Feels like home
2025

ACADEMICS PACKAGE

#3

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Pre/In-Conference Challenge
Poster Presentation

Hi KG Teams! Welcome to your **third Academic Package**! We hope you've been enjoying the process of designing your community-based physical activity program as part of the case study challenge. If you carefully read your first package, you may remember a **hint** that your program design could be **shared in a new way** later on. Well, the time has come! We're excited to introduce the next phase of your challenge: Presenting your program through an **Academic Poster Presentation**.

This task is your opportunity to:
- Effectively communicate your program's design, goals, and rationale to your peers and attendees at Kin Games.
- Showcase your **expertise in kinesiology** by explaining the thought process and research behind your program.
- Engage in **meaningful discussions** and **connect** with other participants, judges, and professionals.

This additional challenge will help you refine your **scientific presentation skills** and share your hard work with the larger kinesiology community. We're thrilled to see your **creativity** and **knowledge** shine through in this exciting new addition to Kin Games!
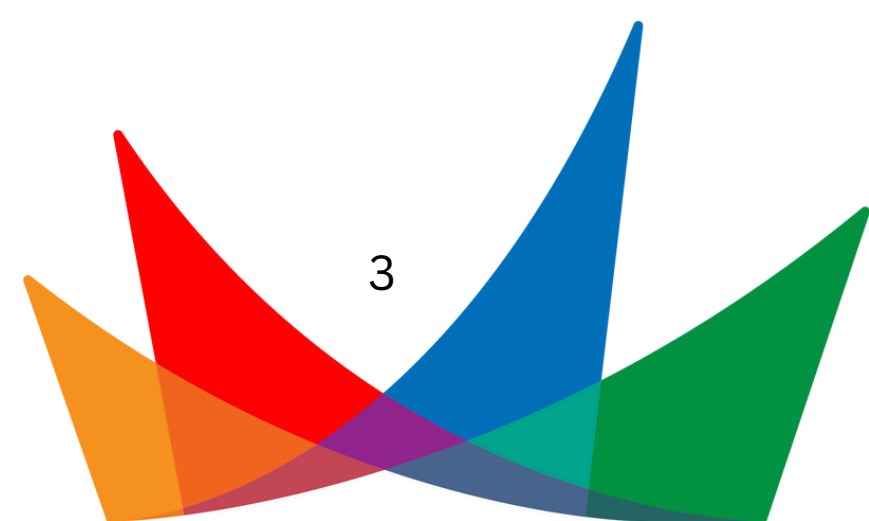
What You'll Be Doing...

Each team will create an Academic Poster that **visually** presents your physical activity program. During the conference, we will have 2-3 members of your team stand by your poster with a **short elevator style pitch (max 3 min)** to:
- Provide an overview of your program to attendees.
- Answer questions from judges and peers.
- Demonstrate the scientific and practical impact of your program design.

... What Needs to be Included

Each team will create an Academic Poster that **visually presents your physical activity program**. During the conference, we will have 2-3 members of your team stand by your poster with a short elevator style pitch to:
- Provide an overview of your program to attendees (think, short 3 min max elevator pitch!).
- Answer questions from judges and peers.
- Demonstrate the scientific and practical impact of your program design.

We would like your posters to include the following sections:
- **Title**
  - **Clearly** state the name of your physical activity program.
  - Use a large, bold font that is easy to read from a distance.
  - Include your team's name and university logo to personalize your poster.
- **Summary/Target Population**
  - Use your case study information to **briefly** describe the specific group your program is designed to serve.
  - Use visuals (e.g., charts, infographics, or images) to highlight key points.
- **Your program Goals/Objectives**
  - Try to use bullet points or short paragraphs for clarity.
- **Program Design**
  - It is up to you how you want to outline your program design. **Be creative!!**
- **Rational**
  - Your research, kinesiology principles, and evidence-based practices to **justify your program design**.
- **Conclusion**
  - A brief conclusion including your limitations and challenges
- **References**
  - We do not require a full reference list of the case study on the poster, only those you are **actively using** in the poster. We do recommend including a **QR code** on the poster with a link to references.

Design Tips for Your Poster

- **Clarity and Readability**:
  - Use **clear headings** and subheadings for each section.
  - Keep text **concise**; avoid long paragraphs.
  - Choose an **easy-to-read font** and use a font size large enough to be visible from a few feet away.
- **Visuals and Graphics**:
  - Use **charts, graphs, or infographics** to display data and simplify complex ideas.
  - Include relevant images, such as photos of the target population, program activities, or facilities.
  - Ensure visuals are **high-quality, labeled, and directly support** your content.
- **Color Scheme and Layout**:
  - Use a **professional and cohesive** colour scheme that enhances readability.
  - Organize your content into columns or sections for a **logical flow**.
  - Leave sufficient **white space** to avoid a cluttered appearance.
- **University Branding**:
  - Incorporate your university's logo and colours subtly to personalize your poster.
- **Interactive Elements (Optional)**:
  - QR codes or links to additional resources can be included to provide more information about your program.

