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Using the Theoretical Domains Framework to Identify Barriers and Facilitators to Exercise Among Older Adults Living with HIV

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Study Background and Purpose

- Quality of life and life expectancy have improved for people living with HIV (PLWH).(1)
- However, PLWH experience a higher prevalence and impact of comorbidities.(2)
- Exercise interventions are recommended, (3) but many PLWH are not meeting current exercise guidelines.(4,5)
- The Theoretical Domains Framework (TDF) helps identify relevant mediating factors of behaviour change that can be targeted using behaviour change techniques.(6)

Purpose:

- To use the TDF to investigate the physical activity barriers and facilitators of older PLWHs
 - Particularly barriers and facilitators to participating in yoga
 - Currently recruiting for a pilot randomized trial involving yoga

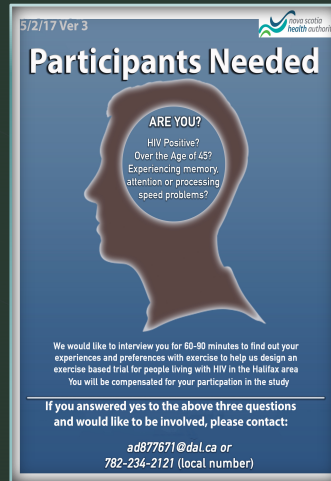


Domains of the TDF:

Social Influences	Environmental Context and Resources	Reinforcement	Intentions	Social and Professional role and identity	Knowledge	Beliefs about consequences	Optimism	Emotion	Behavioural Regulation	Skills	Memory, Attention, Decision Processes
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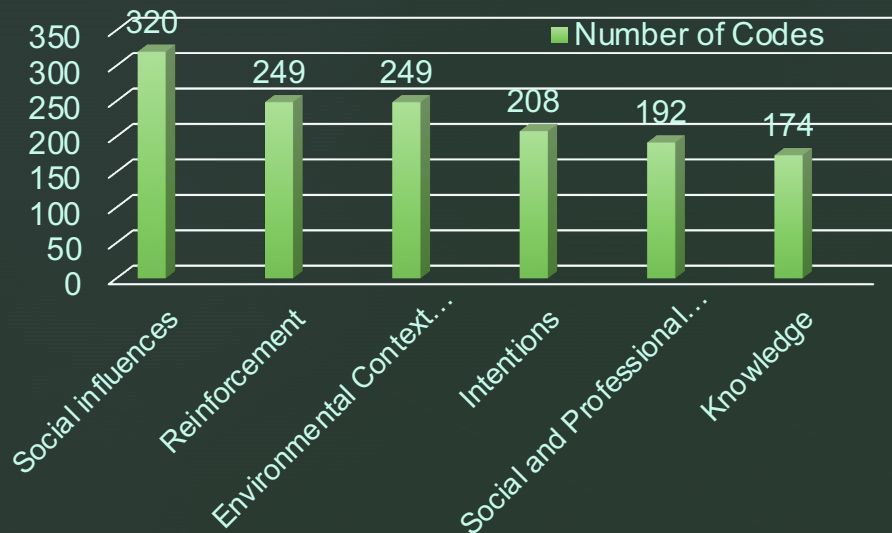
Methods, Data Collection, and Analysis

- Qualitative, in-depth, key-informant, semi-structured interviews with 12 participants
- Inclusion criteria: aged 45 and older, HIV positive, self-identified cognitive difficulties
- Demographic questionnaire
- Interview guide was developed using a committee of people with HIV in Halifax



- Interviews were audio-recorded, transcribed verbatim, then de-identified.
- De-identified transcripts were uploaded onto NVivo11 and the data were coded according to the TDF using deductive content analysis.
- Two independent investigators created a coding guideline, coded each transcript by paragraph, and met frequently.

Results



- 12 participants
 - 9 males, 3 females
 - Mean age: 56.6
 - 20.0 years living with HIV
 - All taking antiretrovirals
 - All had undetectable viral loads
 - Mean CD4 count: 835.5

- **Facilitators:** HIV diagnosis reinforces positive health behaviours, prioritizing exercise over other activities, physical and mental benefits, encouragement from others, technology
- **Barriers:** negative experiences with health care workers, stigma, HIV medications, side effects, comorbidities, weather, injuries, lack of motivation, lack of self-efficacy unfamiliarity with yoga, lack of knowledge of exercise guidelines, lack of information about exercise prescription

- *"Confusing. I have no idea. I know that [yoga is] a meditation. I'm not sure if it's an actual workout or not because I never really saw too much physical stuff associated with yoga. But I would have to say I'm almost in the dark with it." P002*

Discussion and Key Messages

- Our study aligns with previous work indicating positive relationships between perceived health status and participation in physical activity.(9)
- The finding that lack of self-efficacy is a barrier to exercise is of concern because self-efficacy is a significant predictor of adherence to HIV interventions, including exercise.(10, 11)
- Psychological attributes (ie. self-efficacy) may be more influential mediators of adherence to physical activity than physical characteristics.(10)
- Most participants in this study spoke of the mental and physical benefits as motivators to being physically active.
- Many participants were not receiving advice about exercise parameters from their health care providers.

Key Messages:

- PLWH experience numerous barriers to physical activity but also identify many facilitators to motivate engagement.
- Researchers and clinicians designing exercise interventions for PLWHs should incorporate strategies to address these obstacles.
- We recommend that health care providers offer basic exercise information, particularly instruction on weight-bearing and balance exercise.(12,13)
- Lack of knowledge related to physical activity highlights the role of physical and occupational therapists in the rehabilitation cascade for people living with HIV.