A GUIDE TO THE
TRINITY AMPUTATION AND PROSTHESIS EXPERIENCE SCALES - REVISED
(TAPES-R)

Dublin Psychoprosthetics Group: [www.psychoprosthetics.ie](http://www.psychoprosthetics.ie)

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Description of TAPES-R

The TAPES-R is a multidimensional assessment designed to facilitate examination of the psychosocial processes involved in adjusting to a prosthesis and the specific demands of wearing a prosthesis. The TAPES-R comprises a Psychosocial Scale with subscales consisting of five items each (General Adjustment, Social Adjustment, and Adjustment to Limitation). The second section consists of an Activity Restriction Scale incorporating 10 items. The third section concerns Satisfaction with the Prosthesis and comprises 8 items, which are subdivided into two scales, the Aesthetic and Functional characteristics of the prosthesis. The fourth section explores the experience of phantom limb pain, residual limb pain, and other medical conditions not related to the amputation. Each of these are subdivided into questions relating to how often it is experienced, how long each episode lasts, how the level of pain could be described and the extent to which it interferes with their daily lifestyles. This section also incorporates two items requesting respondents to rate their health and physical capabilities. Overall, the TAPES-R consists of 64 items and administration time is approximately 15 minutes.

While using the complete TAPES-R gives a comprehensive picture, each of the scales can be used individually. A further description of the development of the TAPES-R and reviews of salient psychometric data are published in:


A copy of the TAPES-R can be downloaded and freely copied for teaching, clinical and/or research purposes from our webpage at: www.psychoprosthetics.ie

If you are intending to use the TAPES-R, we would ask that you complete the TAPES-R Users’ Brief Project Description Form and return to pamela.gallagher@dcu.ie

If you have any queries regarding the TAPES-R, please contact: pamela.gallagher@dcu.ie

We have a version of the TAPES-R that is adapted for use with people with limb loss who do not use a prosthesis. Please contact pamela.gallagher@dcu.ie for further information.

We also have a version that is adapted for use with people with upper limb loss. Please contact pamela.gallagher@dcu.ie for further information.
Rationale for TAPES-R

To truly capitalise on the current rate of advancement in the development of limb prostheses, it is important to attend not only to the physical and technological factors which play a fundamental role, but also the social and psychological issues facing people who will ultimately be using the prescribed technology.¹,² The considerable variability in people’s adjustment to limb loss and subsequent prosthesis usage has resulted in a search for a method to investigate level of adjustment to a prosthesis and the factors related to prosthetic use. At the time of the development of the original Trinity Amputation and Prosthesis Experience Scales (TAPES)³, there was no multidimensional psychometric assessment tool specific to limb loss that was theoretically and empirically derived and would allow these issues to be part of a routine assessment. Its theoretical and empirical foundation, and the subsequent demonstration of good reliability and validity argue for its applicability as a supplement to clinical assessment and its contribution as a research tool.³,⁴

The aim of the TAPES/TAPES-R is to enable an examination of the psychosocial processes involved in adjusting to a prosthesis, the specific demands of wearing a prosthesis and the potential sources of maladjustment. The intention is to provide a mechanism that will allow the assessment and planning of future care programmes to be more efficient and effective. The TAPES/TAPES-R has been used in both clinical and research contexts to facilitate the exploration of the relationships between the different variables and the identification of those factors, which promote successful rehabilitation and adjustment to wearing a prosthesis and those which interfere. According to Desmond and MacLachlan (2002)⁵, equipping health care professionals with information from this type of psychometric assessment will further enhance their understanding of the user’s perspective and allow for more collaborative working relationships.

The investigation of the psychometric properties of the TAPES/TAPES-R and its application to different client groups is ongoing. See www.psychoprosthetics.ie for a complete listing of projects and publications from the Dublin Psychoprosthetics Group.

For additional information on ongoing work by clinicians, researchers and academics using the TAPES/TAPES-R for different purposes and in different settings, please contact pamela.gallagher@dcu.ie.

A Selection of Publications of *Empirical* Research with TAPES/TAPES-R

Peer Reviewed Journal Publications


Rehabilitation 86 (3): 205-215


Unpublished Dissertations


SCORING THE TRINITY AMPUTATION AND PROSTHESIS EXPERIENCE SCALES - REVISED (TAPES-R)⁶

The TAPES-R is scored manually (see attached TAPES-R with scoring included). There are six subscale scores, which do not include the pain questions in Part 2. We do not recommend one overall score but six individual scores. While the use of the complete TAPES-R provides a comprehensive picture, each scale/subscale can be used individually. Some items are positively loaded and some are negatively loaded (see attached TAPES-R with scoring included). You can tell this by the direction of the scoring.

