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Development of Model Using Sociocognitive Variables to Explain Self-Care in Adult Women with Type 2 Diabetes

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This study was supported by a grant from the South Texas Health Research Center at the University of Texas Health Science Center at San Antonio

Background

- **Diabetes affects 8.3% of population, 25.8 million people, 90 – 95% have T2DM**
- **Women are affected disproportionately to men**
- **Disparate effect in ethnic minorities versus White Americans**

Significance

- 95% of diabetes disease management resides with the individual in diabetes self-care
- Self care & health behaviors occur within the context of a social environment
- Need to determine the psychosocial processes that influence self-care behavior in women with T2DM

Purpose

- Determine if four sociocognitive variables explain self-care behavior in women with T2DM and answer:

1. Do personal diabetes beliefs including barriers to self-care, self-efficacy, outcome-efficacy, and social support explain diabetes self-care in women with T2DM?

2. Do findings from this study support the empirical and theoretical evidence that variables from the HBM, Social Cognitive Theory and Social Support explain self-care behavior?

Method

- ***Design:*** Cross-sectional predictive design
- ***Non-probability Sampling:***
  - 198 women with T2DM
  - Mean age 51.52 years
  - Mean duration of diabetes 10.27 years
  - 79.7% Hispanic
  - 31.6% reported less than high school education
  - 64.4% reported income less than $14,999
  - 75% reported using a combination of multiple therapies

Results -Bivariate Correlations Explanatory Variables

	Social support	Self efficacy	Outcome expectancy
Social support		.325**	
Outcome expectancy		.310**	
Exercise barriers	-.161*	-.324**	
Diet barriers		-.408**	
Medication barriers		-.352**	-.228**
Glucose barriers		-.289**	-.176 *
Total barriers		-.413**	-.148 *

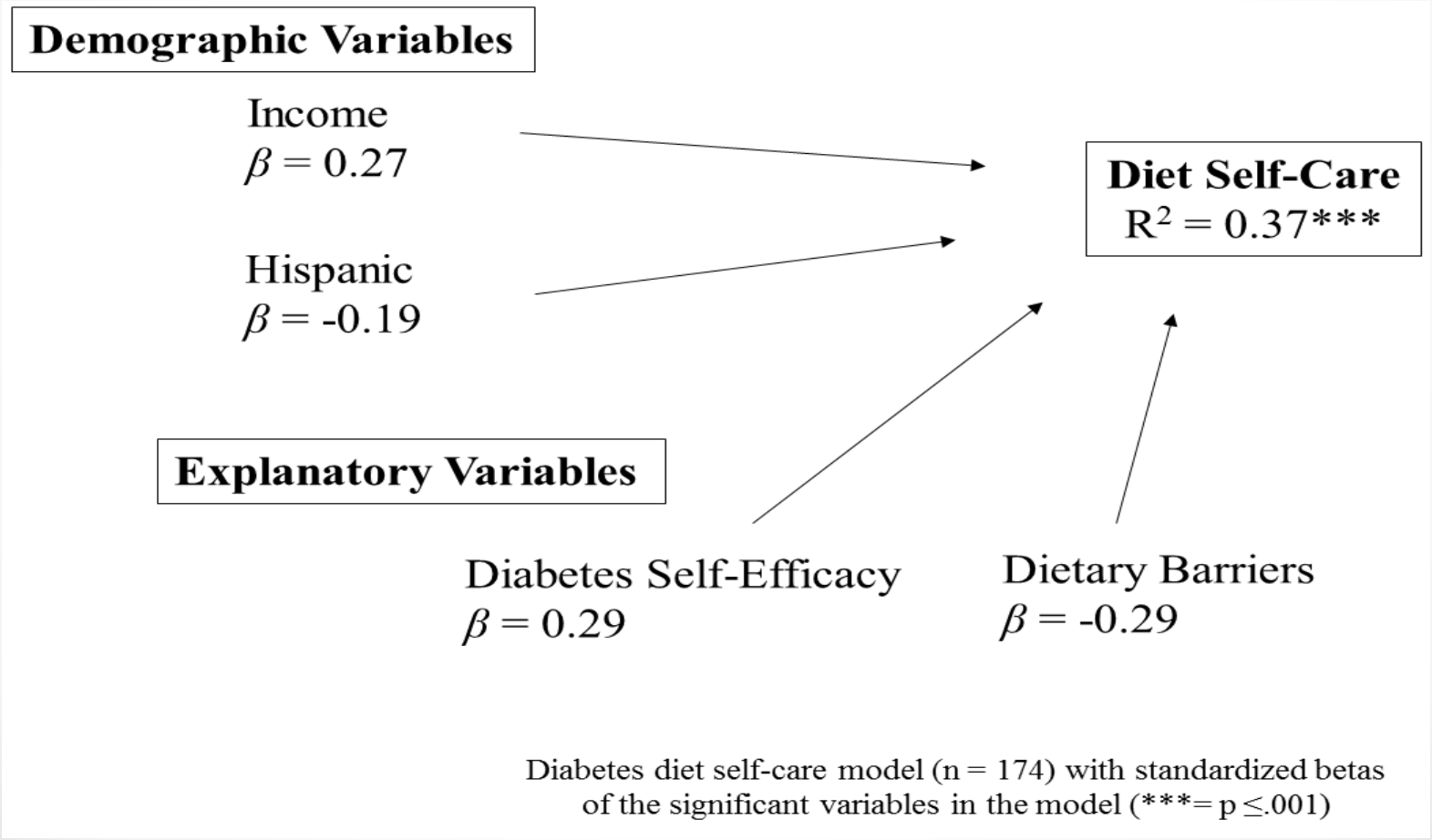
*significant at the 0.05 level (2 tailed)
**significant at the 0.01 level (2-tailed)

