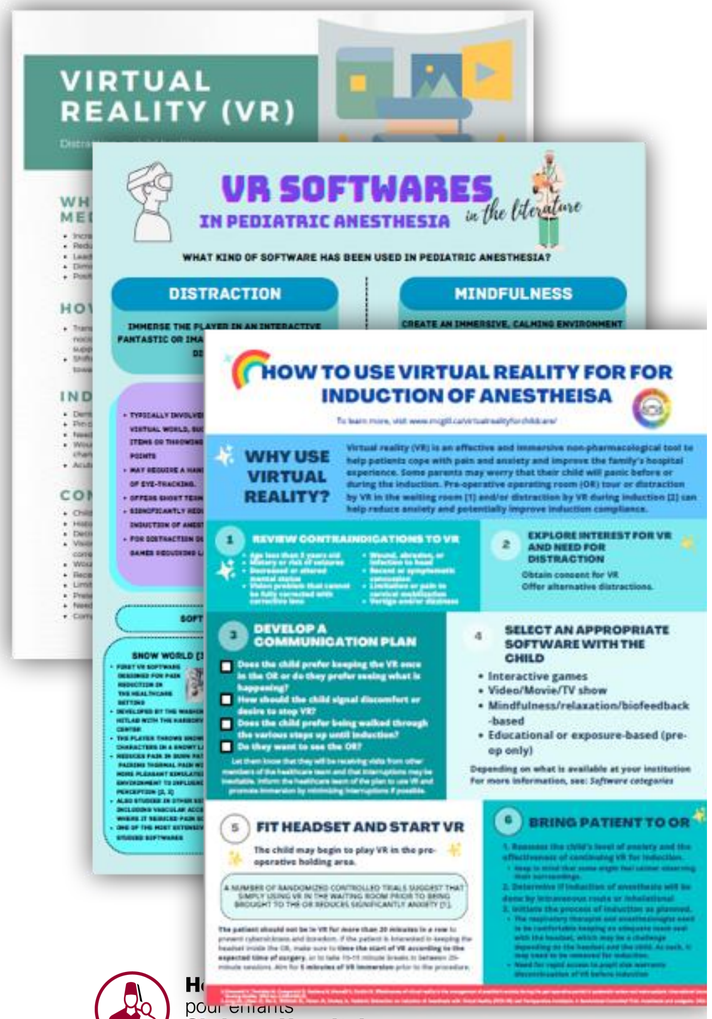


DEVELOPING RESOURCES

- Current resources:
  - Research summaries
  - Step-by-step guides
  - Policy & procedure
  - Patient materials
- Further material will be co-developed based on the workshop discussions
- Resources are published on the VRCC website

RESOURCES

Ongoing development of resources to disseminate VR research and facilitate use of VR.



