



# A COMPARISON OF SPINAL CORD INJURY (SCI) CONSUMERS/STAFF PREFERENCE FOR WALKING: A PILOT STUDY

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## ABSTRACT

### Objective

To pilot a modified version of the Feature-Resource Trade-Off Game (Features Game) for SCI subjects and staff.

### Design

Direct observation of a constrained consensus-building process in 6 panels, 3 with modified Features Game (MFG) and 3 with standard Features Game (SFG).

### Participants/Methods

The Features Game developed by Stineman to demonstrate consumer/staff preference was applied to SCI. Consumer preference for walking will be compared to the other dimensions of a modified Functional Independence Measure (MFIM). The Feature game is illustrated by comparing preferences for recovery among the 14 functional status items making up the FIM. Methods involved trading levels of independence (resources) across the different items (features). Three panels (2 clinician groups and 1 consumer) were studied on the MFG. Three panels (1 clinician groups and 2 consumer) were studied on the SFG. Concentric pie charts (CPC) illustrate FIM preferences.

### Results

The CPC on the MFG showed greater preference by staff for wheelchair independence than the SCI subjects who showed a greater preference for walking. Bowel and bladder independence was preferred by both the incomplete and complete SCI subjects on the SFG but was equal to walking on the MFG in acute SCI subjects.

### Conclusions

The pilot study showed different responses for walking in consumer versus clinician groups, which was unexpected.

## INTRODUCTION

Consumer preference needs careful study to determine the importance of mobility to persons with spinal cord injury. This was illustrated by consumer reaction to a television commercial aired during the 2001 Super bowl which showed a person with SCI getting up from a wheelchair and walking across the stage. The commercial implied such a goal was achievable in the future with proper investment of research funds. Many individuals commented that this offered hope and was a very inspiring message, where as others were upset at a message of false hope and the implication that individuals in wheelchairs needed to walk. Consumer preference and satisfaction are important and essential components of the new paradigm defined and described in the Long Range Plan of the National Institute on Disability and Rehabilitation Research (NIDRR), U.S. Department of Education.<sup>1</sup> Stineman<sup>2</sup> recently reported a discrepancy between consumers and clinicians rating of dimensions of disability. The study not only showed differences, but also facilitated a discussion between consumers and clinicians that allowed the clinicians to more openly consider the consumers value judgments. An adaptation of Stineman's methodology was developed for this study. The purpose of the study was to pilot a modified version of the Feature-Resource Trade-Off Game for subjects with spinal cord injury and staff. Our hypothesis is that individuals with spinal cord injury preference for recovery of function will differ from that of clinicians.

## METHODS

The Features Game developed by Stineman to demonstrate consumer/staff preference was applied to spinal cord injury. Consumer /staff preference for walking was compared to the other dimensions of a modified Functional Independence Measure (MFIM) which separated walking and wheelchair mobility. Thus, six items of self-care, two items of sphincter control, and six items of mobility (wheelchair, walking, stairs, chair, tub, and toilet transfers) will comprise the MFIM.

This study involved the direct observation of a constrained consensus-building process in 6 panels (5 persons/panel). Three panels (2 clinician groups and 1 consumer) were studied on the MFG (see Figures 1 and 2). All clinicians selected work with individuals with SCI.

The objective of the Features Game is to establish the relative value of alternative functional status states. The features being traded here will be the 14 MFIM tasks. Resource trade-off is the imagined level of

independence achieved among the various tasks. The game uses the nominal group process<sup>3</sup> that is clearly integrated with concepts from economic utility analysis<sup>4</sup>. This process assures that each panelist has equal opportunity for input.

The game involves a continuous two-step process of building imagined recovery patterns until all stages are completed. The specific steps to form each stage are as follow:

Step 1-The Free Movement Phase:

Step 2 Zero-Sum Exchange with Individual Discussions and Voting:

Steps 1 and 2 are repeated until the five interim stages are defined.

