Case studies

Brenda loves to listen to upcoming bands online. When she finds a new band that she likes, she joins their fan pages on social networking sites, downloads images of them to use as backgrounds on her phone and laptop, and writes positive reviews about them on her blog. However, as she has limited income, she doesn’t actually buy their music, either on CD or as a download – instead she finds their music on file-sharing websites and downloads it for free. While she knows this is wrong, she justifies it by telling herself that she introduces the artists to a new group of fans via her blog, and that in the long run, they’ll make money from her actions.

Greg enjoys films and the latest television shows. Rather than pay for a subscription to a television service, or buy box-sets, he prefers to download the content from the internet. While he knows that this is illegal, he feels that it’s unlikely that he’ll be caught. Even if he is, he thinks that he probably won’t be punished because all of his friends also download copyrighted work from the internet, and he feels that they can’t all be prosecuted. He thinks that anyone who pays for a television service, and then watches the programmes with advertisements, is an idiot, as he can download an ad-free version from the internet within hours of the programme first being aired.

Chapter overview

There are offences that many individuals carry out at some point in their lives – perhaps driving a little too fast, taking stationery supplies from the workplace, engaging in underage drinking or smoking, or perhaps even using illegal or controlled substances. We tend to think of these as ‘victimless’ crimes, because we cannot easily identify any individual who is being harmed by these actions. Of course, this is not to say that there are no victims of these offences – such as the company whose supplies are being taken, or those whose health or safety is put at risk by the actions of the offender. But because these victims aren’t easily identifiable, many individuals feel that these crimes do not do any harm.

Similarly, most people do not consider themselves to be cybercriminals because they do not hack, create malware, prey on children online or commit fraud. But many internet users do engage in an online, supposedly ‘victimless’ crime – copyright infringement through piracy of music, film, television programmes, books or software.
Several high-profile file-sharing services have been the subject of major news stories in recent years, such as ‘Kazaa’, ‘Napster’, ‘The Pirate Bay’ and ‘Limewire’ (David, 2010; Jewkes, 2010; Yar, 2007).

This chapter examines online copyright infringement, with particular focus on illegal file-sharing of music, video and software. Definitions of key terms will be provided, and the various methods used during illegal file-sharing and piracy will be outlined, along with a historical view of how copyright infringement has developed over time. The psychology of offenders will be examined, including demographic characteristics and motives, as well as the psychological characteristics that such offenders seem more likely to exhibit, and the methods by which they explain their behaviours, particularly neutralisations. Potential solutions will be considered, including the key methods by which deterrence may be achieved, as well as an attempt to identify the most effective form of punishment available.

Definitions

Many different terms are used when describing the illegal distribution of copyrighted material. For example, Bryant (2008) uses the terms ‘illegal file-sharing’ and ‘commercial music piracy’ to describe the transmission of files and the creation of physical discs such as CDs or DVDs respectively. Other authors, such as Hill (2007), use less differentiation, defining digital piracy as ‘the purchase of counterfeit products at a discount to the price of the copyrighted product, and illegal file-sharing of copyright material over peer-to-peer computer networks’ (p. 9).

