

A glowing lightbulb with a circuit board overlay. The lightbulb is on the right side of the image, with its filament glowing. A circuit board with various components and lines is overlaid on the image, extending from the left and right sides. The background is a solid blue color.

# ROLES OF GAMIFICATION IN YOUTH ENGAGEMENT AND EMPOWERMENT

Siu Ming Kwok, Dora Tam, Tara Collins, and Barbara Lee

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# AFFILIATIONS

- Dr. Siu Ming Kwok, Professor and Associate Director, School of Public Policy, University of Calgary
- Dr. Dora Tam, Professor, Faculty of Social Work, University of Calgary
- Dr. Tara Collins, Sessional Instructor, Faculty of Social Work, University of Calgary
- Dr. Barbara Lee, Assistant Professor, School of Social Work, University of British Columbia

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**Diversecities in Calgary**

**Hull Services in Calgary**

**Wood's Homes in Calgary**

**Center for Young Parents in Grande Prairie**

**Big Brothers Big Sisters of Lethbridge and District**

**McMan Youth, Family and Community Services Lethbridge and areas**

**Dept. of Family and Community Support Services in the County of Grande Prairie**



# OUTLINE



Theoretical  
Framework/ Method



What is Gamification?



Research Design and  
Participants



Findings



Discussion and  
Implications

4

# THEORETICAL FRAMEWORK AND RESEARCH METHOD

- Self-Determination Theory (SDT) (Ryan & Deci, 2000)
  - Individuals have intrinsic motivation to set goals and have interests, and are able to self-regulate and develop skills with adequate external motivation such as encouragement and recognition
- Participatory Action Research (PAR) (Bozlak & Kelley, 2015; Schneider, 2012).
  - Not only a research approach, but also a methodology that is user-led enabling the co-creation of knowledge to promote change through engagement & collaboration
  - “...the method of choice when youth’s voices need to be heard” (p.72)
  - “involving youth in iterative manner...whereby youth gain more voice, choice, and power with each iteration” (p.72)

# WHAT IS GAMIFICATION?

- Supported by both the SDT and PAR
- This is an intentional use of game elements for a gameful experience of non-game tasks and contexts (Seaborn & Fels, 2015)
  - Fun and purposeful
  - Alignment with social work group work practice
  - Resonates with youth who are born in the technology era



YOUTH  
IDEAS

X

WEB  
APP



Promote Mental Wellness

**Join our Co-Creation  
Focus Group to develop a  
web application to  
promote child and youth  
mental wellbeing**

Children and youth ages  
12-17 who live in Calgary  
are welcome to join at no  
cost on either day:

**Date & Time:**

Tuesday, July 19, 2022  
5:00pm – 7:00pm

**Location:**

Central Library, Meeting Room  
(800 3 ST SE)

OR

**Date & Time:**

Wednesday, July 20, 2022  
1:30pm – 3:30pm

**Location:**

Village Square Library Meeting Room  
(2623 56 ST NE)

To participate or for more info, contact our Project  
Coordinator at [CYM.H.Coordinator@ucalgary.ca](mailto:CYM.H.Coordinator@ucalgary.ca) or  
text/call 403-667-1216



This CYMH Project has been approved by the University of Calgary Conjoin Faculties Research Ethics Board (REB20-0719\_REN1). This project is supported in part by funding from the Social Sciences and Humanities Research Council of Canada and the University of Calgary.

