Psychoprosthetics is the study of psychological aspects of prosthesis use. It emphasises the individual’s experience of prosthesis use, personally meaningful gains and outcome assessment, and the inclusion of these personal perspectives across all stages of care to optimise use in a personally meaningful way. It addresses the Global Priority Research Agenda areas of impact of AT on quality of life and methodologies for AT outcomes.

User centred perspectives on prosthesis use

In this research programme, we examine:

- the personal impact of prosthetic devices (e.g. quality of life, mood, adjustment, body image, rehabilitation engagement, participation in life activities, identity);
- conceptualisations of successful outcomes from the perspective of the person using or wanting to use a prosthesis;
- individual differences impacting on prosthesis use (e.g. cognition, pain, self-regulation and goals, coping); and
- psychometrically sound outcomes measurement.

What is the impact for AT users and other stakeholders?

Conceptualising Success

To optimise use, it is important to understand what a prosthesis enables a user to do and the meaning the user ascribes to it.

Outcome Assessment

A prosthesis device cannot be assessed independently of the person using it and the reason for them using it.

We developed a multidimensional assessment of psychosocial adjustment to amputation and prosthetic use that foregrounds the user experience, establishes quality benchmarks and promotes high-quality care.

What is the impact for AT users and other stakeholders?

Implications for products, provision, personnel and policy?

Products

Our research addresses the gap in user-centred research that can inform the type and nature of assistive technology required.

Improving understanding of the relevance of technologies for the user and greater knowledge of personally meaningful outcomes of AT provision and use will contribute to cost-effective and appropriate technological solutions that are person-centred rather than technology led.

Provision

We measure key AT outcome variables and relate these outcomes to the provision of specific AT (i.e. prosthetic devices).

Understanding the effects of AT in the lives of users and the outcomes valued by users is critical in demonstrating fundamental and added value that devices offer and informing funding decisions.

Policy

Our research evidence can inform policy to support the accessibility and optimal use of personally meaningful assistive devices.

(1) Addressing effects, costs and economic impact of assistive technology and for informing standards.

In understanding and quantifying impact, we provide evidence for impact of assistive technology on the user’s quality of life.

(2) Methodologies for the assessment of assistive technology need and unmet need.

We provide ways of knowing what the outcomes of importance are from the perspective of the user and how to assess these outcomes. This is essential in identifying and analysing need, meaningful planning, matching (unmet) need to appropriate assistive technology solutions, and optimising usage.

Strategies to share and build global capacity based on this work

The guiding principles underpinning our research can be applied to other assistive devices. We welcome collaborators in moving this agenda forward.

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