Do Female Avatars Encourage Mental Health Support in Gamified Peer to Peer (P2P) Cognitive Behavioural Therapy (CBT)?

A study to understand if the Proteus Effect can persuade helpfulness in a gamified P2P CBT platform when female avatars with stereotypical supportive qualities are used by men.

**Problem for P2P CBT**
- Online CBT and P2P are effective, accessible, and affordable options for non-severe mood disorders
- Dr. Robert Morris combined the two effectively in lab, but there were problems of low engagement when commercialized

**Gamification as a Solution**
- Shown effective for encouraging health behaviours such as drug adherence, pain management, and fitness
- Avatars and narratives provide persuasive experiences in effective gamification

**Research Questions**
- **RQ1:** Would using “helpful” avatars in a CBT P2P serious game motivate higher engagement than one using “unhelpful” avatars among men?
- **RQ2:** Would using “helpful” avatars in a CBT P2P serious game facilitate attitude change towards helping more strongly than one using “unhelpful” avatars among men?
- **RQ3:** Would engagement levels and avatar identification be mediators and confounders to attitude change?

**Expected Contributions**
- Evaluation of the Proteus Effect for motivating attitude change towards helping others using gendered stereotypes in fantasy narratives
- Identification of opportunities provided by avatars to encourage engagement in P2P CBT
- A preliminary design on improving engagement in P2P CBT platforms with gamification

**Limitation:** Due to ethical limitations and limited resources, true P2P testing cannot be done at this point for the safety of our participants.

**References**

**Gameplay**
Single-player role-playing computer game
1. Customize a premade character and navigate a fantasy themed narrative.
2. Respond to NPCs’ negative thoughts using a CBT template to advance game. NPCs have meta analyses supporting this approach.
3. Activity rewarded with more narrative and cosmetic rewards to character.

**Study Design**
In-lab study
- Excludes: Non-male identifying, mental health service workers, under 18, non-English speakers

**Recruitment**
Posters on UW Campus Slides in classrooms of agreeing instructors

**Reimbursement**
$15 CDN

**Operationalization of Metrics**
- **Engagement (RQ1)**
  - Average length of words per submission
  - Time spent per log in
- **Attitude change (RQ2)**
  - Change in Helping Attitudes Scale score
- **Mediators and confounders (RQ3)**
  - Big Five Inventory Short Form
  - Initial Helping Attitudes Scale score
  - Identification for the Proteus Effect (Exit)
    - Narrative Transportability Scale Short Form
    - Avatar Similarity Questions
    - Semi-Structured Interview

**Study Procedure**