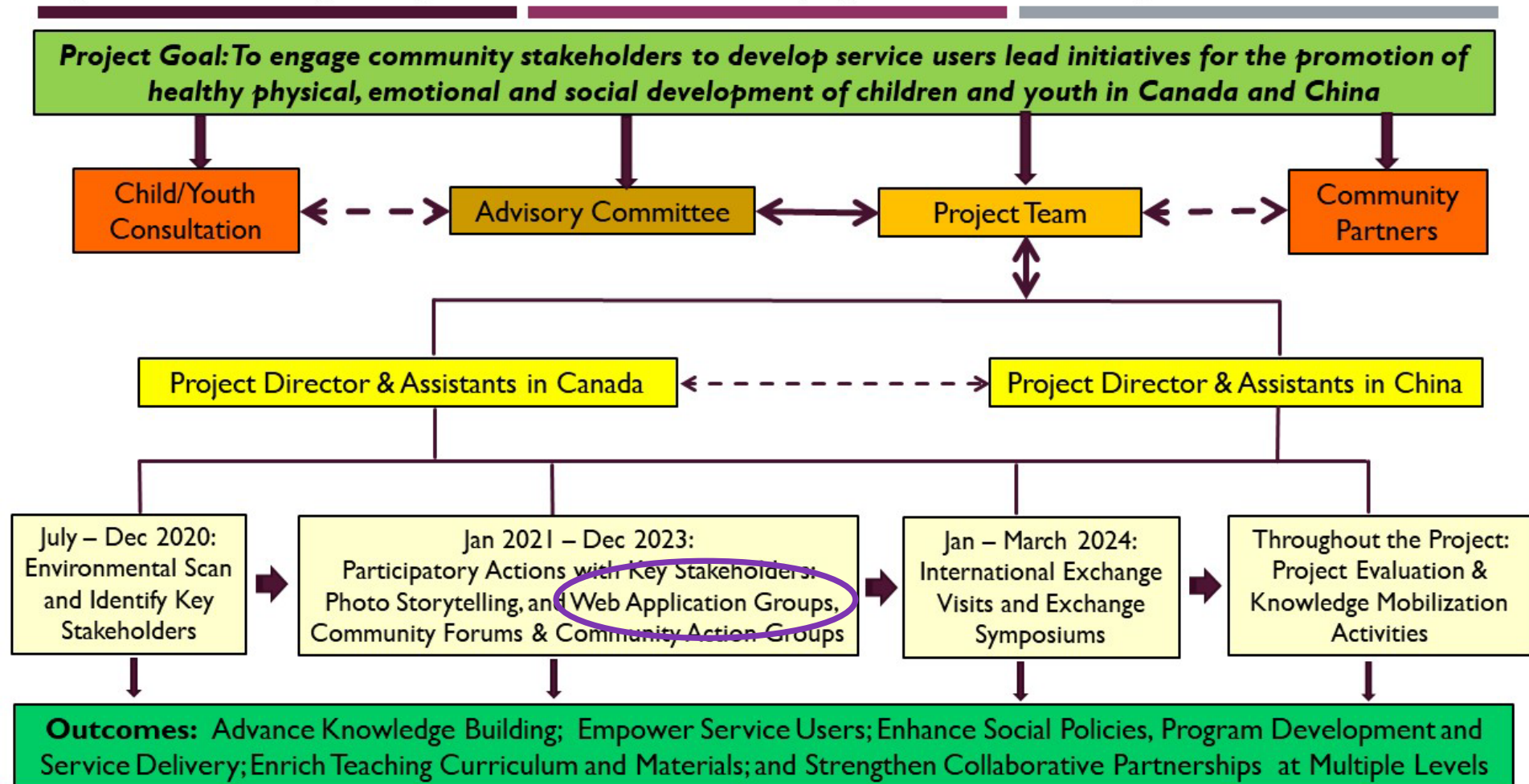
Posted 2022/06/24

## OBJECTIVES

- To co-create a web app with youth for promoting mental wellness and providing early intervention on youth mental health concerns
- To empower youth building a sense of engagement, confidence, autonomy, and well-being

# Web App Co-creation Focus Group is Part 2 of the Children and Youth Mental Health Project

Figure 1: CYMH Project Logic Model and Time Frame (May 2020 to March 2024)





