Who Are You and How Do You Move?: A Study Proposal
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ABSTRACT

Only 21% of U.S. adults meet the recommended guidelines for physical activity (CDC, 2014) despite of widespread advertising of the power of exercise to improve health and prevent disability. Racial minorities and older adults, growing parts of the U.S. population, are even less likely to meet these guidelines (CDC, 2014). This study will take three approaches to better understand the role of identity in exercise engagement among Black older adults (BOAs). Quantitative inquiries will explore the relationship between physical activity, physical activity participation, and physical function. Qualitative inquiry will explore how BOAs conceptualize physical activity and relate it to their concepts of self. Outcomes of the study will be used to gain insight into whether identity has a role in physical engagement and whether it could be leveraged to improve healthy activity engagement.

RESEARCH DESIGN

Study Context

Several factors, including environment, race, efficacy, and competence, have been explored in an attempt to improve understanding of physical activity motivation and engagement (Braveman & Gottlieb, 2014; Chase, 2013; King et al., 2000; Markus, Cross, & Wurt, 1990; McAuley, 1993; Moore, 1993.) Identity, which encompasses all of these factors, has shown to relate to activity in younger white individuals but the relationship has not been well examined in minorities or older adults. It is unknown how Black older adults view themselves or their agency in relation to activity practices.

Study Participant Criteria

- Adults 65 and over (N=40)
- Self-identified as Black or African American
- Negative for cognitive, neurological, musculoskeletal, or cardiovascular impairments that limit activity
- Community dwelling
- English language speakers

Targeted Data:

- Demographics (age, gender identity, SES, living environment, health and activity history)
- Modified Exercise Identity Scale (mEIS) score (Perras, Strachan, & Fortier, 2016)
- Physical function (gait speed, grip strength, sit to stand test)
- Physical activity journal (Anderson & Cychoz, 1994)
- Interview recordings & field notes

Study Timeline:

Demographic, identity, and activity readiness data will be collected first, available in paper and online formats. Physical function data collection will occur next, at least one week after survey completion to reduce the potential impact of priming on task performance. A physical activity journal will then be completed by subjects, concluding quantitative data collection. A subset of study participants will then be selected for qualitative data collection via interview.

Three Part Study Design

Part 1: mEIS score correlated with physical activity levels Correlational study examining the relationship between identity and reported volume (minutes) of moderate to vigorous physical activity (24 day period). Study is designed to determine strength of relationship and provide insight into whether the phenomenon of correlated identity and activity occurs in Black older adults. Regression analysis will be used to examine relationships between activity identity, exercise behavior, age categories, and gender identity.

Part 2: mEIS score correlated with physical function measures Correlational study examining the relationships between identity and three validated measures of physical function in older adults; Gait Speed (Guralnik et al., 2000), Grip Strength (McGrath et al., 2018), and 5 Times Sit to Stand Test (Buotao et al., 2008). Study is intended to provide insight into whether higher physical identity activity correlates with improved physical function in adults as they age.

Part 3: Exploration of how BOAs with strong identity engage conceptualize physical activity and frame their identities in relation to that concept Case Study designed to provide insight into the ways in which identity is defined, related to, and sustained as a function of an individual’s concept of self. Study participants will be selected based on strength of EIS score. Framework analysis of recorded and transcribed interviews will be used to highlight reoccurring themes and relationships. Researcher will integrate field note to enrich contexts of reporting. Analysis of data to be verified through secondary readers and subject feedback.

Theoretical Frameworks

Quantiative research methods are anchored by the International Classification of Function, Disability, and Health (ICF Model), which underlies the Physical therapist practice and highlights the role of person and environment on participation (APTA, 2012; Jette, 2006), as well as Social Determination Theory (SDT), which provides a framework that models identity formation and maintenance while bridging the concepts of the psychological and physical self (Strachan, Fortier, Perras, & Lugg, 2013). Qualitative research is anchored by Identity Theory, which recognizes social-structural and internal-cognitive components of identity (or identities); and Discursive Psychology, which examines how projected selves interact as identity roles assert themselves, thus altering behavior (McGann & Spence, 2010; Stryker & Burke, 2000).

Potential Future Questions

- How is physical activity identity developed?
- How is physical activity identity maintained over time?
- Can physical function be improved through interventions that focus on relationship forming with the self?
- Can physical activity engagement be improved in BOAs by designing and directing PA programs that are responsive to the identities of BOAs?

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International Classification of Function, Disability, and Health: APTA 2012

KEY LITERATURE FRAMING THE PROJECT

Foundational research for this inquiry has been based on the works of Anderson and Cychoz, who established the concept of an exercise identity and created a scale to measure this phenomenon (1994, 1997). Subsequent research by Cardinal & Cychoz (2007, 2015) has explored the effects of this concept on behavior and it’s relationship to related ideas, such as self-concept. These researchers repeatedly demonstrated a relationship between self-reported identity and activity, although primarily in college aged adults. Strachan has additionally provided research to justify the application of Social Determination and Identity Theory Frameworks to the study of these ideas (2013).