The preference stages developed by each panel are illustrated by concentric pie charts consisting of slices profiling panelists' preferences for functional achievement in the 14 MFIM items (Figures 1 and 2).

## RESULTS

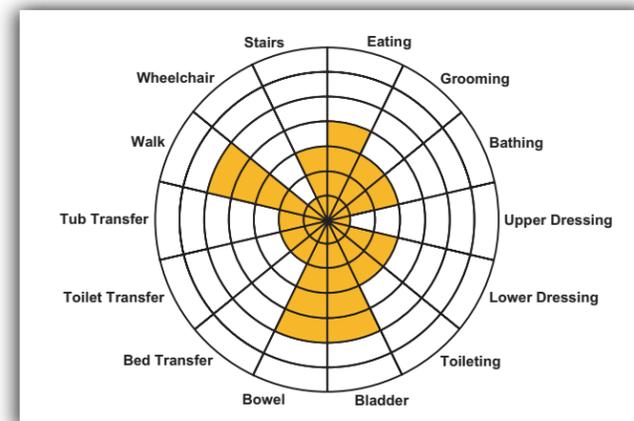


Figure 1 Concentric pie chart depicting Stage 3 for the acute, incomplete spinal cord injury consumer group one year post injury.

Consumers with spinal cord injury and professional staff advanced bowel and bladder management to level 5 (supervision) by Stage 3 (see Figures 1 and 2) and therefore showed little difference in their preference for recovery of bowel and bladder function. This has previously been reported in the literature.<sup>5,6</sup>

The walking domain, however, was advanced by consumers to level 5 by Stage 3 with wheelchair unchanged. Professional staff advanced the wheelchair domain to level 5 by Stage 3 while not moving the walking

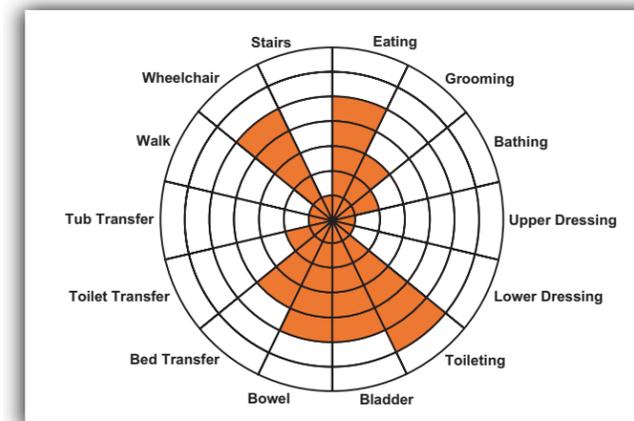


Figure 2 Concentric pie chart depicting Stage 3 for professional staff members working with persons with SCI in rehabilitation.

domain (Figures 1 and 2). The major difference, therefore, is that professional staff members showed a greater preference for wheelchair independence whereas the consumers with acute incomplete spinal cord injury showed a greater preference for walking. Several staff members suggested that their preference for wheelchair independence was based on their practical experience of having to discharge patients early due to the number of allowable rehabilitation days and reimbursement from 3rd party payers. These findings have not previously been reported in the literature.

## DISCUSSION

The results of this pilot study support our hypothesis that there may be a difference of preference for walking function between consumers with acute incomplete SCI and clinicians who treat them. This observation is important, because it has been shown by Stineman<sup>2</sup> and others that clinicians at times experience conflict between professional specialization and perceptions of therapeutic efficacy and this formulation is different than the consumer, who views the issue from a personal experience. Other groups of consumers with SCI need to be evaluated according to their preferences and are currently being studied by this approach. Differences may exist between individuals with complete versus incomplete injuries, acute versus chronic injuries and based on age. Finally, the process of playing the Features Game may "help to bridge the consumer-clinician perspectives" and could possibly serve as an educational tool for student and professional staff.

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