Intellectual property (IP) law and protection are used as the basis for legal and economic uses of the term ‘piracy’ (Yar, 2006, p. 65). Stephens (2008) describes intellectual property rights (IPR) as ‘encompassing the privileges accorded to the creators and owners of creative work (IP) including inventions, designs, software, music, films, and written works’ (p. 121). Such privileges can include the prevention of reproduction without the copyright holder’s permission (Stephens, 2008), although Stephens also notes that some consumers argue for ‘fair use’ of the content. This ‘fair use’ is open to interpretation – but for example, consider the case of a customer who buys a music CD through a legitimate source, such as a high street store. They may wish to have easy access to the music in their car, as well as in their home, and they may make a copy of the CD to keep in their glove box. They might want to make a digital copy in mp3 format to keep on their portable music player, but they later might buy a new device that doesn’t read mp3 files, and so they need to copy it to a different format. If they also want to use one of the files as a ringtone on their mobile phone, they may need to make a new version of the file again, in a third format. The consumer may need to purchase four further copies of the same music track in order to legally possess this content, even though they paid for the first CD, and would only ever listen to one version at a time. It is interesting to note that many companies are now beginning to recognise this desire by consumers to have multiple copies of a digital product, and many DVDs now include a version of the film or television programmes that can be directly installed onto a portable media player or computer.
Organisations created to protect copyright holders regularly publish information about the costs and prevalence of copyright infringement. Bryant (2008) indicates that ‘industry-based organizations may have a particular interest in emphasizing the seriousness of the problem’ (p. 23), understandably so, as the welfare and employment of their members are at risk. While there is little doubt that piracy activity is a very common problem (Yar, 2007), in reality it is very difficult to accurately estimate the true cost of piracy for several reasons, as outlined by Yar (2006). For example, overall piracy rates are ‘often extrapolated from detection and conviction rates’ (p. 72), thus meaning that levels of policing activity by law enforcement or other bodies may impact on the estimates of piracy rates. Increased levels may reflect increased policing efficiency and activity, rather than an increase in offending behaviour. Another problem with estimations occurs because many agencies quantify the extent of the problem in financial losses, based on the ‘legitimate product price’. This presumes that each illegal copy of the file replaces a legitimate purchase, which is not necessarily true. For example, a person may download an illegal copy of a movie. Many estimates of piracy costs assume that the person would otherwise have paid for a cinema ticket, or bought the movie on DVD or Blu-Ray. While certainly true for some users, it probably does not apply in every case – not every instance would directly replace a real sale, as some individuals may download the content as it is free, but would not pay the full price for it. It should also be considered that dilution of product value is another important consideration in copyright infringement (Wall and Yar, 2010). If the product has unrestricted use, it is likely to have a lower value than if the number of copies is more limited.

Illustration 8.1 Cost of piracy. It is difficult to estimate the exact cost of digital piracy. Some copyright infringers argue that digital piracy may actually help a music artist’s career.

Activity 8.1 Copyright infringement statistics
- Search online for the latest statistics involving copyright infringement. Some useful organisations which may provide reports include:
  - British Phonographic Industry (www.bpi.co.uk);
British Software Alliance (www.bsa.org);
International Federation of Phonographic Industries (www.ifpi.org);
International Intellectual Property Alliance (www.iipa.com);
Motion Picture Association of America (www.mpaa.org).

Some researchers have argued that illegal music downloading may not always have a negative impact on sales and income. For example, Peitz and Waelbroeck (2006) suggest that illegal music downloaders may use ‘sampling’ to find products and artists that better suit their own tastes, and that those downloaders may be willing to pay more once they have found their preferred content. While it is certainly true that some users may later purchase content that they have sampled online, not all downloaders do this. Also, many legitimate digital music retailers offer potential customers the opportunity to listen to short clips of tracks to allow them to sample the music before paying for it.

Yar (2006) describes how some recording artists can profit more from illegal downloading, as the more users who listen to their music, the higher the potential ticket sales for concerts, where musical artists often make a higher proportion of income rather than through the sales of CDs and legitimate downloads. There have even been some musicians who distribute their work freely online with this specific purpose. However, this does not take into account other potentially invisible victims. Many record labels reinvest the income from music purchases into the development of new artists, and bypassing legitimate purchase of content may impact on the incomes of technicians, engineers and other professionals who helped to develop the content.

Wall and Yar (2010) indicate that illegal music downloading may actually help to promote music culture, thus expanding the market, particularly with regard to sales of older works. They suggest that it is possible that sales of CDs have remained constant, or perhaps even risen, and that the introduction of authorised content download websites has been very successful. There is some support for this theory. LaRose and Kim (2007) found that downloading intentions had no impact on CD or online pay music purchases. Oberholzer-Gee and Strumpf (2007) found that downloads have a negligible effect on sales, but this study has been criticised, and most studies have found some negative relationship between illegal file-sharing or peer-to-peer systems, and legitimate sales (Liebowitz, 2006; Zentner, 2004).