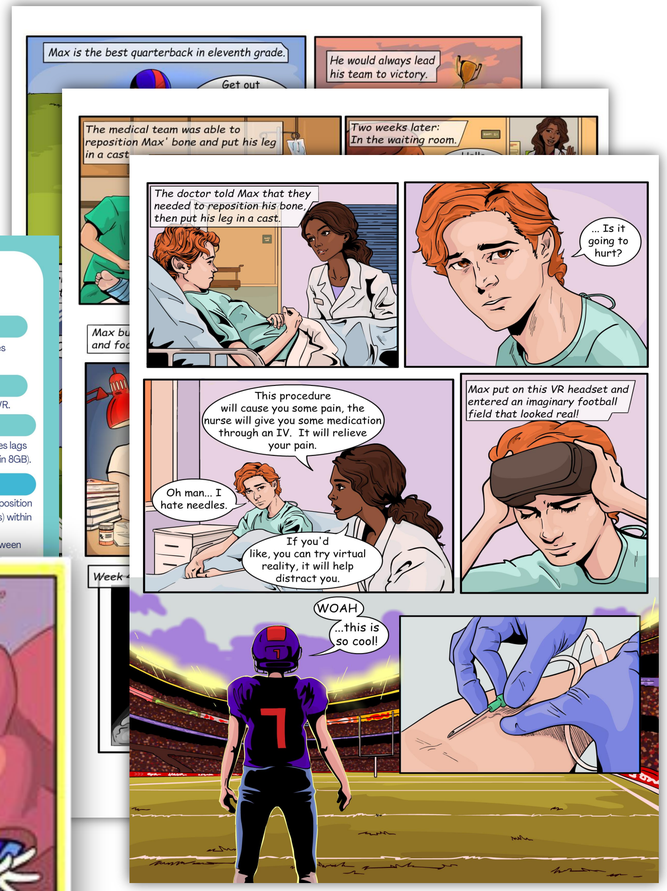
VIRTUAL REALITY

FINDING THE RIGHT VIRTUAL REALITY INTERVENTION FOR YOUR HOSPITAL

1. TARGET USERS & NEEDS ASSESSMENT
   - **Why?** *Identify*
   - **Where?** *Identi*
   - **Who?** *Identify*
   - **What?** *Evaluat*

2. VR SELE
   - **Age appropri**
   - **Content suita**
   - **Comfort and**
   - **Accessibility**
   - **Educational v**
   - **VR interactiv**
   - **Ease of use**
   - **Positive impa**

3. HARDWA
   - Understand th
   - Identify eleme
   - improve qualit
   - Refer to the V



Virtual Reality Workshop
April 26, 2024 | Montréal, Qc, Canada

VR Workshop: Program

9:00 AM — Booths & Posters

VR MARKET, PRODUCTS, AND RESEARCH
Booth and poster set up and viewing

Welcome & Opening Remarks — **9:30 AM**

OPENING REMARKS
Kelly Thorstad, MSc(A)N PHCNP, Nurse Executive, Shriners Hospitals for Children®-Canada
Reggie Hamdy, MD FRCSC, Orthopedic Surgeon, Shriners Hospitals for Children®-Canada

9:40 AM — Readiness for VR Adoption

THE BARRIERS, FACILITATORS, AND CONTEXTUAL CHALLENGES OF VR USE
Argerie Tsimicalis, RN PhD, Associate Professor, Ingram School of Nursing, McGill University

Overview of VR use in Child Healthcare — **10:00 AM**

EVIDENCE FOR VR PAIN MANAGEMENT
Sylvie Le May, RN PhD, Professor, Faculty of Nursing, Université de Montréal

10:30 AM — Lessons Learned

LESSONS LEARNED FROM FIVE STUDIES ON VR AND CHILDREN: FROM MOTIVATION TOWARD TREATMENT TO BIOFEEDBACK FOR MIGRAINE
Stéphane Bouchard, PhD, Psychoeducation and Psychology Department, University of Québec in Outaouais

Booths & Posters — **11:00 AM**

VR MARKET, PRODUCTS, AND RESEARCH
Various companies, researchers, clinicians, and trainees.

NipperMedia

12:00PM — Lunch & Discussion Tables

INTEREST GROUP DISCUSSIONS

Resto Plateau

Implementation of VR — **1:00 PM**

CREATING A PLAN TO INTEGRATE VR INTO YOUR PRACTICE SETTING
Guillaume Fontaine, RN PhD, Assistant Professor, Ingram School of Nursing, McGill University

3:00PM — Closing Remarks

CLOSING REMARKS
Argerie Tsimicalis, RN PhD, Associate Professor, Ingram School of Nursing, McGill University
Jacqueline Chow, RN, Patient Partner, BNI Student (U2), Ingram School of Nursing, McGill University

Virtual Reality Workshop
April 26, 2024 | Montréal, Qc, Canada

CALL FOR ABSTRACTS

DEADLINE: 2 APRIL, 2024

The McGill Virtual Reality for Child Care hub is hosting its first, in-
day VR workshop event. It is an opportunity for all healthcare pro
researchers, and trainees across Québec to come together and lea
evidence for VR in pain/anxiety management, meet with VR compa
out their products, and draft a mobilization/implementation to inte
their respective practice settings.

The VR Workshop Organizing Committee invites all students,
researchers, and healthcare professionals to submit an abstra
poster/booth session of the workshop.

