

Canadian adaptation of an intervention aimed to improve daily functioning of individuals living with chronic pain: study protocol of REVEAL(OT) Canada

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BACKGROUND

- Living with chronic pain (CP) implies major **lifestyle changes**¹.
- Few interventions specifically target **occupational outcomes** in this population².
- More efficient to **adapt an existing intervention** than develop a new one³ based on a **rigorous adaptation process with partners**⁴.
- **Redesign your Everyday Activities and Lifestyle with Occupational Therapy (REVEAL(OT))** was initially developed and studied in a Danish multidisciplinary specialized pain clinic⁵ and has a great potential to be adapted and tested in Canada.

OBJECTIVES

- Define and refine REVEAL(OT)/CA with partners**
(authors of original intervention, people with lived experience, clinicians, managers)
- 1) co-development of the **hypothetical pathway** describing intervention components and their potential mechanisms of action and the adapted **intervention manual**,
 - 2) optimization of **acceptability** of intervention content and format, and **feasibility** of its delivery;
 - 3) Initial **delivery** of the intervention to explore acceptability, feasibility and mechanisms of action of REVEAL(OT)/CA;
 - 4) **co-refinement** of REVEAL(OT)/CA to generate a final manualized version.

REVEAL(OT) INTERVENTION

- **Theoretical basis:** Occupational science, occupational therapy
- **Objective:** Enhance CP management through personalized lifestyle changes
- **Components:**
 - ✓ 2 -4 individual sessions (at the clinic / at home / by the phone)
 - ✓ 4- 8 group sessions (didactic presentations / discussions / skill training)
 - ✓ Personal experience (skill training, assistive devices loans, lifestyle diary)
 - ✓ Cooperation between OT unit and pain clinic
- **Topics:**
 - ✓ Occupation for health & well-being
 - ✓ Benefits of daily physical activity
 - ✓ Meals and eating habits
 - ✓ Occupational balance and time management
 - ✓ Productivity/domestic and out-of-home activities
 - ✓ Energy conservation
 - ✓ Ergonomics at home and work
 - ✓ Flow experience and leisure
 - ✓ Hobbies
- **Duration:** 12-15 weeks
- **Effects:** Improved occupational performance and satisfaction
- **Feasibility:** 3 iteration phases to improve outcomes and implementation

METHODS

- **Participatory action research**
- **Multi-method study design** in 2 phases: <https://osf.io/8gksa/>
- **ORBIT Model**⁶
- **Advisory Committee** involved at each step
- **2 Montreal pain clinics** (CHUM & MUHC)