Results - Bivariate Correlations Explanatory & Demographic Variables

	Social support	Barriers	Dietary barriers	Outcome expectancy
Age		-.201**	-.229**	
Education	-.276**			.156*
Income	-.149 *			

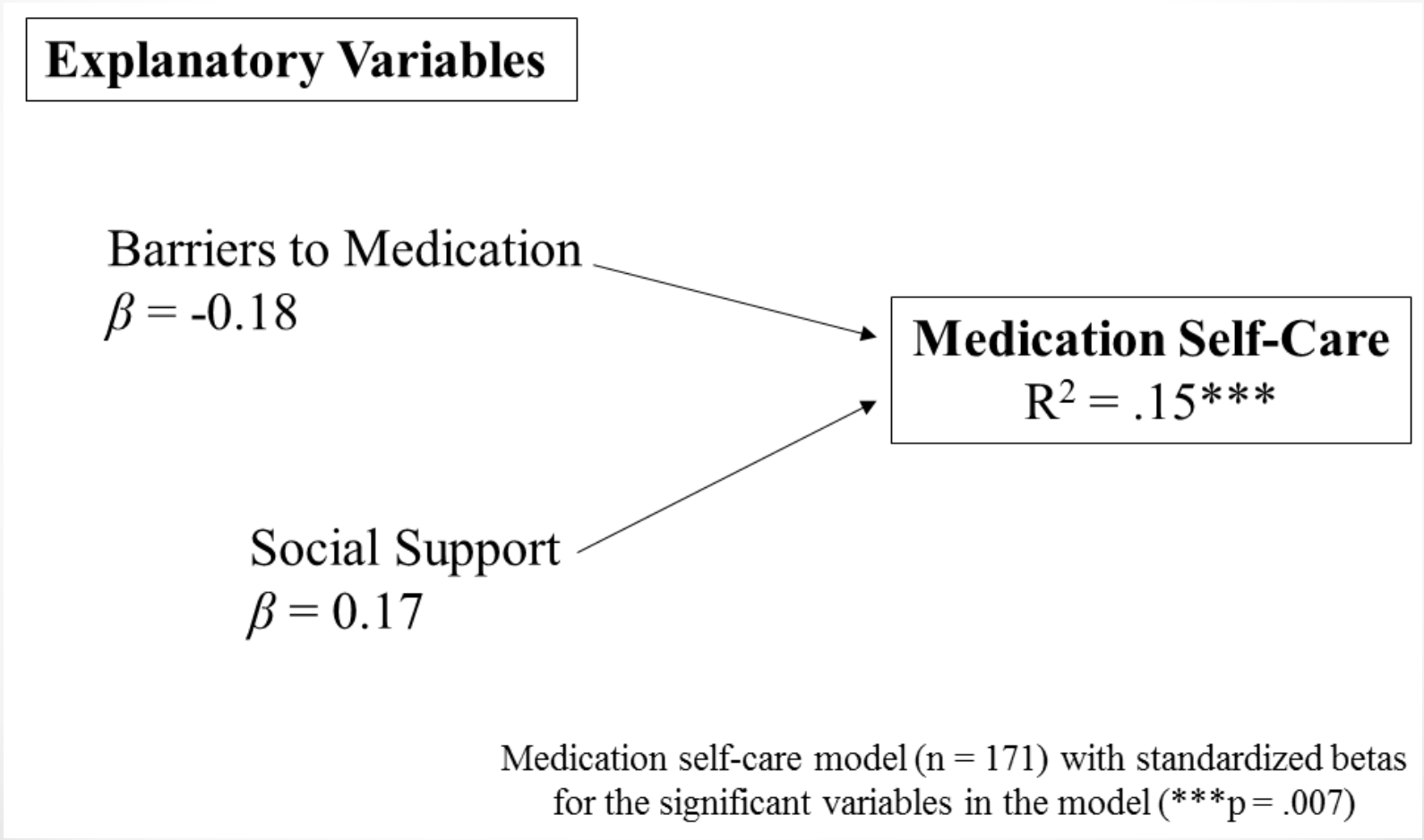
*significant at the 0.05 level (2 tailed)
**significant at the 0.01 level (2-tailed)