Virtual Reality Workshop
April 26, 2024 | Montréal, Qc, Canada

CALL FOR BOOTHS

DEADLINE: 17 APRIL, 2024

Virtual Reality Workshop
April 26, 2024 | Montréal, Qc, Canada

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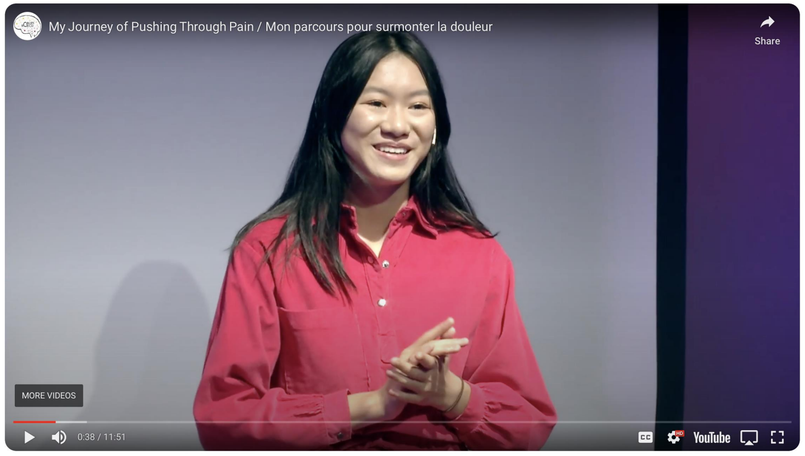
Canada

My Journey of Pushing Through Pain / Mon parcours pour ...
YouTube · RQECD-QNJPI PAINtalks · Jan 17, 2022



METHODS

- We are conducting an organizational participatory research design guided by the Knowledge-to-Action Framework.

ASSESS READINESS

Online, ADOPT-VR2 survey to healthcare professionals across Québec to assess determinants of prospective take-up of VR.

DEVELOPING RESOURCES

Based on survey and workshop, we will co-develop KM resources to support VR dissemination and use. Resources are published on the VRCC website.

TRAINING

Based on survey feedback, we will host a workshop to train healthcare professionals in VR use, targeting specific barriers and contextual challenges.

Share your implementation plans (of any stage of thinking, drafting)

childkind

DONATE

ABOUT US CERTIFICATION RESOURCE LIBRARY GET INVOLVED NEWS

ChildKind International

ChildKind International is a nonprofit organization whose mission is to improve the quality of pediatric pain care around the world through:

- Encouraging excellence in pain care by supporting and recognizing institutions that have developed best practices
- Expanding pain management knowledge with an open exchange of best practices and protocols in the prevention and treatment of pain
- Building connections among clinicians by providing ongoing educational forums

With support from ChildKind, healthcare organizations can enhance their pain management practices to help children at their most vulnerable time.

0 SEARCH RESULTS FOUND FOR: "VIRTUAL REALITY"

Hôpitaux Shriners pour enfants / Shriners Hospitals for Children
Canada

Facility: CANADA		
Department \ Service name: NURSING AND PATIENT CARE SERVICES		
Virtual Reality for Procedural Pain and Anxiety Management		
☐ Policy ☐ Procedure **X Policy and procedure** ☐ Protocol	☐ Guidelines ☐ Collective order ☐ Manual	☐ Plan ☐ Form ☐ Annex
Document No:		

The first national Pediatric Pain Management standard

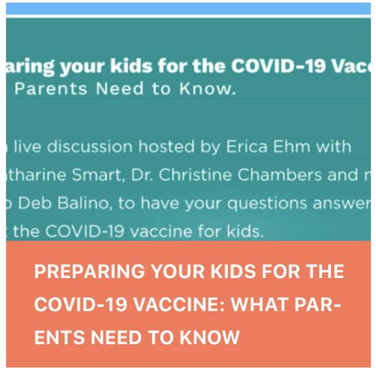
Solutions for Kids in Pain (SKIP) and the Health Standards Organization (HSO) are pleased to announce Canada's first national Pediatric Pain Management standard, establishing a set of guidelines for the delivery of pain management for children from birth to 19 years. The standard provides guidance to health care organizations on how to deliver equitable and quality pain management across hospital settings!

