Playing videogames is arguably the most popular leisure activity among teenagers in the UK. This Christmas, sales of videogame hardware and software are likely to be astronomical. But with all the media hype surrounding the more negative aspects such as addiction and violence (areas that I personally carry out research into), should parents be worried about buying videogames for their children? I have probably published more scientific papers on videogame addiction than any other academic in the world. However, I think the positives of playing videogames significantly outweigh the negatives. I have three “screenagers” myself (two teenage boys and a teenage girl), and they all play videogames. As a parent I always have in the back of my mind that videogame playing is just one of many activities that my children can do alongside their sporting activities, school clubs, reading, watching television, and socialising with their friends. These all contribute to what I describe as a balanced “recreational diet”.

There is now a wealth of research showing that videogames can have innovative educational and therapeutic uses, as well as many studies showing that playing video games can increase reaction times and improve hand-eye co-ordination. For example, research has shown that spatial visualisation ability skills (i.e., mentally, rotating and manipulating two- and three-dimensional objects) improve with video game playing. In an educational context, video games:

■ Are fun, engaging, motivating, interactive, rewarding, and stimulating. Therefore, they can maintain a child’s undivided attention for long periods of time, with elements of interactivity that can facilitate learning;

■ Allow individuals to experience novelty, curiosity and challenge that can stimulate learning;

■ May help in the development of transferable skills;

■ Can be used when developing characteristics such as self-esteem, self-concept, and goal-setting;

■ Can act as safe simulations that allow individuals to engage in extraordinary activities without real consequences.

Because video games can be so engaging, they can also be used therapeutically. For instance, they can be used as a form of physiotherapy as well as in more innovative contexts (for instance, a number of studies have shown that children who play video games following chemotherapy they need less painkillers than children engaged in other activities). So when it comes to buying videogames this Christmas, what should parents do? To begin with parents should actually find out what videogames their children are actually playing! All games now feature the Pan European Game Information (PEGI) rating system, which contains a specific age rating and specific game content. Some games contain material that parents would prefer their children not to be having exposure to.

What is clear from the scientific literature is that the negative consequences of playing almost always involve people that are excessive players. There is little very evidence of serious adverse effects on health and education from playing videogames a few hours a day.

Playing videogames can have a positive impact, says Dr Mark Griffiths.