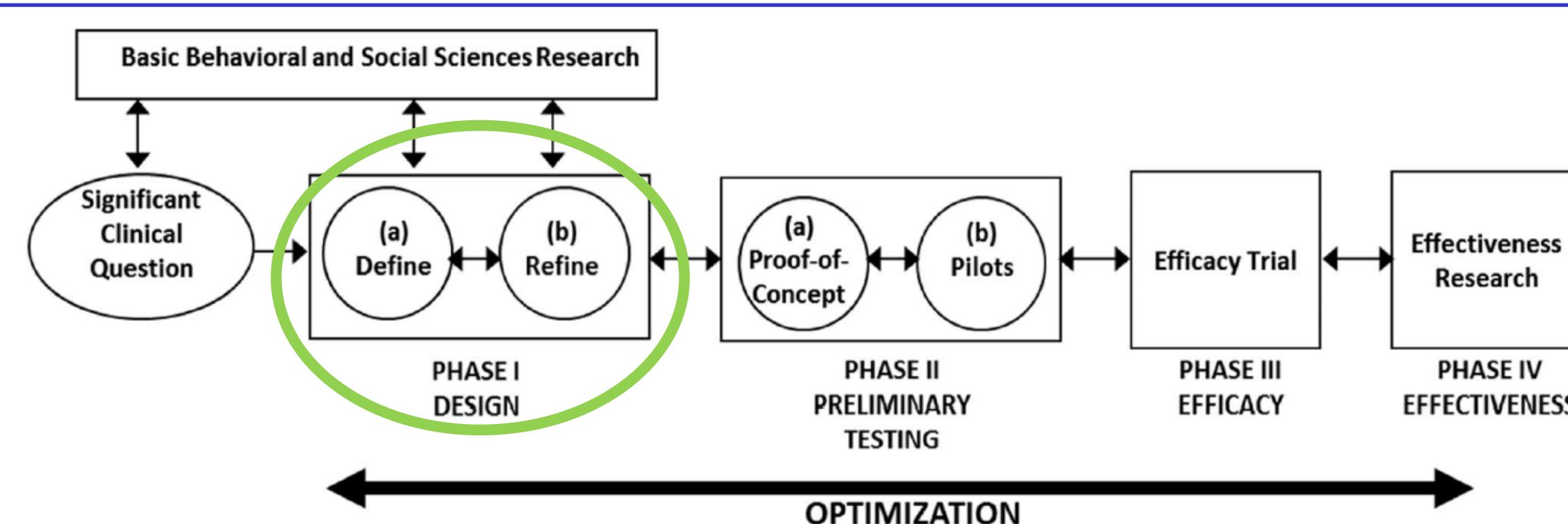


Figure 1. The ORBIT model for behavioral treatment development.

REVEAL(OT)/CA co-design

WP1: Intervention co-development

- 1.1** Develop a first draft of the **hypothetical pathway** of the intervention
- 1.2** Redact a **knowledge-to-practice gap**
- 1.3** Conduct **focus groups** with partners
- 1.4** Conduct **workshops** with the advisory committee to codevelop the hypothetical pathway of REVEAL(OT) and the first version of the intervention manual, and finalize WP2 methodology

Milestones*:

- (a) Hypothetical pathway is mapped out
- (b) Intervention manual is co-developed
- (c) Acceptability of the intervention content and format, and feasibility of its delivery are judged favourable
- (d) WP2 methodology is developed with the advisory committee.

*In collaboration with the advisory committee

WP2: Intervention refinement

- 2.1** Carry out the **intervention**
- 2.2** Conduct **workshops** with the advisory committee before and after each round of intervention to refine the intervention manual.
 - ✓ Questionnaires with patients (pre-post)
 - ✓ Interviews with patients and partners (post)
- 2.3** Evaluation of data and **repetition of 2.1 and 2.2** until the manual is optimized and ready for effectiveness testing

Milestones*:

- (e) The research team and the advisory committee will determine completeness, acceptability, feasibility and anticipated benefits of REVEAL(OT)/CA
- (f) Intervention manual is finalized
- (g) A strategy for the design and funding of future implementation and efficacy trials is established

*In collaboration with the advisory committee

Recruitment	Data collection	Analysis
<ul style="list-style-type: none"> •Patients: CP, Fr/En, ≤1y follow-up •Clinicians: ≥1y •Posters & invitations 	<ul style="list-style-type: none"> •Sociodemo questionnaire •Focus groups: ≈ 90min <ul style="list-style-type: none"> •≈ 20 patients / site •≈ 10 clinicians / site •≈ 2 managers / site •1 advisory committee member 	<ul style="list-style-type: none"> •Rapid analysis (hypothetical pathway) •Reflexive analysis (intervention)

Recruitment	Data collection	Analysis
<ul style="list-style-type: none"> •Patients: CP, Fr/En, internet access •Clinicians: ≥ 1 meeting with 1 patient •Posters & invitations 	<ul style="list-style-type: none"> •Patients (n≈40): <ul style="list-style-type: none"> •Sociodemo questionnaire •Pre/post questionnaires •Patients (n≈4), clinicians (n≈2), managers (n≈2): <ul style="list-style-type: none"> •Semi-structured interviews 	<ul style="list-style-type: none"> •Rapid analysis (main concerns) •Reflexive analysis (lived experience)

STRENGTHS

- **Rigorous methodology**
- **Research team's expertises** and **advisory committee's involvement**

LIMITS

- Possible **coordination challenges** between both clinics
- Possible differences between both **pain clinics' settings**

CONCLUSION

- One of the few available studies about intervention **specifically targeting occupational needs** of individuals living with CP
- Set the stage for **future implementation studies** about lifestyle-oriented intervention in CP management
- Supports the **deployment of OT's role** with this population.

FUNDING



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