



# DETERMINING USER SATISFACTION WITH THEIR PROSTHETIC INTERVENTION

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## INTRODUCTION

It has been found that a good match between person and technology is achieved if the user is provided with a choice of appropriate and available options, and the chosen prosthetic device meets the user's performance expectations and is easy and comfortable to use (Scherer, 2002). Additionally, patient compliance tends to increase with being involved in the selection process of their device (Weilandt, 2006). The question that now presents itself is this: how does one decide what constitutes as a "good match" between person and device? Over the past 30 years numerous studies have attempted to answer that very question, yet all differ in some way.

The purpose of this research was to answer that question by integrating existing reliable and valid questions with new questions that are more specifically interested in the patient's involvement in their care. In conjunction with one open-ended question, the expected results of this survey will hopefully give clinicians a better understanding of their patients' satisfaction and the factors that affect it. It is hypothesized that the functionality of the device will continue to yield the most dissatisfaction among participants when compared to other categories, and that lack of involvement in care will yield higher dissatisfaction results in users who report lower satisfaction in their overall care.

## METHOD

*Subjects:* Three persons with unilateral lower extremity amputation. No demographic information was collected in order to keep results anonymous.

*Apparatus:* An integrated user satisfaction survey was designed using five modified questions from the prosthetic evaluation questionnaire, as well as four original questions. All nine questions were answered using a Likert scale, with answers ranking from 1-5. A tenth open-ended question provided participants the opportunity to discuss any issue that had not been addressed. The questions were broken into four categories: function (of prosthesis), psychosocial experience, involvement in care, and well-being.

*Procedures:* The ten-question survey was provided to four local sites for distribution as deemed appropriate by clinic managers.

*Data Analysis:* Calculated mean scores and percent satisfaction.

## RESULTS

A total of 80 surveys were distributed, three of which were completed by individuals who met the

inclusionary criteria. The average satisfaction rate was found to be 91%. All participants reported that they were less than completely satisfied with the comfort of their device and that they were frustrated with their device at least some of the time. Two of the participants reported being completely satisfied in the involvement in care category, although one of these two participants reported being only somewhat satisfied in their overall experience. Of the four categories, psychosocial experience yielded the lowest satisfactory percentage at 74%, which was found by taking the reported satisfaction values and dividing them by the maximum value for that category. The remaining three categories are listed in Table 1.

Category	Mean score among participants	Percentage of satisfaction
Function (out of 15)	13.7	91%
Psychosocial experience (out of 5)	3.7	74%
Involvement in care (out of 15)	14.7	98%
Well-being (out of 10)	9	90%
Total	41	91.11%

Table 1. Rankings and percentages of user satisfaction among participants.

## DISCUSSION

The low psychosocial score may be attributed to the way that the average scores are calculated, with a 3 being averaged in to the mean score, although a 3 indicates a "neutral" response.

## CONCLUSION

Future efforts will attempt to further understand user satisfaction by urging patients to state their dissatisfaction in their own words.

## CLINICAL APPLICATIONS

To better serve patients by understanding the facets of their satisfaction with their prosthesis.

## REFERENCES

- Scherer, M. Disabil Rehabil 24, 1-4, 2002.
- Weilandt, T. Disabil Rehabil Assist Technol, 29-40, 2006.

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