The In your home set of articles article is separated into 9 sections, each of which can be individually downloaded. It is a 'work in progress' incorporating new information whenever time permits.

Section 4

Internet addiction (IA)

1. Introduction; powerfrequency (ELF) EMFs; radiofrequency (RF) EMFs; measuring EMFs; the importance of timing
2. Appliances A-C; air conditioners, amateur (Ham) radio transmitters, amplifiers, electric guitars and keyboards, aquarium, baby monitors, bath hoists, battery operated equipment, battery re-charging mats, beds, blood glucose monitors, bottle warmer, bra, burglar alarm, camcorder, carbon monoxide detectors, CD player, central heating, motor-controlled chairs, clock radio, clothes dryer, coffee grinder, coffee maker
3. Computers; monitors (Visual Display Units or VDUs), wired and optical mice, health effects, parental guidelines, laptop computers, wireless enabled laptop, PDA (Personal digital assistant), computer wireless LAN (local area network), Schools' reactions, parents, broadband, computer games consoles, tablets, computers and Electrical Hypersensitivity (EHS), protection devices against EMFs from computers

4. Internet addiction

5. Cooking; electric ovens and hobs, microwave cooking, barbecues, deep fat fryers

6. Appliances D-H; dehumidifier, dishwasher, doorbell, electric (el) blankets, el can opener, el clock, el drill, el guitar, el kettle, el knife, el lawn mowers, el shavers, el shower, el toothbrush, el vehicles, electricity meter, exercise machine, extractor fan, fan, fax machines, fire alarm, fitness devices, floor polisher, food processor, foot spa, foot & hand warmer, fridge, fridge/freezer, hair curlers/tongs, hair dryers, headphones, hearing aids

7. Appliances H-S; heart pacemakers, heaters, central heating boilers, heating pads, hi-fi, etc., hostess trolleys, immersion heater, iron, Jacuzzi, musical keyboard, lift, loudspeaker, magnetic field therapy mats, meters, mixer & blender, music centre, nightlights, pagers, PDAs, pencil sharpeners, personal alarms, personal radios, pet fences, photocopiers, plasma balls, power tools, printers, projectors, radar, radios, radio transmitters, sandwich maker, sauna, scanner, security systems

8. Appliances S-Z; sewing machines, smoke detector, sockets, solar panel water heating, solar photovoltaic panels, soldering irons, spinners, stairlift, static electricity, sun beds, sun lamp, tea maker, telephone, television, TV and radio transmitters, TENS unit, toaster, toys, transformers, trouser press, tumble drier,

typewriters, vacuum cleaners, vagina speakers, washing machines, washer/dryer, waste disposal unit, water filters, water heater, water softener, water supply, wheelchairs, wristwatches

9. Grounding & 116 references

Factors associated with Internet addiction (IA)

Psychiatric disorders often coexist with IA, one definition of which is 'an inability to control one's use of the Internet which leads to negative consequences in daily life'. There is growing evidence that genetic, personality and individual differences in automatic and controlled aspects of self-regulation may promote the development of IA. (Spada 2014).

In a study by Lam (2009) the majority of respondents were classified as normal users of the Internet, with 10.2% moderately and 0.6% severely addicted to the Internet. There was a 50% increased odds for males to be addicted to the Internet when compared to females. Other potential risk factors included drinking behaviour, family dissatisfaction and, especially, experience of recent stressful events. Stress-related variables were associated with Internet addiction among adolescents as they are also related to other addictions.

In India the prevalence of IA was 8.7%. Male gender, owning a personal device, hours of internet use/day and the use of smartphones was linked to IA (Prabhakaran 2016). Internet use for online friendships was found to be a significant predictor of IA. Use of internet for chatting, making online friends, shopping, watching movies, online gaming, searching information online and instant messaging were found to be associated significantly with IA.

The findings by Stavropoulos (2017) demonstrated that: (a) higher levels of anxiety were significantly associated with higher IA behaviours, (b) the strength of this association did not vary over time (between 16 and 18 years old), and (c) however, it tended to weaken within classrooms higher in extraversion. The study indicated that the contribution of individual IA risk factors might differently unfold within different contexts.

Internet addiction has been widely researched among adolescents, but they are not the only ones for whom this is a problem.

McNicol & Thorsteinsson (2017) made a study of internet users aged 16-71. They found that 24.4% were problematic users, and 6.7% as addictive Internet users. High use of discussion forums, high rumination levels, and low levels of self-care were the main contributing factors to IA among adolescents. For adults IA was mainly predicted through engagement in online video gaming and sexual activity, low email use, as well as high anxiety and high avoidant coping. Problematic Internet users scored higher on emotion and avoidance coping responses in adults and higher on rumination and lower on self-care in adolescents. Avoidance coping responses mediated the relationship between psychological distress and IA.

Cognitive changes

In an overview by Mills (2014), she concluded that there is particular concern about how Internet use is affecting the brains of adolescents. Whilst accepting that acquiring the skills to use this resource may change brain neurology, she felt that we have not the tools to decide whether the changes may be a problem. Romer (2013) had believed that heavy use of the Internet and video gaming may be more a symptom of mental health problems than a cause. Moderate use of the Internet, especially for acquiring information, is supportive of healthy development.

Links to depression and suicide

In a study by Fu (2010) the prevalence rate for having five or more symptoms of IA was estimated to be 6.7%. Its symptoms seem to co-occur with individuals' suicidal ideation and depressive symptoms.

Seyrek (2017) found that approximately 1.6% of Turkish students aged 12-17 were identified as having IA, whereas 16.2% had possible IA. There were significant correlations between IA and depression, anxiety, attention disorder and hyperactivity symptoms in adolescents. Smoking was also related to IA.