Title: ‘Kids like it loud!’

Shelley Bartlette, Senior Lecturer in Digital Design at Canterbury Christ Church University is developing a ‘parent-friendly’ mobile application in a bid to raise awareness of noise induced hearing loss and tinnitus.

In October 2011, I had just put my 16-month old son to bed and was enjoying a well-earned break when I became aware of a loud high-pitched ringing in my right ear. Numerous tests later, I was diagnosed with permanent tinnitus and was told I would have to learn to live with it. At first I found the condition extremely distressing, and struggled to come to terms with the lack of silence. I had a classic case of ‘why me!’ and battled with anxiety and sleep problems. It was at this point that I started to research the subject to better understand the condition and how it manifests.

In July 2013, nearly two years later, I now manage my tinnitus much better and feel more able to cope. I think the turning point came when channelling my energy into educating myself about the condition. I was genuinely shocked to discover that exposure to loud noise could have such a permanent impact on hearing and that tinnitus caused by loud noise was considered almost entirely preventable.

But it wasn’t until taking my son to a 3-year-olds disco party that the impact of my research really sunk in. The music was so loud that children were crying and covering their ears, running away from the source of the noise. Yet the parents seemed oblivious to the potential risk to their children’s hearing and seemed ignorant to the signs of distress the children were showing. One parent even said ‘Kids like it loud!’ – a phrase I have come to hear a lot recently.

Fuelled by a passion to raise awareness of cumulative noise damage on hearing where repeated exposure to loud noise makes the risk of developing the condition more likely, I secured a small research grant from the university. My first step was to survey 70 parents to
determine whether they had concerns about the level of noise in any recreational venues attended by children. Of those surveyed, 51% felt cinemas and children’s disco parties were louder than they need be.

Using equipment designed to test noise in factories on loan from Mark Scutchings managing director and audiologist at Hearbase in Folkestone, sound pressure levels and exposure times were measured at a number of local cinemas and children’s discos. In collaboration with Mark, findings were analysed to ascertain whether they posed a potential risk on hearing. In general, the cinemas were considered unnecessarily loud with peak noise levels throughout the screenings of between 109-112db. Mark said “We need to ask ourselves if we are making young people more habituated to high noise levels so that when they get their MP3 player later they will crank up the volume without a second thought.”

At a children’s disco party, music was played at worryingly high noise levels. Measuring 119db for the duration of each piece of music, the recommended safe exposure time without hearing protection is just 15 seconds; far less than the 2-hour disco duration (it is worth noting that the measurement was taken several meters away from the sound source, so some children would have been exposed to far louder volumes). Mark said, “the kiddie disco is definitely a potential risk. Why do they need to be that loud? If it were a factory, it wouldn’t be allowed to be so loud. We have spent time making sure factories and work places are safe and now it appears that’s here’s another source of potentially dangerous noise exposure, which should not be ignored.”

We are becoming increasingly aware that MP3 players at high volumes overtime can cause hearing damage. But shouldn’t we be considering why children play music loud in the first place? Mark said “we may be predisposing children to develop noise induced hearing loss in their lives because we are conditioning them to loud sounds early on. They might just get to think that this is kind of normal.”

We appear to be living in an increasingly noisy society, where more than 10 million people in the UK suffer from some form of hearing loss/tinnitus. Is it not about time a new legislation was implemented to prevent children from being exposed to potentially damaging noise levels? Until then, I hope my mobile application will go someway towards raising awareness and to arm people with the facts so they can make informed decisions when exposing children to loud noise, thereby safeguarding the hearing of our future generation.

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