Summary box 8.1 Definitions

- Many terms are used, such as copyright infringement and illegal file-sharing.
- Hill (2007) defined digital piracy as ‘the purchase of counterfeit products at a discount to the price of the copyrighted product, and illegal file-sharing of copyright material over peer-to-peer computer networks’ (p. 9).
- This chapter mainly considers music, film and software piracy, although there are other forms, such as text and design copyright infringement.
- The extent of ‘fair use’ of content is often debated – a person may legitimately want several copies of a file, but all for personal use.
• While regular statistics on the extent and cost of digital piracy are released, it is very difficult to obtain truly accurate figures.
• There are some arguments that illegal music downloading may eventually have a positive impact on sales, perhaps because of sampling, concert attendance or the sale of older works.
• But most studies suggest that there is a negative relationship between digital piracy and legitimate sales.

Methods of copyright infringement

Copyright infringement is not a new offence. David (2010) cites how Henry Fuesli’s 1781 painting ‘The Nightmare’ was pirated very soon after its first authorised reproduction (pp. 1–2). Even Charles Dickens experienced piracy, as his works were transmitted to the US via telegraph without his permission or royalties payments (Jewkes and Yar, 2010, p. 3). There is some irony in the fact that most of Dickens’ works are now legally available as free downloads for eReaders (electronic reading devices), while new authors experience copyright infringement of their books on the same devices. More recently, illegal copying of material has taken many forms, but it has become much easier to copy greater quantities of material due to the digitisation of content (Bryant, 2008).

In the 1980s, dual deck tape recorders provided the means by which people could copy both music cassettes and software cassettes, which could store the software for many home computers of the time. Bryant (2008) cites how the British Phonographic Industry (BPI) launched a campaign in the early 1980s saying that ‘home taping is killing music’. ‘VHS’ format video cassettes could also be copied in a similar way, either by using the relatively rare dual deck video recorders, or by connecting two single video recorders. However, this form of analogue copying of music, software and film was restricted in a way that modern digital copying is not. Serial copying of the tapes resulted in a significant deterioration in quality (Bryant, 2008). A copy of an original recording looked or sounded acceptable (at least when the limitations of the medium were taken into account). But a copy of a copy was much less tolerable, and any subsequent copies were practically unusable. A second problem with analogue copyright infringement related to the time taken to prepare the copy – in some cases the copy had to be made in real time, and so, for example, if a person wanted to copy a 45-minute audio tape, it required 45 minutes to prepare each copy.

When CDs and DVDs became the preferred formats for content the digital nature of the files meant that deterioration of quality was much less of a problem, and files could be copied much faster. Copying CDs became quite popular in the 1990s, but Bryant (2008) indicated that in most cases people only circulated these copies to their families or friends, or made ‘back-up’ copies of their own music collection. Nevertheless, many pirated CDs were created for sale as well. Video piracy lagged behind, hampered by the later production and popularisation of DVDs, as well as the relatively low memory of recordable DVDs compared to commercial DVDs (meaning that it was much more difficult to transfer the content from a commercial DVD to a copy,
Digital piracy and copyright infringement

Illustration 8.2 Analogue media. Analogue media took longer to copy, and was more prone to quality degradation, than digital media.

than it was to do so for a CD). DVDs were also more likely to include copy protection software, which an offender would need to overcome in order to make a pirated copy.

As previously mentioned, some computer games and software which was stored on cassette tape could be copied using dual deck tape recorders. When software started to appear on CD-ROM, some programmes were included in their entirety on the disk, which could then be easily copied (Stephens, 2008). To attempt to avoid this, systems were introduced which required additional information, normally in the form of a product key, which was required to install the software. This product key (normally a list of letters and numbers) was provided either within the packaging of the software, or via communication with the company. Sometimes the same product key could activate multiple versions of the software, and so piracy adapted to simply including a copy of the key with the illegal disk. Even if the software was designed so that the product key could only be used once, there were still methods of getting around this – ‘keygens’ (key generators) were developed which mimicked the mathematical algorithms which were used to create legitimate product keys. The keygen therefore created a new and unique product key which would still be accepted by the software. Another strategy involved software that had been installed as a trial version – in some cases this software included code which deactivated the product when the trial period ended. This code could sometimes be overwritten, thus preventing the deactivation.