# RESEARCH DESIGN:

- Focus Group: Web Application Co-Creation
- Theme: “Play and Create”
- Meet once for 2 hours
- 8 to 12 participants per group
- 2 facilitators and 1 youth support person per group





# PLAY

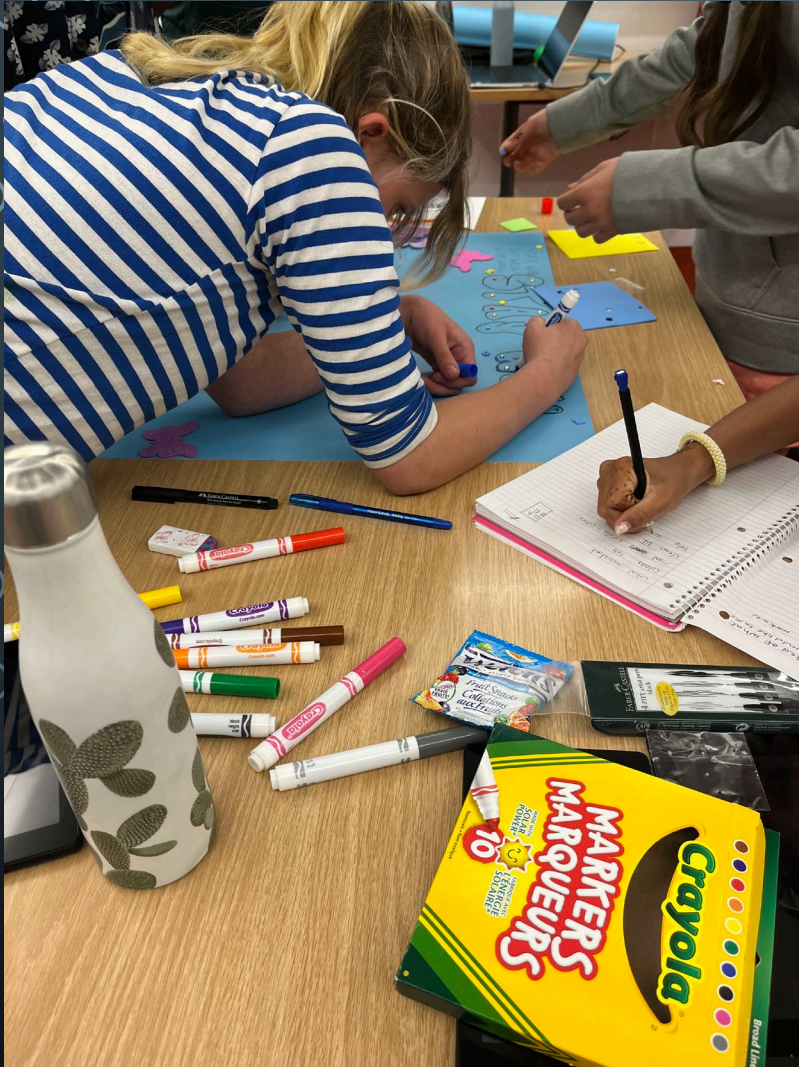
- Testing of 2 – 3 existing mobile apps on youth mental health
  1. Healthy Minds
  2. Super Better
  3. Virtual Hop box
  4. Smiling Minds
- Provide feedback:
  - ease of use, visual design, joyfulness, relevance/usefulness on youth mental health, continue to use, and recommendation to others





# CO-CREATE

- Present with CYMH Web App Prototype to improve youth mental health and resilience
- Work in small groups to strengthen the CYMH web app:
  - Contents and features



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SUMMARY

## Mood Tracker

Hi! How are you feeling today?



On a scale from 1 (lowest) to 5 (highest), how would you say the intensity of such feeling?

1 2 3 4 5

Let your friends know how you are feeling

SHARE

Not Feeling good? Click below to see the list of resources that may be useful.

