INTRODUCTION
Physical limitations are often the focus of amputee rehabilitation. Having a patient achieve activities of daily living is the goal of a rehabilitation team, but this approach can lead to neglecting the psychological needs of a patient who has undergone an amputation. Significant correlations have been found between amputation and depression, anxiety, social discomfort, and body image (Horgan & MachLachlan, 2004). Exercise has been found to be a plausible nonpharmacologic treatment for depression, due to its changes in brain chemistry function similar to those observed with antidepressant treatments (Trivedi et al, 2011).

The aim of this literature review is to highlight the psychological impact that exercise can have on an individual with limb loss.

METHOD
A systematic computerized search was performed using three databases: Prosthetics and Orthotics International (2000- June 2011), and PsycINFO (2000- June 2011). The search was performed with the key words “amputation” or “amputee” and “exercise,” or “physical activity” and “psychological”, “psychosocial”, “Quality of Life”, “depression”, “anxiety”, “social discomfort” and “body image”. This search provided 34 articles. A set of exclusion criteria were developed for this review, which were: (1) the study was published in a language other than English, (2) the study was a case study/review/editorial/opinion, (3) the article was related to amputation but not physical activity and psychology, (5) the study involved development or validation of an instrument.

RESULTS
The search and exclusion criteria resulted in two relevant articles.

Body Image
Wettenhahn, Hanson, & Levy (2002) investigated the relationship between participation in physical activity and body image. The study measured the difference in body image between 24 active and 32 minimally active lower limb amputees. The results showed a significant positive relationship between physical activity level and body image of individuals with lower limb amputations (Wettenhahn et al, 2002).

Quality of Life
Deans, McFadyen, & Rowe (2008) investigated the relationship between physical activity and perceived quality of life in a lower-limb amputee population. 80% of the participants were over the age of 60 years. The findings showed the desire of older, less-active patients to seek comfort, gain confidence, and maintain social standing by prioritizing relationships rather than a level of physical functioning they cannot relate to (vigorous activity such as running). This study supports increasing physical activity in the patient group, so long as social interaction is not compromised (Deans et al, 2008).

DISCUSSION
Amputation can often be associated with anxiety, isolation, depression, and difficulty in accepting body image. These issues can lead to rejection of the prosthesis, which will lead to more isolation and less physical activity (Horgan & MachLachlan, 2004). It can become a vicious cycle of inactivity and psychological challenges. Many studies have proven a positive relationship between regular physical activity and well being. Psychological improvements include elevated self-esteem, mood, memory, and decreased stress.

CONCLUSION
We often have a goal of returning patients to their previous activity level before amputation. Is this the right approach? Kegel (1985) surveyed 156 amputees and found that most had an interest in participating in sports and recreation. A majority of those surveyed, responded that participation could improve their quality of life.

The goal of rehabilitation should no longer be to return the patient to the previous activity level. Every patient should be evaluated for an individualized exercise program at an intensity that will have a psychological effect.

REFERENCES
Deans SA, McFadyen AK, & Rowe PJ. Pros Orth Int. 32 (2), 186-200, 2008