Up until now, we have considered offline methods of copyright infringement. However, the internet has provided new means of distributing pirated copies of music, text, video and software. One of the key differences involves the widespread nature of the distribution online (Yar, 2007). While illegal markets for offline distribution were not uncommon, much piracy which occurred before the popularisation of the internet and digital content was restricted to exchanges between friends, acquaintances and family members. The internet greatly expanded people’s networks, and hence the pool of resources. Previously, if a person wanted a pirated copy of the latest album by their favourite artist, they had to wait until a friend bought it (and was willing to let them copy it), or they had to go to a place where pirated copies of albums were sold. The
nature of the internet means that it is much more likely that somebody, somewhere has already copied the album and made an illegal copy available on a file-sharing network. There are several other methods by which the internet enables piracy (Yar, 2006). These include:

- reduced cost of materials (for example, there is no need to buy discs or tapes);
- soft copies of content can be distributed more quickly than if discs were required;
- unlimited copies can be made from a single file hosted on the internet;
- problems associated with the distribution of physical media are circumvented (such as problems of confiscation and border controls);
- reduced risk of detection, as the distributor has higher anonymity (or at least, perceives that they do);
- the point of distribution can be located in a country where there is little enforcement of copyright laws, therefore reducing the likelihood of prosecution.

Bryant (2008) also notes that the increased speed of the internet enables online piracy and copyright infringement – greater upload and download speeds make distribution of files considerably more appealing. This is further enabled by reducing file sizes using compression techniques (such as converting a song into ‘mp3’ format, which takes up minimal space and can be quickly and easily transferred). This ability to upload and download not just music but entire films or television series with relatively small file sizes has greatly increased the volume of online content, to the extent that new release (and sometimes pre-release) movies can be found on the internet. One consequence of this is that there are now considerably shorter gaps between initial releases of films and airings of television programmes in their home country, and release dates in other countries. This is in the hope that viewers will not download the programme, and will instead wait for a higher quality airing on television.

Summary box 8.2 Methods of copyright infringement

- Copyright infringement is not a new offence, and works have been illegally copied for centuries.

- Audio and video cassette tapes were illegally copied, but this often required real-time copying, and the quality of the content degraded significantly if copies of copies were made.

- The introduction of CDs and DVDs meant reduced degradation of quality and faster copying speeds, but some problems still remained for those engaged in piracy, such as storage capacity on recordable DVDs and copyright protection measures embedded in the discs.

- Software provided on CD-ROM could also be copied, and although a variety of mechanisms were introduced to attempt to reduce piracy, many of these have been overcome through the use of ‘keygens’ or other coding techniques.

- Online digital piracy has resulted in wider distribution methods and expanded pools of available content.

- The internet has several advantages for those involved in copyright infringement, including reducing the need for physical media, faster distribution methods, lower risk of border controls and confiscations, reduced file sizes and reduced risk of detection.
Psychology of offenders

As mentioned, copyright infringement is probably the cybercrime in which many people are most likely to engage and, as such, it is relatively easy to research these offenders. This is particularly true of content downloaders, who seem to be considerably more common than content suppliers or uploaders. In considering the psychology of these offenders, we will first attempt to uncover if there are any demographic characteristics that describe such offenders. The motives of offenders will be analysed, before considering what personality traits (particularly self-control) and societal factors (such as social learning theory) can do to inform our understanding of such offenders. This section will describe the neutralisations (or justifications) that these offenders use to explain their actions, before considering how some theories of decision making and behaviour have been applied to digital piracy.

Demographic characteristics

Several studies have attempted to identify the demographic characteristics of those involved in intellectual property violations. Piquero (2005) reviewed much of this literature. While she found that some studies indicated that males were more likely to perpetrate such offences, other studies found no gender difference. She also noted that older college students were more likely to engage in piracy than younger college students, but that overall, younger individuals were more likely to engage in these behaviours than older individuals were. Yar (2007) also noted that while piracy activity is conducted by people from many social classes, there seems to be a particular problem among younger people.

Over one-third of students commit some form of software misuse or piracy (Cronan et al., 2006), with those students who are more familiar with computers, and those completing computer-related courses of study, reporting the most misuse. Similar to Piquero, Cronan et al. found that students in higher years of courses were also more likely to engage in software misuse.

