



# Factors Affecting Exercise Adherence in Patients Attempting to Lose Weight



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## Abstract

- Obesity affects 42.4% of adults in the United States.<sup>1</sup>
- Generally, people know exercise will help, but adherence to exercise is just as large a problem as obesity itself.
- This systematic review of literature examines the current studies on factors that affect exercise adherence including genetics, exercise modality, and clinician strategies for implementation.
- The purpose of this review is to bring to light the reasons why patients may not adhere to exercise and to identify how clinicians can set up their patients for success with these key factors in mind.

## Background

- Obesity is defined as a body mass index (BMI) of greater than 30.0 kg/m<sup>2</sup>.<sup>1</sup>
- According to the Centers for Disease Control and Prevention (CDC) individuals who are obese are at an increased risk of coronary heart disease, type 2 diabetes, hypertension, dyslipidemia, and mental illness.<sup>2</sup>
- Exercise is a valuable tool used by clinicians to aid in weight reduction. Increased caloric expenditure via exercise results in a caloric deficit which facilitates weight loss.<sup>3,4</sup>
- As little as 1-3 hours of low-intensity exercise per week have been shown to reduce the risk of coronary heart disease events by 30-50%.<sup>3</sup>
- In addition weight reduction, exercise also reduces the risk of acquiring comorbidities associated with obesity.<sup>2,5</sup>
- Exercise adherence has a large impact on weight loss outcomes.
- Factors that affect exercise adherence include genetic factors, exercise modality utilized, and clinician strategies for implementation.<sup>3,4,6-9</sup>
- Additional factors that contribute to exercise adherence include age, sex, socioeconomic status, and biologic and physiologic mechanisms.<sup>4,8</sup>



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## Methods

- The proposed research question was: What are the factors that affect exercise adherence in patients attempting to lose weight?
- A research question was developed to identify the factors that affect exercise adherence in patients attempting to lose weight.
- A systematic review of literature available on this topic was performed. PubMed, EBSCOhost, and Google Scholar were used to locate the articles.
- Key search words used to locate the articles were obesity, adherence, exercise, factors, weight reduction, and modality.
- Inclusion criteria for the articles chosen included publication within the last ten years, peer-reviewed in the English language, and results with the ability to be implemented into practice by clinicians.

## Results

Table 1: Summary of results found in this systematic review of literature

Study	Major Findings	Conclusions
Benell et al <sup>10</sup>	• Personal barriers to exercise adherence can be identified using surveys prior to program implementation	• Improved exercise adherence when exercise program is patient-centered
Xu et al <sup>9</sup>	• Self-reflection and motivational interviewing improved self-monitoring and weight loss	• Individuals are more likely to adhere to exercise when personal motivational factors are implemented into exercise protocol
Jekauc <sup>11</sup>	• Individuals are more likely to adhere to exercise if it was through a modality that they found enjoyable	• Factors that improve positive effect evaluation of exercise include diversity of training, positive feedback, and the ability to choose the exercise modality
D'Arcy <sup>12</sup>	• Obese patients with chronic pain benefited from physical therapy and low-intensity warm pool exercises	• Exercise modality influences the management of chronic pain and improves functionality
Herring et al <sup>6</sup>	• Individuals who are prone to compulsive behavior may have increased exercise adherence	• Genetic factors may play a role in exercise adherence

## Discussion

- Healthcare providers are treating obesity and its comorbidities more often now than ever before.
- Exercise is a valuable tool that can not only aid in weight reduction but also reduce the comorbidities of obesity.<sup>2,4,7</sup>
- A limitation of this systematic review is that the efficacy of the factors mentioned to improve exercise depends upon the motivation of the patient.<sup>5,7,11</sup>
- Communication is imperative in patient-provider relationships to promote positive outcome.<sup>4,5,7</sup>
- Although more research is needed to determine what specific factors play a role in exercise adherence, the methods discussed in the systematic review will allow providers to have a better understanding of their patient's individual goals and limitations.
- Moving forward it is imperative that providers focus on treatment and motivation styles specific to their patient including but not limited to self-expansion, motivational interviewing, surveys that focus on barriers to exercise, and alternative exercise modalities.<sup>3,4,9,12</sup>

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