



# Self-As-Doer and Self-Determinism:

## New Perspectives for Motivational Differences in Type 1 and Type 2 Diabetes Self-Care

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### INTRODUCTION

#### Diabetes and Self-Care Behaviors

- ❖ More than 23.4 million people in the U.S. have diabetes<sup>1,2</sup>
- ❖ Inadequate glycemic control and noncompliance with diabetes self care behaviors are associated with serious health complications for patients with Type 1 (T1DM) and Type 2 (T2DM) diabetes mellitus<sup>1</sup>
- ❖ Motivational factors have been found to affect the frequency of self-care behaviors for patients with T1DM and T2DM<sup>3-4</sup>
  - ❖ Persons with diabetes are more likely to persist in self-care behaviors when they enjoy the very act of the behavior and when the behavior has value.
- ❖ Etiological, physiological, demographic, and health behavior differences between patients with T1DM and T2DM have been identified in previous research<sup>1,5-6</sup>
- ❖ Yet, there is a paucity of research examining how motivational predictors of self-care behaviors may be different between patients with T1DM and T2DM

<sup>1</sup>American Diabetes Association, 2005; <sup>2</sup>World Health Organization, 2006; <sup>3</sup>Williams, et al., 2004; <sup>4</sup>Brouwer, Mosack, & Wendorf, 2010; <sup>5</sup>Plotnikoff, 2008; <sup>6</sup>Wejman, et al., 2005

#### Self-As-Doer

- ❖ Definition: identification with *doing* a behavior or action<sup>1</sup>
- ❖ Links illness identity with behavioral enactment
  - Diabetes care requires a dynamic agent; a doer of self-care behaviors
  - Self-care behaviors may not be enjoyable; motivation may be needed
  - May have unique predictive effects on self-care behaviors for T1DM and T2DM due to differences in illness identity and disease etiology
- ❖ Differences in self-as-doer between persons with T1DM and T2DM may exist due to differences in age, illness identity, and immediacy of reinforcement for performing self-care behaviors<sup>2-3</sup>

<sup>1</sup>Houser-Marko & Sheldon, 2006; <sup>2</sup>Plotnikoff, et al., 2008; <sup>3</sup>Wejman, et al., 2005

### HYPOTHESES

- Persons with T1DM will display a greater degree of self-as-doer than would persons with T2DM
- Persons with T1DM will display a greater degree of autonomous and controlled motivation than persons with T2DM

### METHOD

#### Participants

- ❖ 371 Persons with diabetes
  - ❖ 161 men, 193 women
  - ❖ Ages: 18 – 84  
( $M = 39.90$ ,  $SD = 16.50$ )
- ❖ Diabetes:
  - Type I: 207
  - Type II: 187

#### Procedure

- ❖ Targeted Recruitment:
  - ❖ Social support groups
  - ❖ Internet diabetes-related user groups
  - ❖ Patients at local hospital clinics

#### Measures

- ❖ Treatment Self-regulation Questionnaire (Williams, Freedman, & Deci, 1998)
  - ❖ Autonomous and controlled self-determinism
- ❖ Self-As-Doer – Diabetes
  - ❖ Author-derived measure developed from pilot data
  - ❖ Participants rated the degree to which they see themselves as a doer on 48 statements (e.g. “sweets resister”, “blood glucose monitor”)

#### Statistical Analysis

- ❖ Independent samples *t*-test were calculated to examine the difference between those with T1DM and T2DM in degree of self-as-doer and controlled and autonomous motivation and self-as-doer identity

### RESULTS

#### Hypothesis 1

- ❖ Persons with T1DM reported a greater degree of self-as-doer identity than did persons with T2DM,  $t(293) = 3.35$ ,  $p < .001$

#### Hypothesis 2

- ❖ Persons with T2DM reported significantly higher levels of autonomous motivation than did persons with T1DM.,  $t(334) = 3.22$ ,  $p < .001$
- ❖ Persons with T1DM did not significantly differ from persons with T2DM in levels of controlled motivation,  $t(333) = -.50$ ,  $p = .62$

#### Means and Standard Deviations

	Self-as-doer	Autonomous Motivation	Controlled Motivation
T1DM	3.40 (.55)	32.56 (4.89)	34.14 (8.73)
T2DM	3.18 (.52)	34.29 (4.80)	34.64 (9.46)

### DISCUSSION

- ❖ Individuals with T1DM reported significantly higher degrees of self-as-doer than did individuals with T2DM
- ❖ Findings suggest that persons with T1DM are more likely to see themselves as the “doer” of their self-care behaviors, which may influence the frequency of self-care behaviors and improve overall health
- ❖ Individuals with T2DM reported being more motivated when self-care behaviors were self-initiated and intrinsically important to them compared to persons with T1DM
- ❖ Differences in self-as-doer and autonomous motivation between persons with T1DM and T2DM may exist due to differences in age, illness identity, and immediacy of reinforcement for performing self-care behaviors
- ❖ Persons with T1DM and T2DM did not differ in controlled motivation, suggesting that the degree to which individuals are motivated by the pressure exerted by others (i.e. doctors, family, friends, etc.) to perform their self-care behaviors is similar between the two groups
- ❖ Results may allow clinicians to target and tailor intervention strategies on particular variables to improve self-care behaviors based on the patient’s type of diabetes