Motivations

While there have been proposed links between piracy and terrorist groups, it is unclear to what extent this applies to online copyright infringement (Yar, 2007), or how many of those engaged in online piracy have links to terrorist organisations. It is likely that a significant proportion of those involved in online illegal file-sharing do not have terrorist links, and so this chapter will focus on these individuals. Cyberterrorism will be considered in more detail in Chapter 9.

Higgins (2007) identified motivation as an important factor in illegal downloading behaviours. Bryant (2008) suggests that those who illegally download content are motivated by both the opportunity to collect the content without paying for it, but also the opportunity to access the content immediately, without having to leave their home (pp. 2–4). When music piracy first became popular online, there were
very few sources where legitimate copies of songs could be accessed – it was difficult to download music both instantly and legally. This has since changed – major online retailers such as iTunes and Amazon provide the opportunity to access music files, instantly, legitimately and from the comfort of the customer’s own home. But the presence of these major retailers has not eliminated music piracy, and so other motives, most likely price, must still be a major explanation of downloader activity. Hsu and Shiue (2008) found that many consumers were not willing to pay the full retail price of non-pirated versions of software in Taiwan, and that these were more likely to use pirated versions. Factors such as social norms, source reliability and the presence of technical support were cited by those who were willing to pay more, but prosecution risk seemed to have little effect. Conversely, Liao et al. (2009) found that prosecution risk did have an impact on intention to use pirated software.

If downloader activity can be explained by financial motives (and, to a lesser extent, accessibility), this does not help to understand the actions of those who upload files (Becker and Clement, 2006). While some file-sharing networks require users to upload files in order to utilise their service, many do not. Becker and Clement (2006) found that some uploaders may be motivated by reciprocity – a feeling that they have benefited (or will benefit) from the service, and that they should give something back. It would therefore seem that there is a social aspect to file-sharing, which will be considered later in this chapter. However, it should be remembered that many users of these services never upload any content.

As previously mentioned, most individuals who commit ‘victimless’ crimes do not consider themselves to be criminals. In a similar vein, Bryce and Rutter (2005) found that most internet users view piracy behaviours as morally acceptable and a useful method for saving money. They discovered that 27 per cent of people had downloaded music tracks, and 18 per cent had downloaded entire albums, in the previous year. The major barrier they identified to legal downloading was a lack of access to credit cards, which may help to explain why younger users are more likely to commit such offences. The motivations cited by Bryce and Rutter’s participants included range of choice, convenience, cost and being able to access music that was not otherwise available in the offender’s country. They did not see any major risks in downloading, except the possibility that the file would not work properly, or that they may inadvertently download malware. Reasons given for not copying music included preference for the legitimate version, fear of poor product quality, lack of guarantee and potential links with organised crime.

Interestingly, while many other types of cybercrime seem to be facilitated by anonymity and online disinhibition, Hinduja (2007) found that the reduced sense of self, and subsequent reduced feelings of responsibility for actions, did not seem to influence participation in illegal file-sharing. No link was found between those who prefer anonymity and pseudonymity online and likelihood to engage in software piracy. This is an interesting finding, but further research is required to see if it can be replicated, and if it applies to other forms of piracy, such as music and video.
Summary box 8.3 Demographic characteristics and motivations of offenders

- Older college students seem more likely to engage in copyright infringement than younger college students, but overall, younger people are more likely to perpetrate such offences.
- Greater familiarity with computers seems to be correlated with higher likelihood of offending.
- It has been suggested that motivation for digital piracy is a combination of reduced cost and immediate access. As legitimate forms of immediate access are now available, while piracy remains, it would seem that reduced cost is the dominant factor.
- uploaders may be motivated by reciprocity (Becker and Clement, 2006), although their motivations are not as well understood, and many users never upload content.
- Other potential motives include range of choice, lack of access to credit cards, convenience and being able to access content that was not otherwise available.
- Online anonymity has not been linked to software piracy.

Self-control and social learning theory

As with many types of criminal behaviour, it is likely that it is a combination of factors that leads an individual to illegally download material. Higgins et al. (2006) suggested that low self-control may be a factor in predicting who would engage in digital piracy, but that individuals need to learn the behaviours from others, and so social learning theory (see Chapter 1) is also important. We will consider the roles of both of these factors in turn.

