Just like computers and the Internet, mobile phones are becoming common personal items for older persons. In early 2006, 60 percent of people aged 65 to 74 years and 36 percent of people aged 75 years and over owned and used mobile phones in the UK [1]. Actually, older people have a much higher adoption rate of mobile phones than of Internet usage [2]. Many older persons use mobile phones in both leisure and work contexts.

However, while for some older persons, communicating using mobile phones seems to be an enjoyable experience, most mobile phones had not been designed with older people in mind and are usually difficult for them to use [3]. Most complaints are related to displays that are too small and difficult to see; buttons and characters that are too small, causing users to push wrong numbers frequently; functions that are too many and too complex, non-user-friendly menu arrangement; unclear instruction on how to find and use some functions; and services that are too expensive.

If the problems related to the use of mobile phones can be solved, mobile phones can potentially play an important role in maintaining quality of life for older people in many ways. They provide a sense of security and safety for elders: By carrying mobile phones, other people can reach them practically anytime and anywhere [4]. Past studies show that when asked, older people were quite vocal and creative in specifying desired innovations, such as a health-monitor function, speech activation, or a security-bracelet function that can send calls for help [5].

In a research project commissioned by the British Society of Gerontology, people 60 years old and above were actively involved in exploring issues related to their mobile phone use with the intent of translating the findings into a set of requirements for the design of a senior-friendly phone, through a combined approach of qualitative and quantitative methods (content analysis of expert interviews and focus group discussions, as well as statistical analysis of an online questionnaire designed in collaboration with the focus group) to arrive at a more nuanced understanding of these issues.

The Issues

Through a combination of the investigation into usage patterns, problems and concerns, perceived benefits, and desired and unwanted features, we uncovered the following issues:

- The most-called person: partners.
- The three important benefits of having mobile phones for older persons are: 1. They know they can always call somebody when they are in trouble; 2. They feel more confident to go out by themselves; 3. They feel safer when they are alone.
- The three most-desired functions are address book, diary, and alarm clock (arguably, these functions share a common characteristic of being memory aids).
- The top three functions considered unnecessary are music player, camera, and videophone (these are entertainment-related functions, which many older persons would not associate with a communication device).
- The three most difficult aspects of using mobile phones are learning to use, navigating menus, and choosing the right option.

The Design

Shifting through the problems with the current design of the phones used by the study participants and the participants’ opinions on the various aspect of physical design, a set of requirements for the physical design elements that were perceived to be senior-friendly are:

- **Buttons**: Square large metallic buttons.
  Reason: Metallic buttons clicked when pressed, thereby providing an auditory confirmation that the number associated with those buttons had been dialed successfully, useful for older persons with reduced vision (which might cause viewing
they preferred metallic buttons to rubbery buttons, as metallic buttons “give the impression of a serious piece of equipment.”

- **Display**: One that can display large text and whose screen backlight does not turn off when idling.
  
  Reason: Older persons require extra cognitive processing time when dialing a number or writing text, and the default automatic backlight dimming is too fast for most of them.

- **Shape**: Flip phone with antenna.
  
  Reason: A flip phone is easier to pick up and end calls, and it has a comfortable length and angle when opened; an antenna helps when picking up the phone in a crowded handbag.

- **Color**: Bright or silver.
  
  Reason: Easier to spot in a crowded handbag. However, some older persons disliked brightly colored phones for fear of being too visible, hence attracting mobile phone thieves.

- **Size**: Bulky, can be grabbed and held comfortably. The participants provided an example of the phone model that was too small, which was “the new Nokia that only has this new rotary dialer,” essentially, the 7380 model.
  
  Reason: Joint stiffness makes it difficult to grab and hold small devices.

- **Hardwired functions** (these are the functions that should be “hardwired” to particular buttons): one-button locking function to prevent accidental dialing, panic button for emergencies, and a button to place a caller/number into a blacklist.
  
  Unfortunately, although any active mobile phone can be used to dial 999 (the emergency number in the U.K.), even when there is no credit left or the contract has expired, very few mobile phones allocate a button for emergency dialing. Most models that support hardwired emergency numbers are mobile phones for children (e.g., LG1000 Migo phone).

Using the criteria proposed by the participants (except the hardwired functions, which unfortunately do not yet come standard in many commercial models), an extensive search in shops and online commenced. The model that most closely matches these criteria is an LG8380, a flip phone with an antenna and square metallic buttons that clicked when pressed.

**What Do We Learn About Mobile Phones and Older Persons?**

From this study, it is apparent that for older persons, mobile phones are perceived as memory aids to mediate aging-related memory decline and for providing a sense of safety and security. As such, functions that do not support these aims are perceived as unnecessary. It is also the memory decline (or in general, cognitive decline) that causes problem for older persons in using and learning to use mobile phones.

The study also revealed the preferred physical design of mobile phones for older persons. The model that most closely matches the proposed criteria is quite a modern and popular design that is served by most mobile phone providers. Product designers take note—it is clear from this study that mobile phone design for older persons is not necessarily limited to or based on old-style, out-of-date models, supporting only very basic calling functions.

**References**


   
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Mobile phones - design history. Designers of new products often look to existing forms. The very first handheld mobile phone, the Motorola DynaTAC, bears more than a passing resemblance to the Handie-Talkie (right) used by the US Military in the Second World War. It is no co-incidence as Motorola made both products. When consumer mobile phones became a possibility in the 1990s, the earliest designs looked like products that the non-mobile users had already experienced. The inspiration for Motorola’s Personal Phone was the look and feel of the cordless landline phone. Today we are much mor Best mobile phones to stay in touch in old age. Last updated on 20 February 2019. For some older people and those who have disabilities, using a standard mobile phone can be difficult, but there are alternatives on the market. In this guide Denver GSP-110 TTfone Star Doro 6520 Binatone M250 Nokia 105. In this guide However, it is a popular phone for older people with some excellent features. A display size of 2.8 inches is the largest in our top five, enabled by the flip design. The designs of mobile sets for aged persons are really good with relatively big sized buttons specially red and green and enough space between them. We are independent and offer a wider market comparison (where we can). We order our comparison tables by price or feature and never by referral revenue. Some of these phones are smartphones while others are more old school looking in terms of design, but they're all a great fit for the elderly, including some Samsung and iPhone models. If you are someone who is looking for a smartphone for an elderly relative, or an elderly person in the market for a new device, there are a lot of factors to consider when making the right choice. As capable as our smartphones are, there are admittedly some that aren't the most intuitive to use, and that can be a big problem for anyone not already familiar with the ecosystem. If you are planning to pick up a new phone for yourself, or senior citizen in your life (a parent, grandparent, etc) — you have a few considerations to make. First, do they really want or need a smartphone?