

Self-Controlled Coping Moderates the Relationship between Self-Efficacy and Diabetes Self-Care in Type 2 Diabetes

Monet McCalla, OMS II, DeWitt Jones II, OMS II, Elizabeth A. Beverly, PhD
Ohio University Heritage College of Osteopathic Medicine, Athens, OH 45701

Background

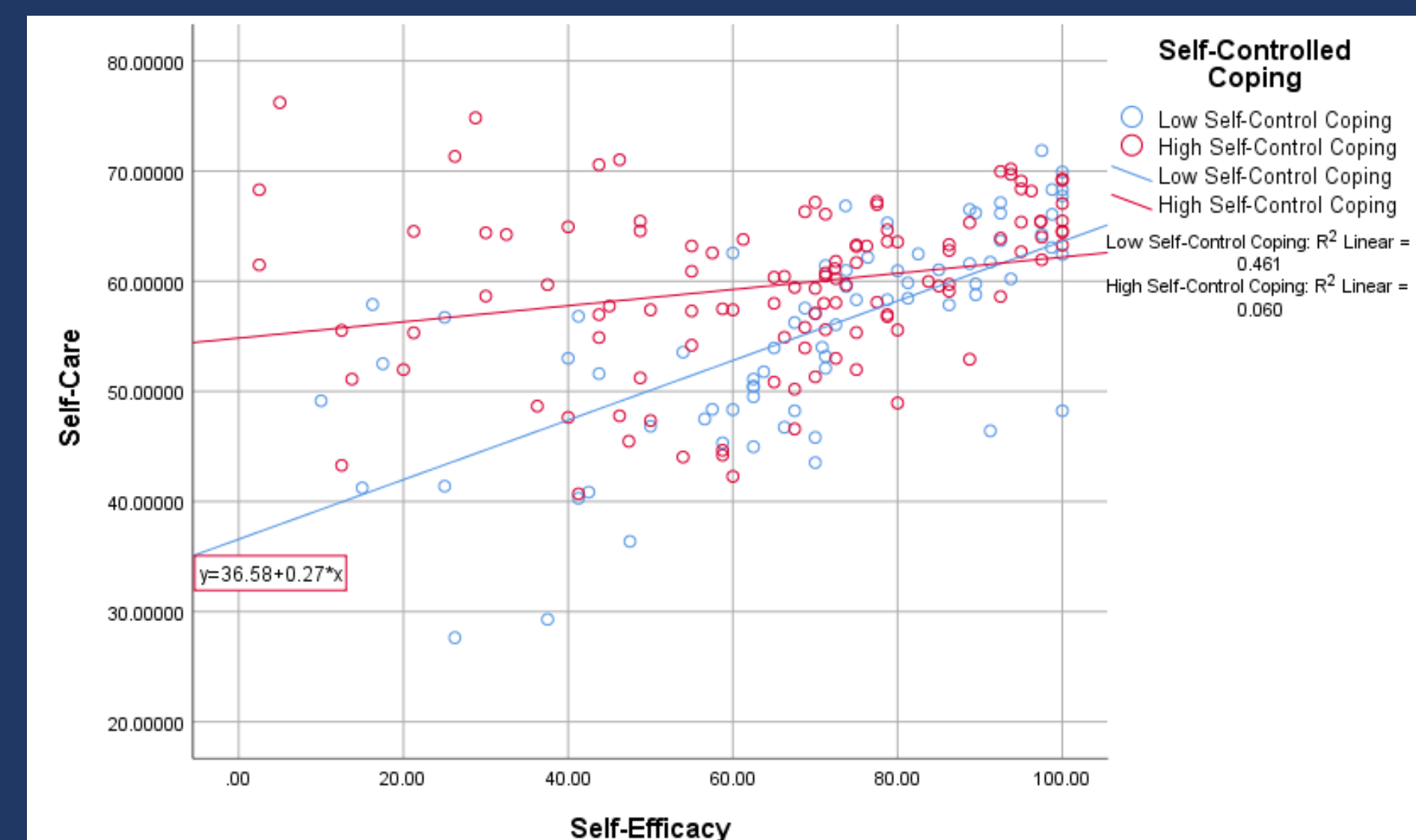
- The diagnosis and management of diabetes is stressful.
- Diabetes distress addresses a person's worries, concerns, and fears about living with a demanding, progressive chronic illness.
- Diabetes distress is associated with fewer diabetes self-care behaviors, lower diabetes QOL, and less social support. Long-term follow-up studies are needed to confirm these findings.
- There are two defined ways in which people living with diabetes can cope, self-controlled coping or emotional coping.
- Patients managing diabetes in a self-controlled manner are shown to exemplify more ideal diabetes self-care.
- The purpose of this study was to assess the moderating effect of coping styles in the relationship between self-efficacy and diabetes self-care in adults with type 1 (T1D) and type 2 diabetes (T2D) in rural southeastern Ohio.