RESOURCES





# Sharing with Large Group



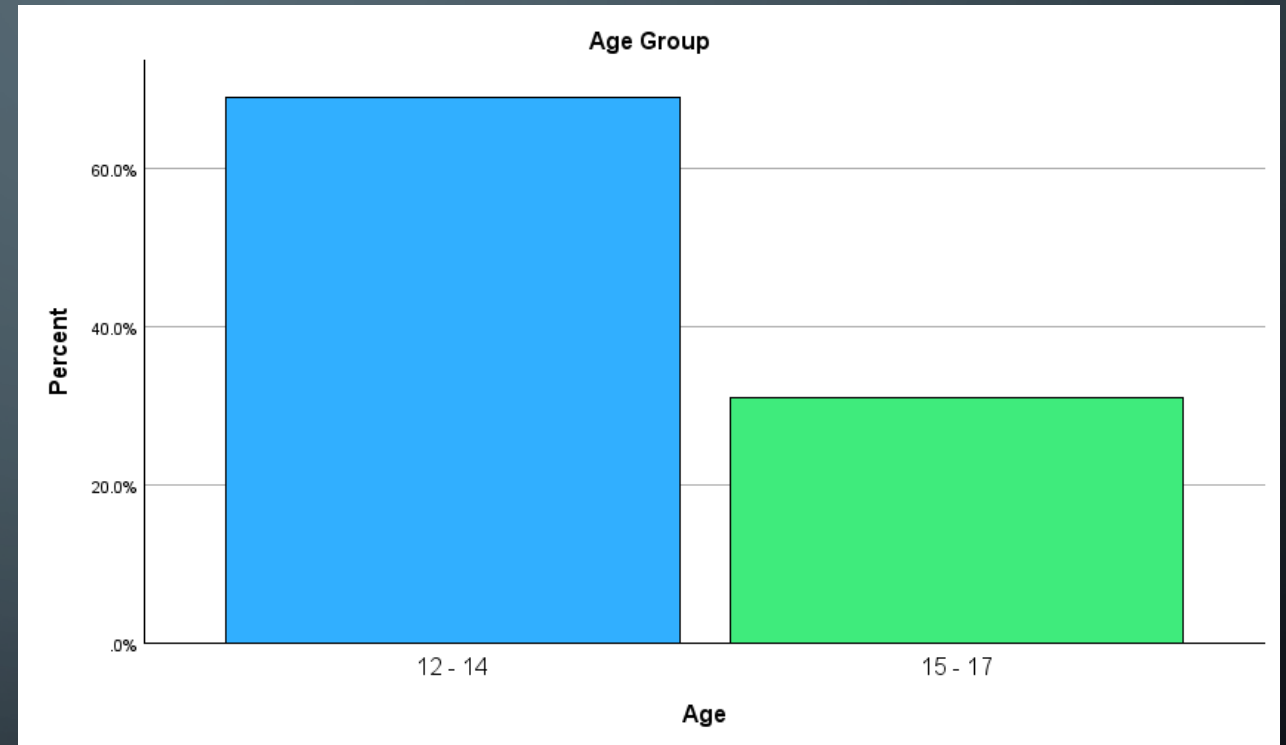
# PROGRAM EVALUATION

- One 10-point scale to rate the joyfulness in the focus group
- Four open-ended questions:
  - Like the most
  - Like the least
  - Meaningfulness
  - Future improvement
- Voluntary participation on program evaluation



