TIDAL N+
Transformative Innovation in the Design of Assisted Living products and services

TIDAL training needs survey results

Narrative report written by Weiran Zhou, UCL, based on analysis of data from a pilot study carried out by Marisa Sargent, Loughborough University.

Introduction

This pilot study was carried out by Marisa Sargent at Loughborough University. It sought to identify the training needs of AT (assistive technology) researchers. There were 14 respondents to the survey. Most of them worked in universities or NGOs. Respondents from other organisations, such as local government departments or agencies, health, social enterprises and other HE (Higher Education) institutions, were also represented. The respondents had either a Master's degree or a Doctorate degree. 28.57% of them were early career researchers. 21.43% were educators, and 14.29% were established researchers. Clinical scientists, clinicians, entrepreneurs, manufacturers and patient representatives each had one respondent. The most common areas of professional interest amongst respondents were design and social care/wellbeing.

Training barriers

78.57% of the respondents thought training is extremely or very important to them. However, there are certain barriers to accessing the training. The primary challenge appears to be finding suitable training, with 72.72% of respondents viewing it as an extreme or moderate barrier. Respondents mentioned that they cannot easily know the relevance of available training to AT and their own work. In other words, knowing which training is good for their career development remains difficult. The cost of training is often seen as a barrier, but it's not as significant as finding suitable training. 45.45% of the respondents thought lack of time and excessive workload is an extreme or moderate barrier which is the same proportion as cost. Location, duration and format of the training are not extreme barriers to most AT researchers. Notably, more than half of the respondents do not consider accreditation as an important aspect in training.

Training opportunities and gaps for researchers in AT

There were several existing training courses mentioned by the respondents, covering the topics of Accessibility, Disability-inclusive research, Ethics, Foundations in Design Thinking, Health Economics, Neurodiversity and Inclusive teaching tools (see table for course names). Training providers cited were IAAP (International Association of Accessibility Professionals), Future Learn/London School of Hygiene and Tropical Sciences, NIHR (National Institute for Health and Care Research), IDEO and Loughborough University. Most of the courses can be accessed online. However, self-funding is required for some courses, which cost around £1000.

The survey also indicates the training topics that AT researchers would like to have in the future. Regarding design courses, there is a specific interest in gaining a deep understanding of particular disabilities in order to effectively interact with users and design for their needs. Additionally, some researchers expressed a desire to learn about upscaling designs for AT manufacturing. Furthermore, there is a demonstrated need for training on medical device regulation, especially related to medical device standards, CE marking, and patenting, which is a major challenge to researchers. The survey also emphasized the necessity for training in ergonomics, outcomes measures in AT, and design/clinical tests for prosthetics.

Conclusions

This was a small, pilot survey which gives some insight into current training barriers for AT researchers, the types of training available, and the range of training needs. It indicates a need for a larger study to evaluate training requirements for AT researchers; development of training programmes on a range of topics specifically geared towards them; and creation of sources to help AT researchers identify suitable training more easily and effectively.

How this research has informed TIDAL's work

The study identified a desire and need for researchers to be able to interact more effectively with disabled people in order to design better for their needs. To support this need, we have created Disability Awareness content specifically aimed at researchers working with disabled people in a design or user testing context.

Some researchers expressed a desire to learn about upscaling designs for AT manufacturing, and for training on medical device regulation. The TIDAL Accelerator provided an opportunity for ECRs to learn about the process for commercialising their designs, and included a workshop on medical device regulation. Dissemination of the TIDAL rapid review, 'The impact of Brexit on Assistive Technologies Evidence Brief. March 2023.' Will also help to meet this need.

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