Poster Dimensions & Printing

We would like your poster dimensions to be **24x36 inches** and presented in **landscape**. We would like one team captain to bring their poster with them to team check in on the first day of the conference. Our academics committee will be there to collect it from you.

If you are unable to travel with your poster, we are granting you the option to have us print your poster for you for the cost of **$28.50**. If you choose this option, you must send us an email by **February 14th** that you would like us to print it for you. The poster itself must be submitted **NO LATER than February 26th 2025 in PDF format** to **ebayne@kingames.ca** and **mwalsh@kingames.ca.** Any submissions after this deadline will be your responsibility to print and bring with you to the conference.
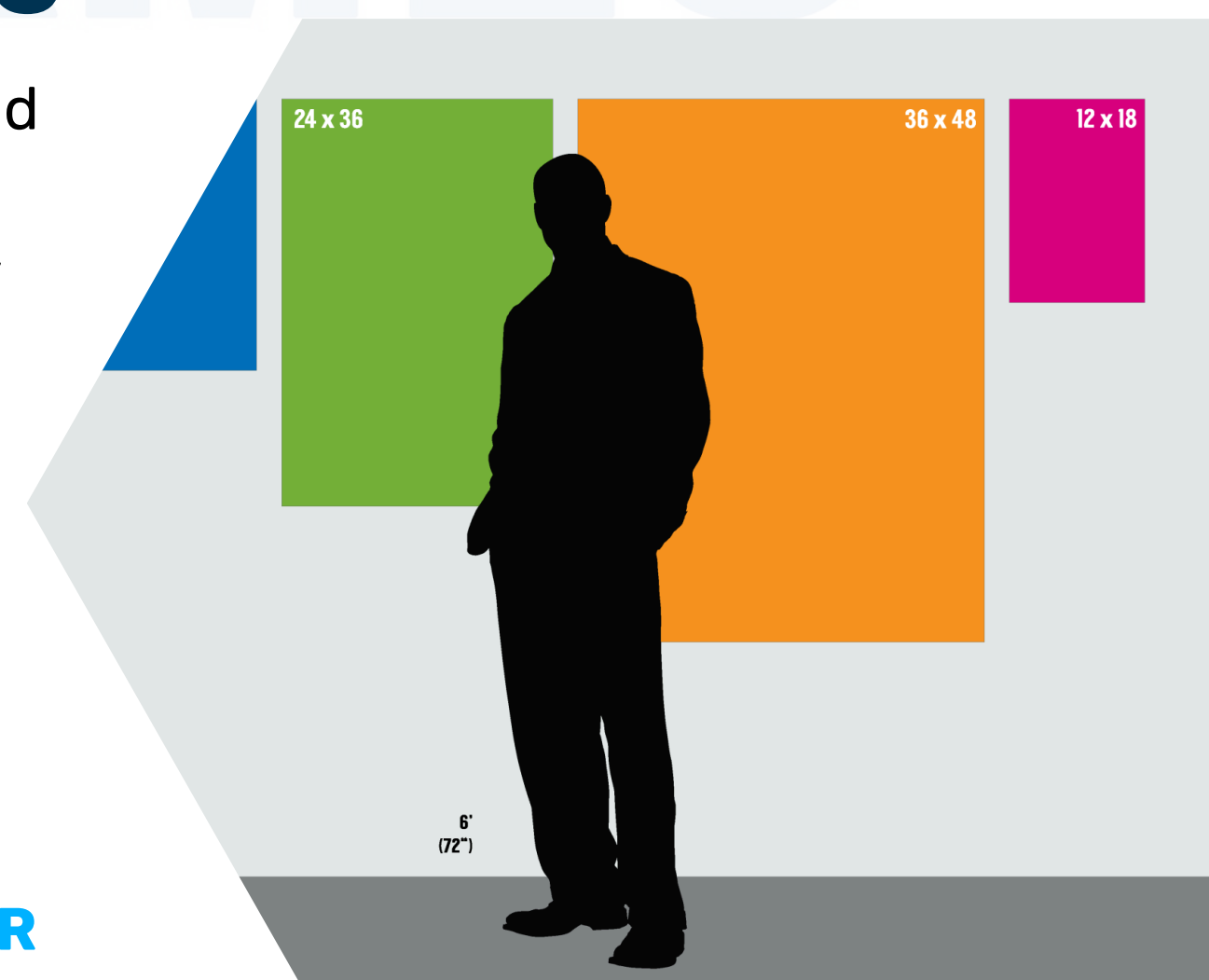
Some Examples of Academic Conference Posters

NOTE: THESE ARE NOT EXACT REPRESENTATIONS OF WHAT YOUR POSTER SHOULD LOOK LIKE

We just wanted to give you some inspiration on what you could do, PLEASE be creative, we want to see your beautiful styles mixed with your scientific knowledge.