## PARTICIPANTS (1)

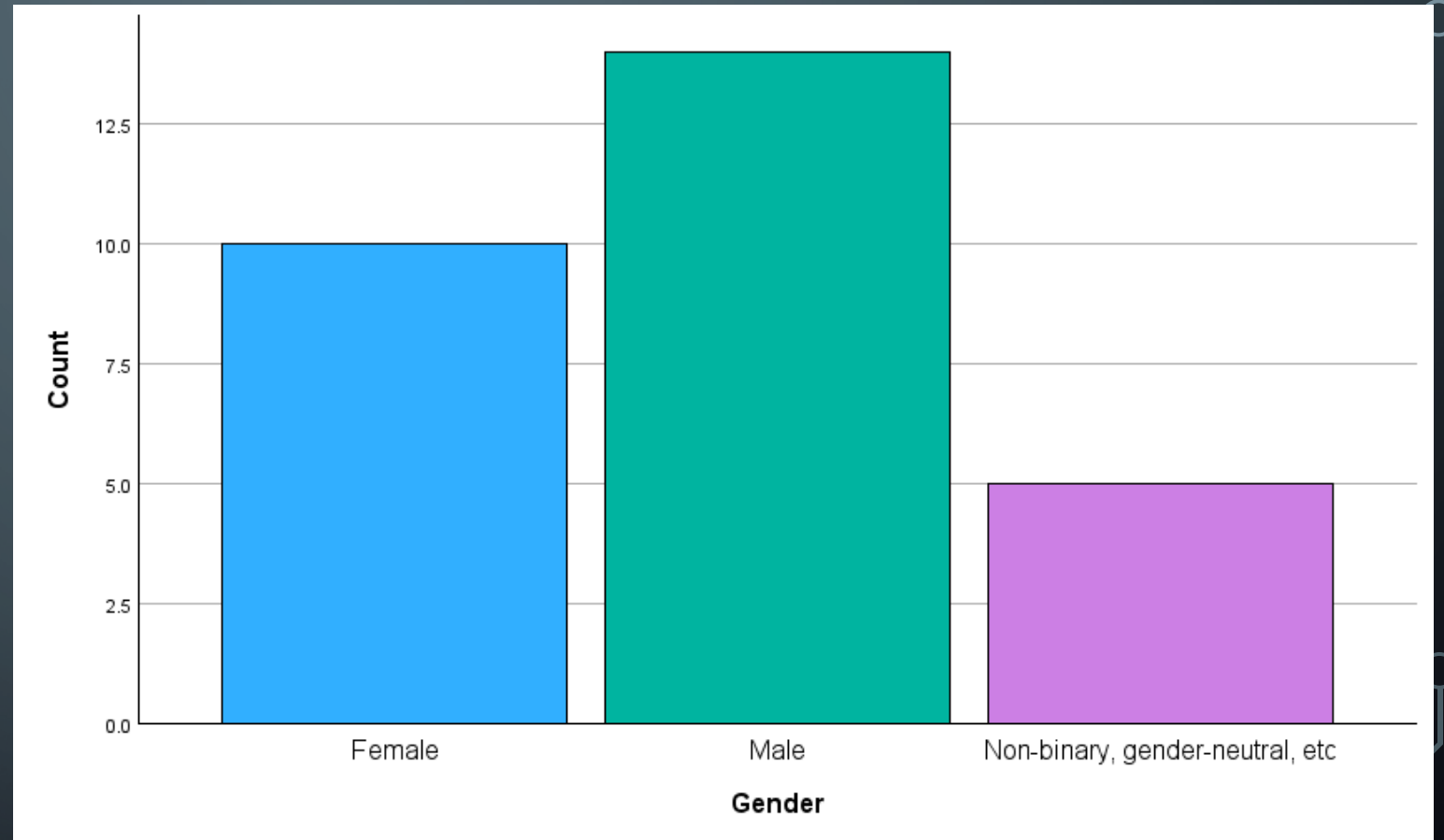
- Facilitated 4 groups in 2 cities in Alberta Canada between May and July 2022
- 29 youth participated
- More participants in the younger age group, 12 to 14 than the older age group, 15 to 17





