

# Lifestyle Health-Related Self- Concept in the Context of a Lifestyle Intervention

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# Project Timeline

- ◆ Creation of the Lifestyle-Health-Related Self-Concept Questionnaire
- ◆ Implementation of the Lifestyle-HRSC in a lifestyle intervention
- ◆ Review of health-related items
- ◆ Interest in physical activity

# Health-Related Self-Concept

- ◆ Self-concept is the set of perceptions and beliefs that you have about yourself; including your nature, personal qualities, and typical behavior.
- ◆ Little research research exists regarding the significance of health as a related factor to self-concept and on the relationship to health-related behavior (Wiesmann, Niehorster, Hannich, & Hartmann, 2008).
- ◆ Knowledge of health-related self-concept as related to health behavior could further the understanding of individual variability in the meaning attributed to symptoms and related behavior, and subsequently the practice of preventive health care.

# Lifestyle-HRSC: Example items

## ◆ **Nutrition**

◆ *I actively track my eating habits; In general, I practice healthy eating*

## ◆ **Social support**

◆ *I can quickly contact my social support system; I feel accepted by my social support system*

## ◆ **Avoiding diabetes**

◆ *If I go on as in the past, I will develop diabetes; My lifestyle is risky for developing diabetes*

## ◆ **Physical activity**

◆ *I am capable of overcoming barriers to physical activity; I am open to new physical activity experiences*

## ◆ **Problem solving**

◆ *I am a frequently stressed kind of person; It does not bother me that unhealthy foods could compromise my health*

## ◆ **Challenges related to being healthy**

◆ *If I slip on my healthy eating, I can recover; I am a strong-minded person and can be active in my everyday life*

# Physical Activity Guidelines

- ◆ Despite well-known health improvements associated with moderate and vigorous physical activity, less than 20% of US adults meet physical activity and public health guidelines (USDHHS, 2008)
- ◆ American College of Sports Medicine (ACSM) Guidelines (Garber et al., 2011)
  - ◆ Moderate physical activity (MPA) 30-60 minutes 5 days per week; 150 moderate intensity per week
  - ◆ Vigorous physical activity (VPA) 20-60 minutes 3 days per week

# Physical Activity Guidelines

## Moderate Physical Activity (MPA)

- ◆ Gardening
- ◆ Housework
- ◆ Yoga
- ◆ Walking briskly
- ◆ Canoeing
- ◆ Water aerobics
- ◆ Hiking
- ◆ Dancing
- ◆ Downhill skiing
- ◆ Hunting

## Vigorous Physical Activity (VPA)

- ◆ Jogging or running
- ◆ Rock climbing
- ◆ Biking (more than 10 mph)
- ◆ Swimming laps
- ◆ Competitive sports
- ◆ Fast dancing
- ◆ Calisthnics (push-ups, pull-ups)
- ◆ Karate, Tae Kwon Do
- ◆ Jumping rope
- ◆ Shoveling

# Physical Activity and Type 2 Diabetes Prevention

- ◆ Physical activity interventions have a positive impact on type 2 diabetes risk and associated health outcomes
  - ◆ Supervised exercise interventions produce improved body mass index (Conn et al., 2014)
  - ◆ Interventions that promote diet, physical activity, or both decrease progression of risk of type 2 diabetes (Greaves et al., 2011)
  - ◆ Self-efficacy interventions are highly associated with increased physical activity behavior (Higgins et al., 2014)

# Study Purpose

- ◆ Examination of psychosocial factors provides additional insights into lifestyle intervention participation and, subsequently, desired health outcomes.
- ◆ Health-related self-concept (HRSC) indicates positive (i.e., promote well-being) and negative (i.e., decrease adaptive health behavior) perceptions of health.
- ◆ **The purpose of this study was to examine the relationship between Lifestyle-HRSC questionnaire and physical activity.**

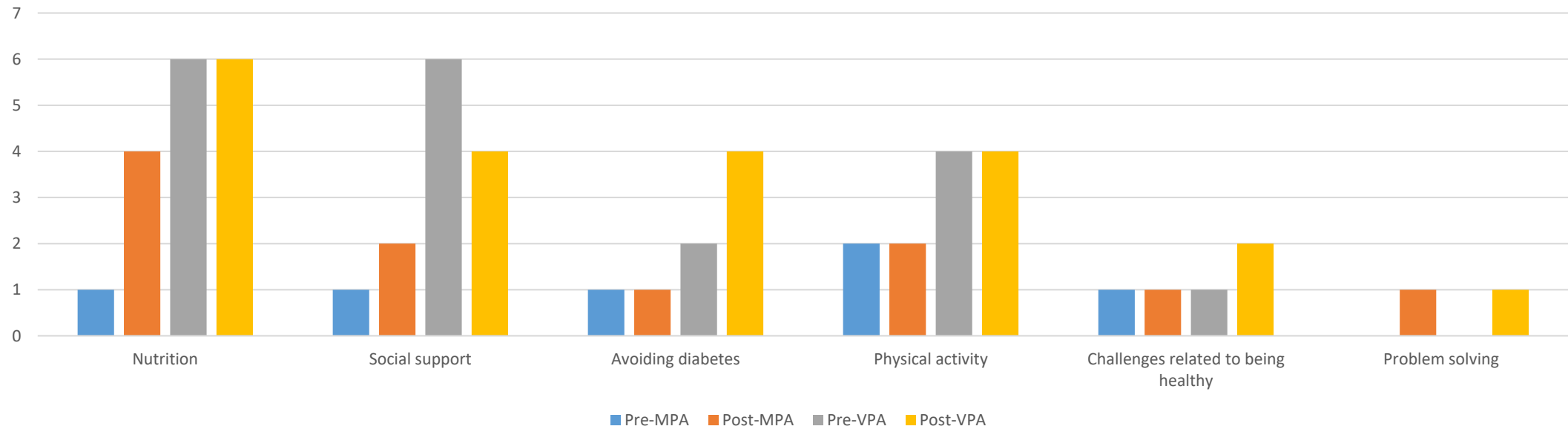


# Methods

- ◆ The Lifestyle-HRSC scale (Thomas et al., in review; 79-items) was implemented within a 12-week type 2 diabetes prevention intervention.
- ◆ Data were gathered from 71 participants.
- ◆ Linear regressions were calculated to predict physical activity based on Lifestyle-HRSC items.

# Results

Number of Items Per Factor



# Results

- ◆ *I often have good feelings when I am active in everyday life (Social support, Physical activity)*
  - ◆ Post-MPA, Pre-VPA, Post-VPA
- ◆ *I am not able to manage my negative thoughts (Social support, Problem solving)*
  - ◆ Post-MPA, Post-VPA
- ◆ *I am afraid of developing diabetes (Avoiding diabetes)*
  - ◆ Pre-VPA, Post-VPA

# Discussion

- ◆ Physical activity effectively prevents chronic conditions, including heart disease and type 2 diabetes.
- ◆ Psychosocial factors could enhance our understanding of adherence to physical activity guidelines.
- ◆ Physical activity, diet, social support, and behavior change techniques have been proven to contribute to greater success in interventions.
- ◆ To ensure successful participation and adherence to physical activity, it is important for providers to understand these factors.
- ◆ Lifestyle-HRSC may provide an innovative screening to distinguish among participation in moderate and vigorous physical activity.

# References

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# Questions or comments?

Thank you for your time and attention!