TITLE: ACADEMIC POSTER CHALLENGE
Kin Games Academics Committee

SUMMARY/TARGET POPULATION
- Description: Briefly summarize the group your program serves using concise text.
- Visuals: Include charts, infographics, or images for emphasis. Examples: demographics, activity focus.

PROGRAM GOALS/OBJECTIVES
- Use bullet points or brief paragraphs.
- Highlight measurable outcomes or intended impacts. Examples: "Improve cardiovascular health by 20%" or "Enhance community engagement."

PROGRAM DESIGN
- Use bullet points or brief paragraphs.
- Highlight measurable outcomes or intended impacts. Examples: "Improve cardiovascular health by 20%" or "Enhance community engagement."

THE PROGRAM

Figure 1: Use a figure caption so that we know what you are trying to depict!

Figure 2: A Graph of happiness with our program
- Bullet points talking about our results
- Bullet points talking about our results

- Bullet points talking about our results
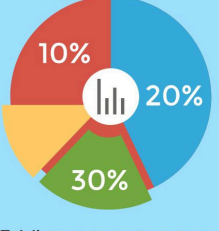- Bullet points talking about our results

Figure 3: Who uses our program

RATIONALE
- Summarize kinesiology principles, research, or evidence-based practices that support your design.
- Use graphs, tables, or images to illustrate key points.

CONCLUSIONS
- Briefly summarize key takeaways from your program.
- Include limitations or challenges encountered during the design process.

DIMENSIONS & SUBMISSION
- Dimensions: 24×36 inches.
- Printing: Bring a printed copy to the conference or email for a $25 printing option.
- Deadlines:
- Print Request Email: February 14th, 2025.
- PDF Submission: February 26th, 2025
- Late submissions require self-printed posters.

REFERENCES
References, shortened APA format

- Good amount of white space
- Shows off the program
- Very clear sections

- Creative colouring which follows a theme and highlights important parts
- a LOT of text, could summarize ideas better
- highlights keywords and important sections

Effect of Simulated Microgravity on Wayfinding in the International Space Station as Experienced in Virtual Reality

Walsh, M., Rastogi, A., Banerjee, R. Burles, F., Iaria, G.

Introduction
- **Wayfinding** is essential for everyday movement and is dependent on landmarks, **cognitive maps** (**CM**), & sensory integration (1)
- On Earth, gravity provides us with an orientational reference frame (2)
- Space hosts many factors that are detrimental to wayfinding, like **microgravity** (2)
- In microgravity, **vestibular** senses are altered and there are many more **degrees of freedom** (**DOF**) to movement than on Earth (3)
- By creating a **virtual reality** (**VR**) version of the International Space Station (**vISS**), we can examine wayfinding and CM formation in microgravity without leaving Earth

Objective & Hypothesis
OBJECTIVE: To examine how CM are formed and maintained in simulated microgravity

HYPOTHESIS: Participants who perform better on behavioural measures will perform better in vISS

Method
- 12 participants (58.3% male); 21.11 years (SD = 1.91)
- DAY 1
  3 behavioural tasks: Spatial Configuration Task (SCT), Mental Rotation Task (MRT), Four Mountains Task (FMT)
  VR familiarization and vISS Tour
- DAY 2-4 - 10 Trials of Main Task point in direction of node in vISS (CM measure) then travel to that node
- All VR completed laying horizontally to mimic vestibular downregulation
- Correlation between pointing accuracy and mean travel time between nodes (s) with SCT, MRT, FMT
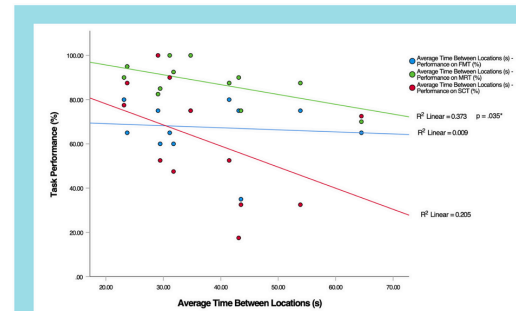- learning effects of pointing performance measured by repeated measures ANOVA

Results

Figure 1. Correlation of behavioural task performance (%) and average travel time between locations (s)

Travel Time (Figure 1)
- significant negative correlation with MRT (r = -.611, p = .035)
- non-significant, but negative trend with SCT (r = -.453, p = .139)

Pointing Performance
- No significant correlations
- highest correlative trend with SCT (r = .374, p = .231)