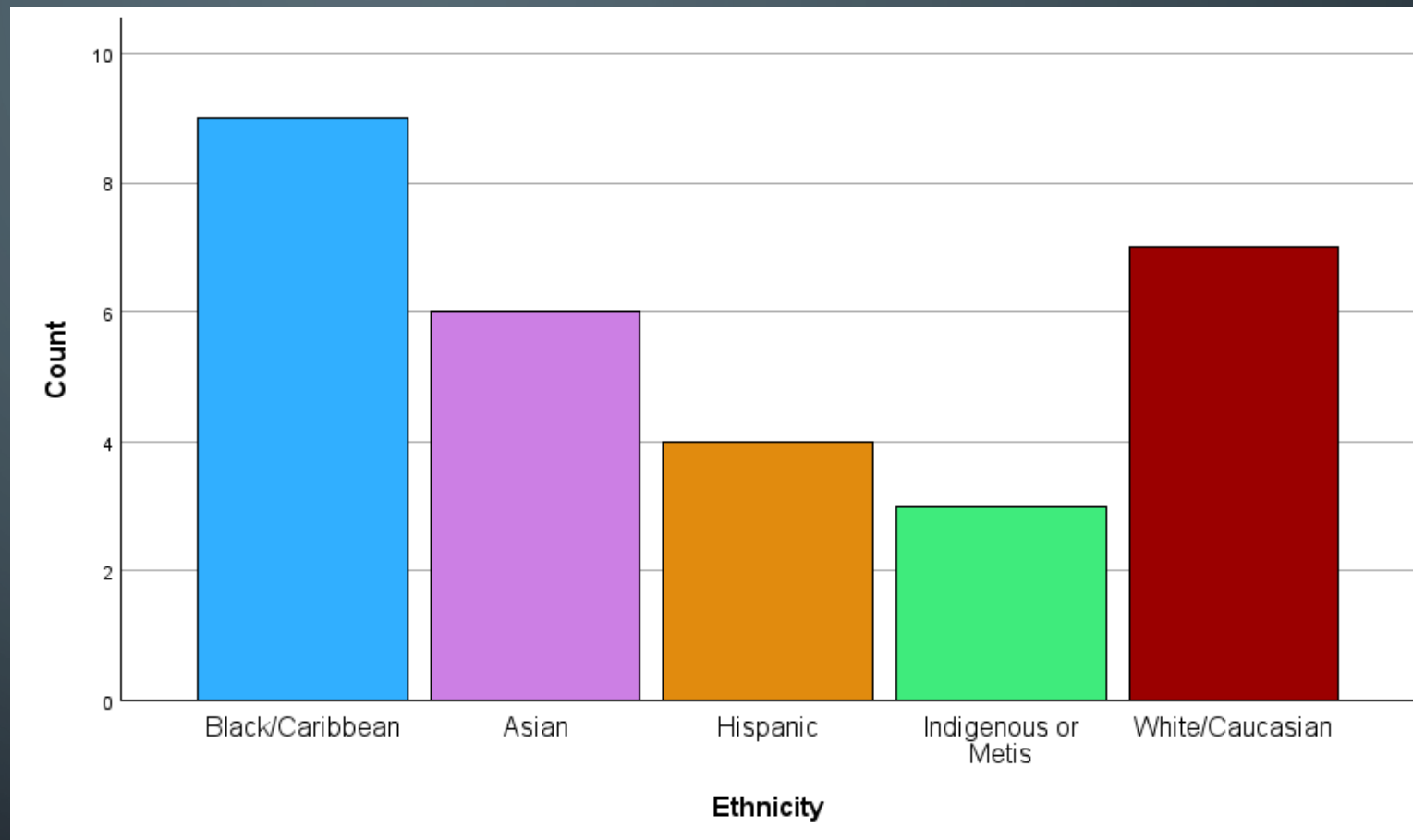
## PARTICIPANTS (2)

- High proportion of male participants



## PARTICIPANTS (3)

- Majority youth from racialized communities



# QUANTITATIVE FINDING

Research Question	Gamification Feature
How enjoyable was the Co-creation group on a scale of 10?	
<ul style="list-style-type: none"><li>■ Ranged between 8 and 10;</li><li>■ Mean = 9.29</li></ul>	Fun, intrinsic motivation