Results
Model 1 Dietary Self-Care



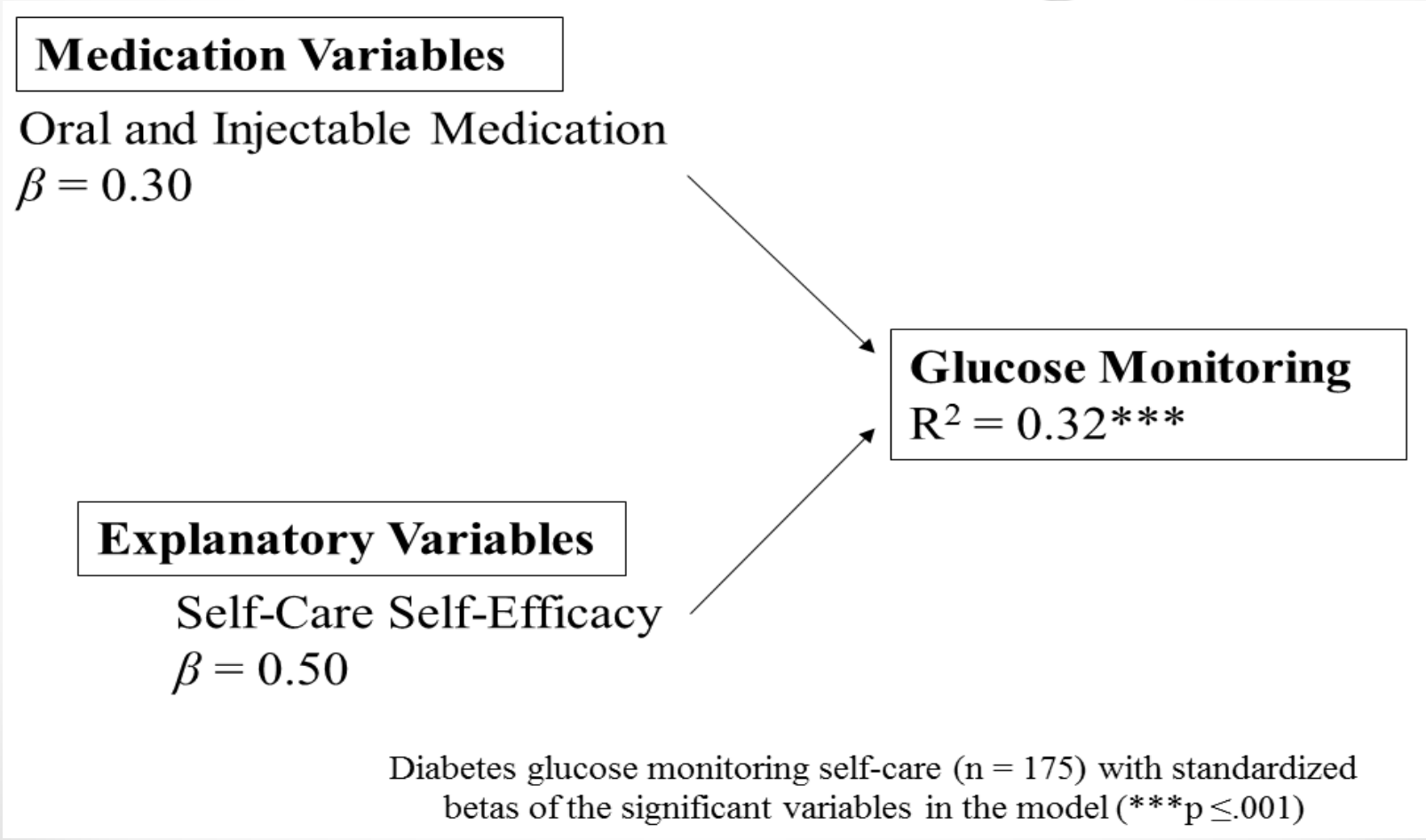
Diabetes diet self-care model (n = 174) with standardized betas of the significant variables in the model (***= p ≤.001)

