

“Suits you!”



Introduction

This exercise is designed to get you thinking about the capabilities and limitations of a range of users based on their physical characteristics. It is aimed at stimulating a way of thinking about design that is focused on fitting the task and the equipment to the user, rather than the other way around.

Learning outcomes

At the end of this exercise, you will:

- Have a greater awareness of anthropometric variability in the population
- Have an appreciation of the strengths and limitations associated with different user characteristics
- Start to understand how these variations are relevant to product design

What to do

There are two parts to this exercise. The first part is about measurement of physical characteristics.

1. In groups of at least six, draw around your hands on an A4 sheet of paper. The rules are:
 - a. Everybody uses the same hand – so if the first person draws around their left hand, everybody draws around their left hand
 - b. Everybody’s hand must be in the same place on the piece of paper – the easiest way to do this is to place your wrist at the base of the sheet (it’ll be best to have the sheet in portrait orientation)
 - c. Splay your fingers out as much as you can while drawing (that’s the fingers of the hand being drawn, not the fingers of the hand doing the drawing!)

What you end up with should be a series of concentric hand prints – something like the image below:



2. Now identify the smallest hand and the largest hand on the piece of paper. Trace around these with different colour felt tip pens to highlight them.
3. Measure these hands from the base of the wrist to the tip of the middle finger.
4. Now measure your own hand and calculate how big it is in proportion to the smallest and largest hands. Convert this into a percentage by using the smallest hand as '1' and the largest hand as '100'.
5. Compare your statistics with each other, and see how you measure up against the general population by looking at data tables available at ...

The second part of the exercise is about considering how these sizes – and, more importantly, the differences between users – relate to product design. Here are some questions to get you thinking – and remember, bigger is not necessarily better!

- What kinds of tasks or activities might a bigger hand be better at than a smaller hand?
- What kinds of tasks or activities might a smaller hand be better at than a bigger hand?
- Can you think of any products that are particularly good or bad for small hands?
- Can you think of any products that are particularly good or bad for large hands?
- Think about the design of the hand as if it were a product – what is it particularly well suited for? What is it not well suited for?
- Pick one of the products you were thinking about earlier, and redesign the hand for best use of that product. Then do it the other way around – redesign the product to make best use of the hands we've got.
- Finally, think more generally about how you would bear these things in mind for the design of a brand new product. Remember to consider the variation in your users – whoever they may be.

As additional exercises, you could go on to consider other physical characteristics – we've just thought about hands here, but try running through the same questions with other aspects of size and shape. Then you could even go further and think about cognitive attributes – for instance, variations in skills and experience, what kind of product stereotypes people hold in their heads etc. All of these are important considerations in user-centred design.