# QUALITATIVE FINDINGS (1)

Research Question	Findings	Group Features
■ Things participants liked the most about the Web App co-creation focus group	Creating the App together	Set goal, purposeful
	Make the poster together	Gameful experience
	Work with favorite people	Extrinsic motivation
	Gift card	Extrinsic Motivation
	Conversation	↑ Voices heard
	Sharing of Ideas	↑ Confidence
	Work together	↑ Sense of engagement
	Meet new friends	↑ Well-being

## QUALITATIVE FINDINGS (2)

Research Question	Findings	Group Features
■ Things participants liked the least	Majority loved everything	Youth-focused, Fun, Purposeful, Engaging
	That we were not able to write down the specifics of what might have improved the apps more, although I understand that may take a really long time to read through ahah. (C016)	<i>Counter to the objective of empowerment</i>

## QUALITATIVE FINDINGS (3)

Research Question	Findings	Group Features
<ul style="list-style-type: none"> <li>How meaningful for creating this Web App for youth?</li> </ul>	(Experience) is meaningful because you get to use that when you go into university (C014)	Individual set goals
	Reviewed (3 apps) and put them into practice (to create) (C016)	Develop skills
	I think it's very meaningful and I congratulate the CYMH (Project) for doing so because there are many children struggling with this issue and would likely need this sort of help. (C017)	Intrinsic motivation, purposeful,



## QUALITATIVE FINDINGS (4)

Research Question	Findings	Group Features
■ Things to improve for future similar groups	Majority had nothing to add/change	“Play and Create”
	I think perhaps allowing us to just write some things down in the feedback form we got about the apps would also be helpful (C016)	
	I wished we had more time to work on our apps (C014)	

# DISCUSSION/IMPLICATIONS (1)

- Successful in recruiting participants from diverse backgrounds, specifically youth from racialized communities
- The gameful nature of the co-creation group well-suited to the target population – youth who are born in technology era
- The group purpose of creating a Web App to improve youth mental health supports both intrinsic and extrinsic motivation as people were just coming out of the COVID-19 pandemic and the youth has the higher rate of mental health issues reported (Stephenson, 2023)

## DISCUSSION/IMPLICATIONS (2)

- Program evaluation results demonstrated positive outcomes in the use of gamification design to engage and empower youth
- Recruitment and group design have to take age and maturity of youth into consideration
  - Older youth could be involved in more leading role in the group
  - Adjustment of group design/activities may be needed on the spot despite consistency may be at stake when multiple groups are being facilitated; however, the participants and creating the best experience is more important, but this requires skills of the facilitator

# DISCUSSION/IMPLICATIONS

- Program evaluation results support the use of Participatory Action Research
  - *“involving youth in iterative manner...whereby youth gain more voice, choice, and power with each iteration” (p.72) (Bozlak & Kelley, 2015)*
  - We have a number of youth continued through all phases of the CYMH Project and became a champion and took on leadership roles
- Also support future research on the use of digital technology to improve youth mental health and wellness
  - The duration of the co-creation group needs to be proportionally realistic for apps development (e.g., content, coding, & validations)



# SELECT REFERENCES

Bozlack, C.T., & Kelley, M.K. (2015). Participatory action research with youth. In H.A. Lawson, J. Caarinf, L. Pyles, J. Jurkowski, & C. Bozlak (Eds), *Participatory Action Research* (pp. 67-89). Oxford University Press

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IF YOU ARE INTERESTED TO DISCUSS FURTHER ON THE USING  
DIGITAL TECHNOLOGY TO IMPROVE YOUTH MENTAL HEALTH

For more information or collaboration contact:

Dr. Dora Tam at [dtam@ucalgary.ca](mailto:dtam@ucalgary.ca)