Results
Model 2 Medication Self-Care



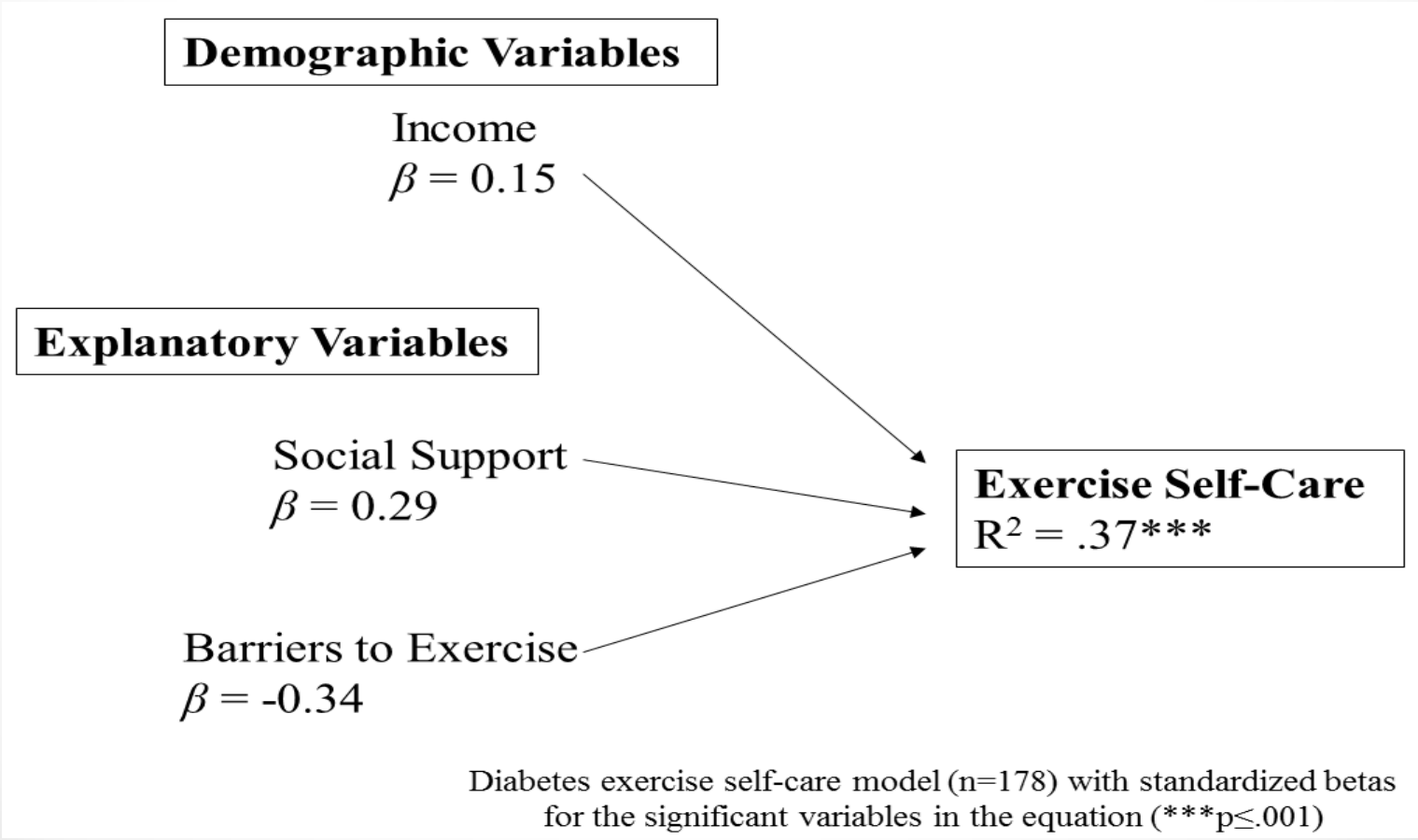
Medication self-care model (n = 171) with standardized betas for the significant variables in the model (***p = .007)