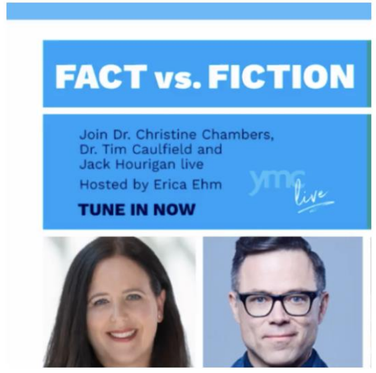
#ItDoesntHaveToHurt

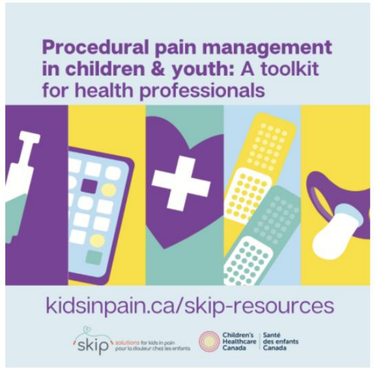
News Release | Executive Summary | Download now

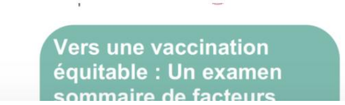
home | about us | our team | resources | our activities | our impact | connect

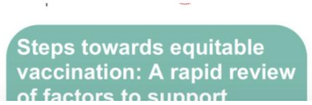
Language / Langue | Topic / Thèmes | Type of Resource / Type de ressource