Performance Improvement
- Task day 3 performance significantly better (F(1.965, 214.24) = 6.69, p = .002) than task day 1 (p = .003) and task day 2 (p = .015)
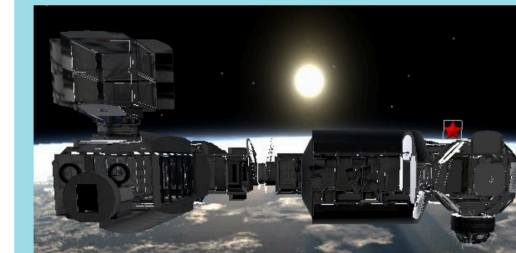
Figure 2. Lateral view of vISS

Discussion & Limitations
Discussion
- Mental rotation correlated with faster navigation
- Decreased reliance on vestibular sense along with increased DOF may require **higher reliance on mental rotation**
- Mental rotation previously found to be facilitated in microgravity (4)
- **Landmarks** important for orientation in microgravity, may help maintain upright
- Many subjects did not use landmarks in the vISS resulting in constantly changing orientations and possible increased reliance on mental rotation (5)
- previous studies indicate **impaired pointing performance in microgravity** (6)
- CM abilities on earth may relate to wayfinding and pointing in microgravity
- learning effect in pointing performance suggesting better CM over time

Limitations
- Unable to perfectly recreate microgravity environment, missing challenges such as isolation, radiation, lack of sleep and stress (2, 7)
- **Motion sickness** caused by VR limited time of testing sessions, may have allowed for memory consolidation of CM between task days (8)
- **Small number of subjects** leads to lower power in results, more testing needed

Conclusions
- Mental rotation and CM abilities on earth may facilitate wayfinding in microgravity
- Salient landmarks may aid in orienting, reduce DOF and reliance on mental rotation to make wayfinding more similar to on Earth
- Need adequate time for astronauts to create CM

REFERENCES

RUBRIC

Criteria	Poster Layout & Design (30 Points)
Level 4	**30 Points:** Poster is visually appealing, professional, and well-organized. Sections are clearly labeled, flow logically, and effectively guide the viewer. Use of visuals (charts, graphs, images) strongly enhances understanding.
Level 3	**24 Points:** Poster is organized and visually appealing. Most sections are clear, and visuals are relevant and contribute to understanding.
Level 2	**18 Points:** Poster has some organization but may lack clarity or cohesion. Visuals are present but minimally effective or underutilized.
Level 1	**4 Points:** Poster is disorganized or cluttered, making it hard to follow. Visuals are irrelevant, poorly executed, or missing.
Level 0	**0 Points:** Poster layout is incoherent and fails to communicate key information. No visuals used.
Criteria	**Presentation Delivery (30 Points)**
Level 4	**30 Points:** Presenters are confident, engaging, and professional. Elevator pitch is clear, concise, and effectively summarizes the program. Excellent audience interaction.
Level 3	**24 Points:** Presenters are mostly confident and professional. Elevator pitch is clear but may lack some impact. Audience interaction is effective.
Level 2	**18 Points:** Presenters are somewhat prepared but may lack confidence or professionalism. Elevator pitch is unclear or incomplete. Limited audience engagement.
Level 1	**12 Points:** Presenters are unprepared or struggle to communicate ideas clearly. Limited or no engagement with the audience.
Level 0	**0 Points:** Presenters are unprepared and unable to effectively deliver the presentation. No engagement with the audienc

RUBRIC

Criteria	Knowledge (30 Points)
Level 4	**30 Points:** Poster and Presenters demonstrate a deep understanding of their program, clearly articulating the rationale, design, and impact. Confidently answer all questions with detailed, accurate responses.
Level 3	**24 Points:** Poster and Presenters demonstrate good understanding of their program and can explain the rationale, design, and impact. Most questions are answered accurately.
Level 2	**18 Points:** Poster and Presenters have a basic understanding of their program but may struggle to explain certain aspects. Answers to questions are incomplete or lack detail.
Level 1	**12 Points:** Poster and Presenters show limited understanding of their program. Answers to questions are vague, unclear, or incorrect.
Level 0	**0 Points:** Poster and Presenters show no understanding of their program and cannot answer questions.

Criteria	Spelling, Grammar, & Language Use (10 Points)
Level 4	**10 Points:** Poster and presentation use professional language with no spelling or grammar errors. Communication is clear and concise.
Level 3	**8 Points:** Minor spelling or grammar errors that do not affect readability. Communication is mostly clear.
Level 2	**6 Points:** Some spelling or grammar errors that occasionally impact readability. Communication may lack clarity in parts.
Level 1	**4 Points:** Frequent spelling or grammar errors that affect readability. Communication is unclear or unprofessional.
Level 0	**0 Points:** Major spelling and grammar errors throughout. Communication is unclear or unreadable.

QUESTIONS?

Contact the nerds!

(aka your Academics Coordinators)

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