The TAPES-R subscale scores are calculated as follows:

*Psychosocial Adjustment subscales*

*General Adjustment:* Add the values corresponding to items 1-5 in Part 1 (p3) and divide by the number of items that were deemed applicable/answered  
*Social Adjustment:* Add the values corresponding to items 6-10 in Part 1 (p3) and divide by the number of items that were deemed applicable/answered  
*Adjustment to Limitation:* Add the values corresponding to items 11-15 in Part 1 (p3) and divide by the number of items that were deemed applicable/answered

High scores on these subscales are indicative of adjustment

*Activity Restriction Scale*

Add the values corresponding to items a-j in Part 1 (p4) and divide by the number of items that were deemed applicable/answered

A high score is indicative of activity restriction

*Satisfaction with Prosthesis subscales*

*Aesthetic Satisfaction:* Add the values corresponding to items i-iii in Part 1 (p5)  
*Functional Satisfaction:* Add the values corresponding to items iv-viii in Part 1 (p5)

High scores on these subscales are indicative of satisfaction with prosthesis

We are currently developing norms for the TAPES-R. At the moment, each score is compared against the group average and/or over time.

Please contact pamela.gallagher@dcu.ie for collated subscale data from available studies.

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**TRINITY AMPUTATION AND PROSTHESIS EXPERIENCE SCALES – REVISED (TAPES-R)**

Scoring for People with a Prosthesis: (See attached TAPES-R with scoring included).

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<th>Name: _______________________________</th>
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### Psychosocial Adjustment subscales

**General Adjustment:** In Part 1 (p3) add the values of:
Item 1 + Item 2 + Item 3 + Item 4 + Item 5 and divide by the number of items that were deemed applicable/answered
A high score is indicative of positive adjustment

**Social Adjustment:** In Part 1 (p3) add the values of:
Item 6 + Item 7 + Item 8 + Item 9 + Item 10 and divide by the number of items that were deemed applicable/answered
A high score is indicative of positive adjustment

**Adjustment to Limitation:** In Part 1 (p3) add the values of:
Item 11 + Item 12 + Item 13 + Item 14 + Item 15 and divide by the number of items that were deemed applicable/answered
A high score is indicative of positive adjustment

### Activity Restriction scale

In Part 1 (p4) add the values of:
Item (a) + Item (b) + Item (c) + Item (d) + Item (e) + Item (f) + Item (g) + Item (h) + Item (i) + Item (j) and divide by the number of items that were deemed applicable/answered
A high score is indicative of activity restriction

### Satisfaction with Prosthesis subscales

**Aesthetic Satisfaction:** In Part 1 (p5) add the values of:
Item i + Item ii + Item iii
A high score is indicative of satisfaction with prosthesis

**Functional Satisfaction:** In Part 1 (p5) add the values of:
Item iv + Item v + Item vi + Item vii + Item viii
A high score is indicative of satisfaction with prosthesis
TRINITY AMPUTATION AND PROSTHESIS EXPERIENCE SCALES-REVISED (TAPES-R)
USERS’ BRIEF PROJECT DESCRIPTION FORM

*If you are intending to use the TAPES-R, we would appreciate if you would complete the following form and send it to: pamela.gallagher@dcu.ie

CONTACT DETAILS:

Name:

Organisation:

Address:

E-mail:

Telephone:

Short description of project (to include information on setting and sample):

If you have any queries on using the TAPES/TAPES-R, please contact pamela.gallagher@dcu.ie
The Dublin Psychoprosthetics Group is a unique multidisciplinary group of researchers and clinicians interested in applying many and varied aspects of psychology to prosthetic use, especially in regard to the rehabilitation of people with amputations. It is a co-directed project between Dublin City University, Ireland, the National University of Ireland, Maynooth and Trinity College Dublin, Ireland. Contact details for the co-directors are:

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Prof Malcolm MacLachlan
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Trinity College Dublin, Ireland.
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The Dublin Psychoprosthetics Group also has many local and international associates who are leading authorities in their areas, with whom we are collaborating. A list of these collaborations and projects and a complete listing of publications and conference presentations can be found on our website (www.psychoprosthetics.ie). Some of our most recent publications include:


We are interested in facilitating colleagues who may wish to use the Trinity Amputation and Prosthesis Experience Scales-Revised (TAPES-R). This instrument is intended for clinical and research use and measures how well individuals adjust to wearing a prosthesis.

We are also interested in establishing links with colleagues in other countries, including 'developing countries', who may wish to collaborate with us on future projects.