Results
Model 3 Blood Glucose Monitoring



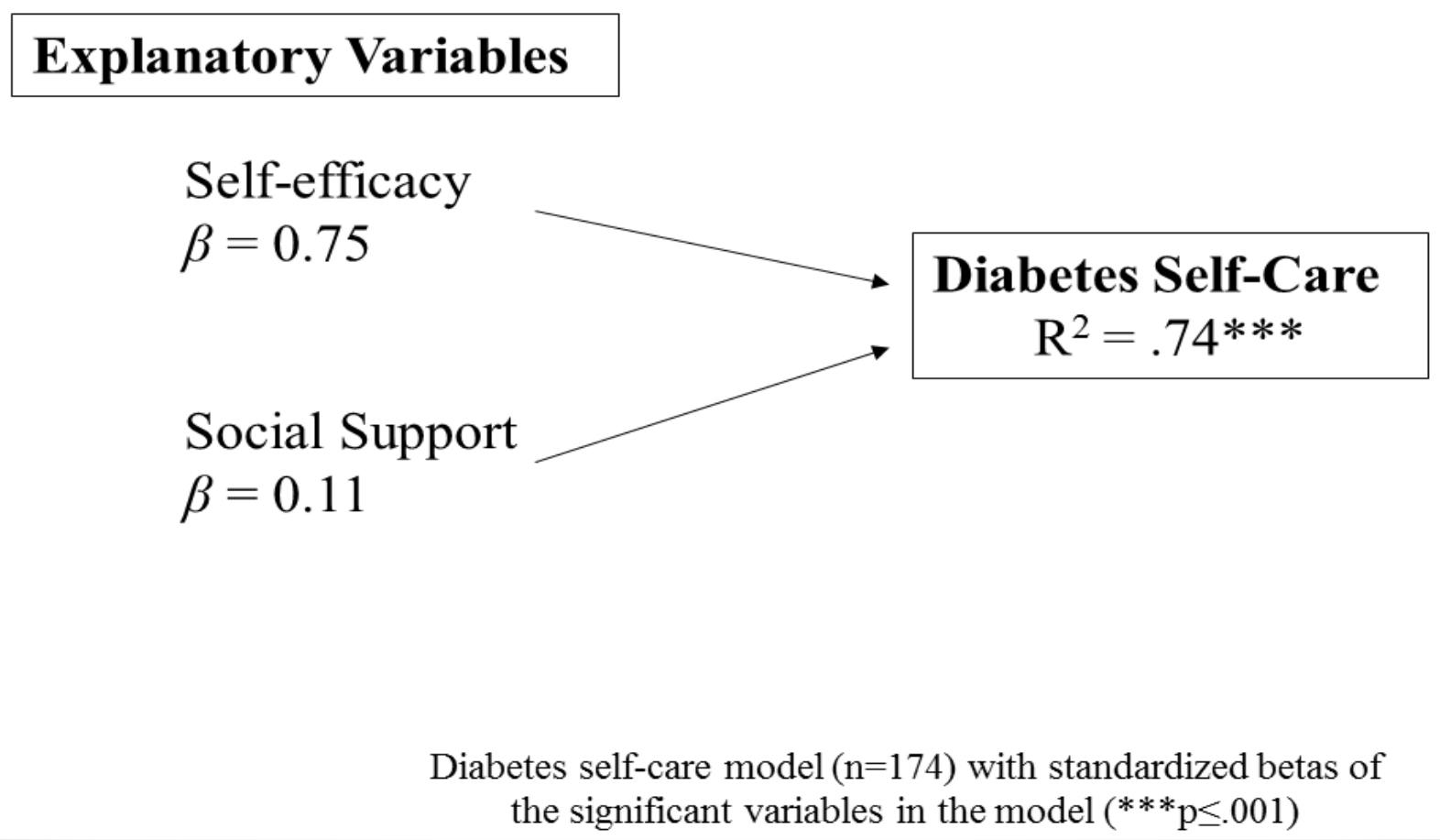
Diabetes glucose monitoring self-care (n = 175) with standardized betas of the significant variables in the model (***p ≤.001)

Results
Model 4 Exercise Self-Care



Diabetes exercise self-care model (n=178) with standardized betas for the significant variables in the equation (***p≤.001)

Results
Model 5 Diabetes Self-Care



Diabetes self-care model (n=174) with standardized betas of the significant variables in the model (***p≤.001)

Discussion

- Income positively influenced diet self-care while being Hispanic negatively influenced
- Contextual factors of barriers to self-care, self-efficacy and social support consistently explained diabetes self-care
- Outcome efficacy did not contribute to the explanation of self-care
- The model analyses were not affected by socially desirable responding

Conclusion

- This study found evidence to support all variables of interest (Barriers, Social Support for Self-Care, Self-Care Self-Efficacy, Outcome Efficacy)except one
  - Outcome-efficacy did not contribute to explanation of diabetes self-care in this sample
- Findings from this study extend the empirical evidence that concepts of self-efficacy, social support and barriers explain self-care

Implications

- Further exploration with samples representative of other ethnic groups
- Explore what interventions may improve self-efficacy
- Explore ways to help women develop supportive relationships
- Develop women's problem solving skills to minimize barriers to self-care
- Further examine the economic barriers to self-care, especially for minority women