Methods

- We conducted a cross-sectional survey study with adults with T1D and T2D in rural southeastern Ohio.
- Surveys were distributed electronically in Qualtrics and via mailed packets to adults with T1D and T2D, aged 18 years and older who were able to read and speak English, and living in southeastern Ohio.
- Participants completed the following measures:
 - Type 1 Diabetes Distress Scale (T1-DDS) or
 - Type 2 Diabetes Distress Scale (T2-DDS)
 - Patient Health Questionnaire-9 (PHQ-9)
 - Self-Care Inventory-R (SCI-R)
 - Confidence in Diabetes Self-Care Scale (CIDS; self-efficacy)
 - Coping Styles (CS: emotional coping and self-controlled coping)
- We conducted hierarchical multiple regression models using SPSS version 26.0. To avoid multicollinearity with the interaction terms, self-efficacy and coping styles variables were centered.

Conclusions

- In adults with T2D, self-controlled coping moderates or strengthens the relationship between self-efficacy and diabetes self-care.**
- Integrating self-controlled coping skills in diabetes education may improve self-efficacy and diabetes self-care in adults with diabetes.**



Results

- A total of 325 adults (age=41.6±19.2 years, 62.2% female, 86.5% white; 59.7% T2D, A1C=7.5±1.6) participated.

Table 1. Summary of Hierarchical Regression Analysis Examining the Moderating Role of Coping Styles in the Relationship between Self-Efficacy and Diabetes Self-Care in Adults with Type 1 Diabetes (n=108)

	<i>b</i>	<i>p</i>	R ²
Age	.004	.976	.20
Gender	-2.524	.453	
Depressive symptoms	.225	.560	
Diabetes distress	-3.896	.072	
Self-efficacy	.115	.063	
Emotional coping	-.172	.086	
Self-controlled coping	.160	.144	
Self-efficacy*emotional coping	-.005	.101	
Self-efficacy*self-controlled coping	-.005	.163	

Table 2. Summary of Hierarchical Regression Analysis Examining the Moderating Role of Coping Styles in the Relationship between Self-Efficacy and Diabetes Self-Care in Adults with Type 2 Diabetes (n=187)

	<i>b</i>	<i>p</i>	R ²
Age	.170	.036	.22
Gender	-1.025	.686	
Depressive symptoms	.239	.374	
Diabetes distress	-4.739	.002	
Self-efficacy	.151	.007	
Emotional coping	-.057	.380	
Self-controlled coping	.184	.016	
Self-efficacy*emotional coping	.004	.145	
Self-efficacy*self-controlled coping	-.007	.021	

Future Directions

- To assess the moderating effect of coping styles in the relationship between self-efficacy and self-care utilizing a longitudinal design to determine causal pathways.
- To evaluate additional coping styles and their effect on diabetes.

Monet McCalla, OMS II
Email: mm908112@ohio.edu



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