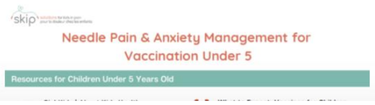






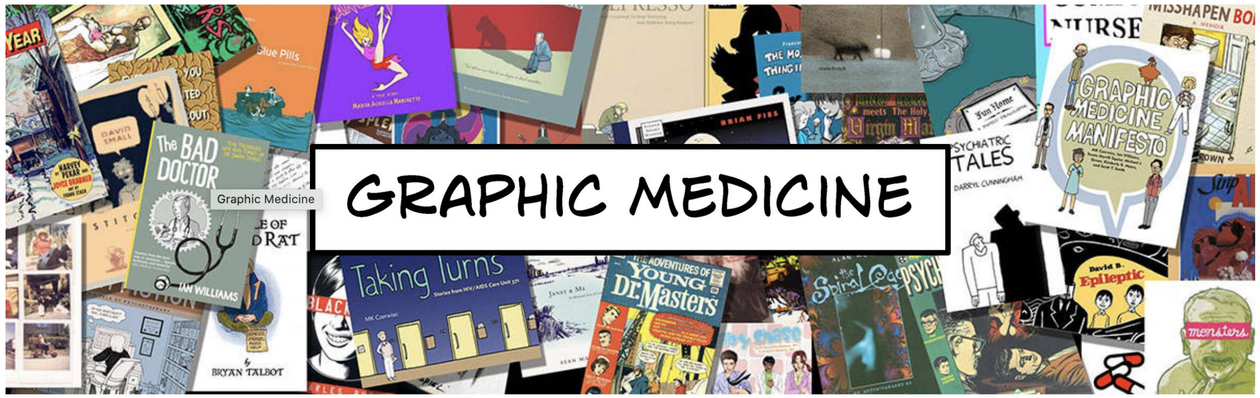






CALL FOR COMIC STRIPS

Join us in creating a comic book



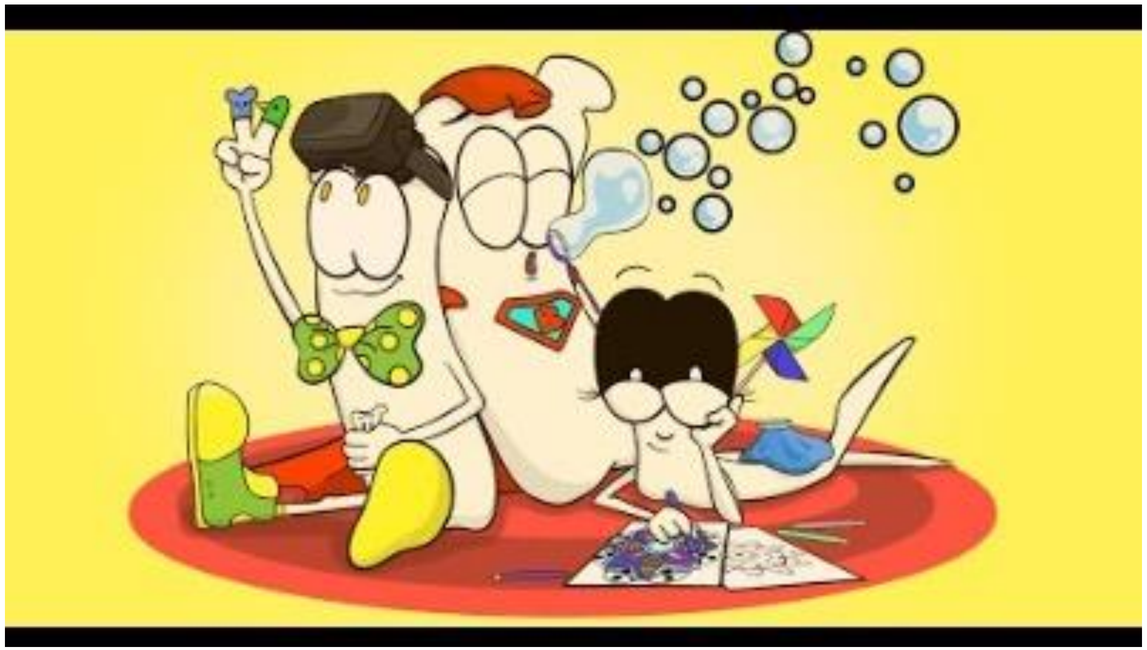
MCAF

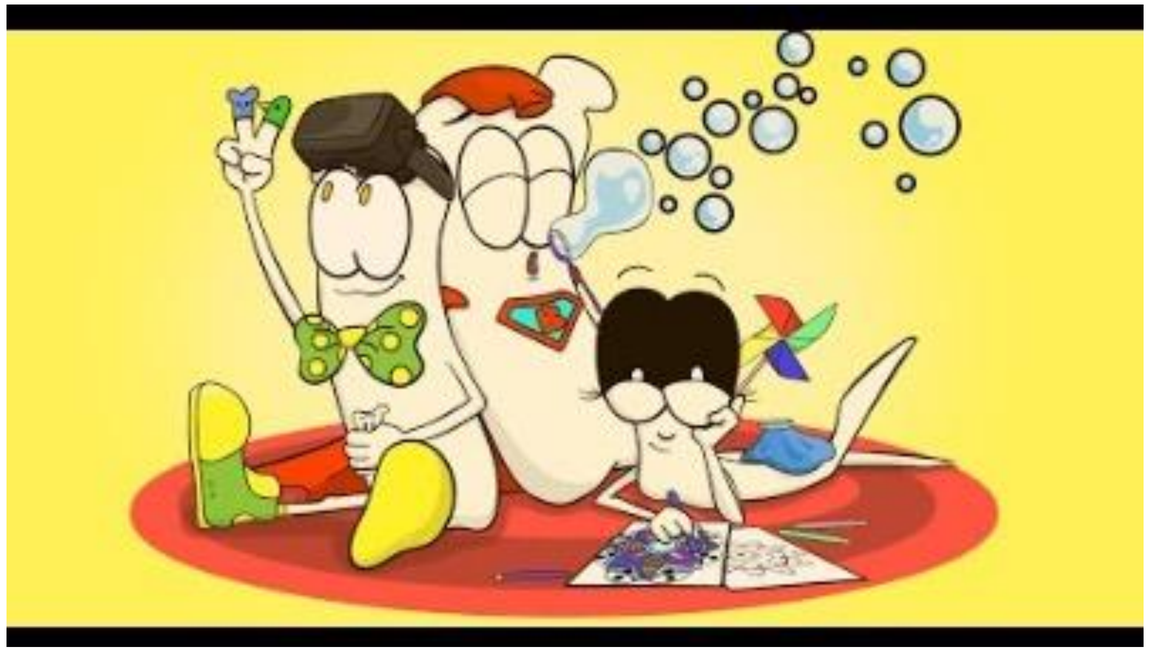
MONTREAL COMIC ARTS FESTIVAL

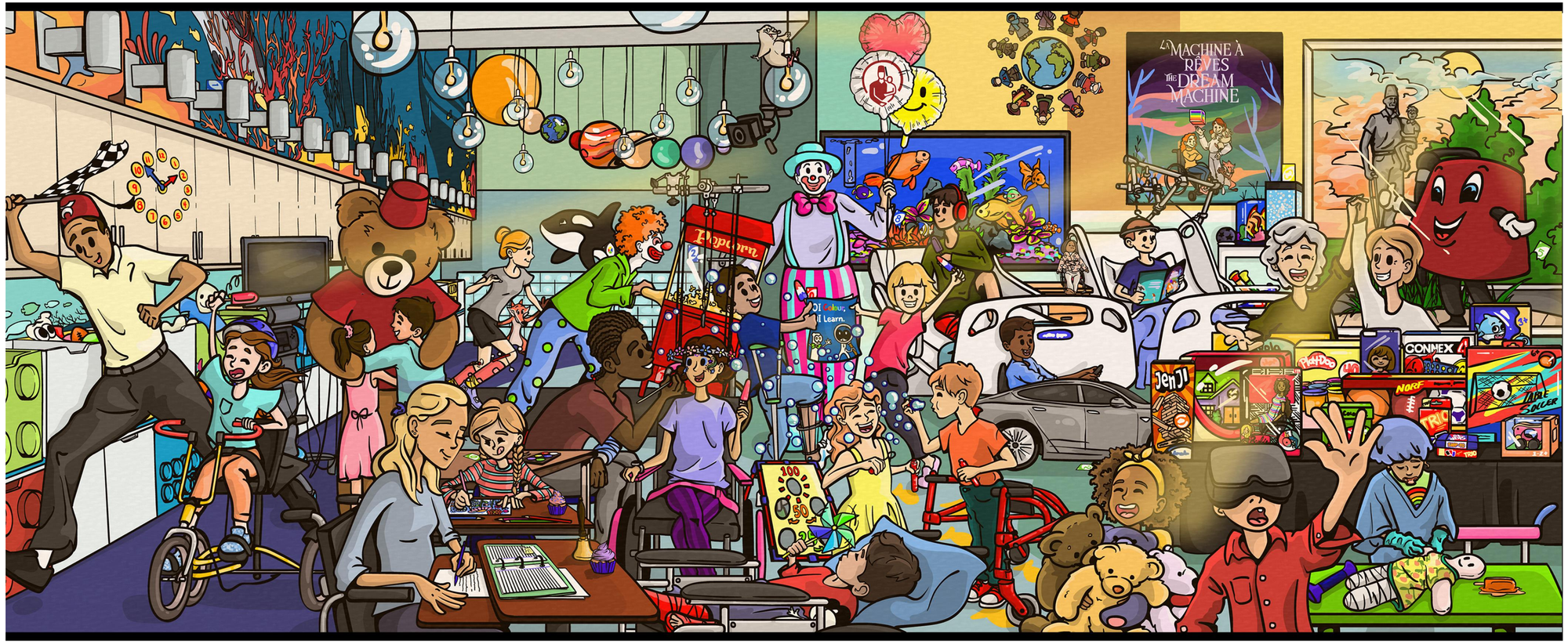
Hôpitaux Shriners pour enfants® Shriners Hospitals for Children® Canada

What Can We Do When Feeling Pain

Lorsque tu ressens de la douleur







CHERCHE & TROUVE!

ISPY!

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ACKNOWLEDGEMENTS

Tunis Shriners

McGill University

Hôpitaux Shriners pour enfants
Shriners Hospitals for Children®

Investissement Québec

Fonds de recherche Santé Québec

RSBO
Réseau de recherche en santé buccodentaire et osseuse