Low self-control is a fairly stable characteristic through life, and has been linked to criminal behaviour (Gottfredson and Hirschi, 1990). Individuals with low self-control tend to be impulsive, insensitive, risk-taking and fail to consider the long-term consequences of their actions (Higgins et al., 2006), and links have been demonstrated between low self-control and downloading behaviours (Higgins et al., 2012). Malin and Fowers (2009) found that adolescents’ attitudes towards internet piracy were related to low self-control. LaRose et al. (2005) also found that downloading behaviour was linked to deficient self-regulation.

Low self-control, combined with learning deviant models from offending peers, may initiate or increase an individual’s involvement in crime. As the behaviours are learned from peers, this may also help to explain why individuals involved in piracy do not consider it to be morally wrong. Further support for the role of social learning theory was found by Morris and Higgins (2010). Similarly, D’Astous et al. (2005) found that a person’s intention to swap music online depended on their perception that important others in their lives wanted the piracy to be committed, and a belief that they would be able to do so – both of which can be linked to social learning theory. The study by Malin and Fowers (2009) also found that attitudes to internet piracy were related to affiliation with deviant peers.
Summary box 8.4 Self-control and social learning theory

- Low self-control is a relatively stable personality characteristic which has been linked to criminal behaviour. It is characterised by impulsivity, insensitivity, risk-taking and failing to consider long-term consequences of behaviour.
- Several researchers have found links between low self-control and digital piracy.
- Deviant behaviours may also be learned from peers, which may help to explain why offenders do not see it as morally wrong.
- Social learning theory, and belief about other people’s perceptions of offending, seem to be important predictors of offending behaviour.

Neutralisations and ethical positions

Neutralisations were described in Chapter 1, and are a similar phenomenon to cognitive distortions described in Chapter 6. Neutralisations are basically techniques that offenders use to reduce the guilty feelings that offending creates. Sykes and Matza (1957) originally defined five types of neutralisation:

- Denial of responsibility – offenders refuse to accept responsibility for their actions, perhaps suggesting that they were forced into the action because of matters beyond their control.
- Denial of injury – offenders suggest that the victim was not injured, or that they could afford the financial loss.
- Denial of victim – offenders see the victim as deserving of punishment.
- Condemnation of the condemners – offenders suggest that those who were victimised are hypocrites.
- Appeal to higher loyalties – offenders suggest that their behaviour was warranted because their immediate social group needed it to be carried out.

Other types of neutralisation have been identified since Sykes and Matza’s original list. For example, Coleman (1994) proposed an additional neutralisation of ‘everyone else is doing it’.

Some empirical research has attempted to determine which neutralisation techniques have been used by those involved in illegal file-sharing. Moore and McMullan (2009) found that most students did not use multiple neutralisations, although all showed support for at least one. The most common neutralisation techniques used were denial of injury, denial of victim and ‘everyone else is doing it’. Moore and McMullan suggest that the anonymity of the internet may mean that they do not realise the harm that they are doing to the musician. Moore and McMullan also suggested that file sharers seemed to believe that musicians ultimately benefit from illegal file-sharing as it widens their fan base.

A similar study by Ingram and Hinduja (2008) found that denial of responsibility, denial of injury, denial of victim and appeal to higher loyalties predicted piracy participation (p. 334). Ingram and Hinduja suggest that the focus on group norms,
rather than legal ones, might be a product of university settings. Conversely, Siponen et al. (2010) found that ‘appeal to higher loyalties’ and ‘condemnation of the condemners’ strongly predicted software piracy intentions. Morris and Higgins (2009) also found support for both neutralisation theory and social learning theory in explaining downloading of music, software and movies, but other studies (such as Hinduja, 2007) found only weak relationships between neutralisations and online software piracy.

The question then follows as to whether such use of neutralisation techniques during copyright infringement may be indicative of a lack of ethical standards, at least with regard to this particular offence. Yar (2010) describes several studies that found that illegal downloaders see the behaviour as acceptable, and Piquero suggests that people are either unable or unwilling to perceive piracy as an ethical problem. Gopal et al. (2004) found that ethical predispositions indirectly affect digital piracy, Garbharran and Thatcher (2011) found that moral disengagement is a significant factor in software piracy, while Yar (2007) indicates that downloaders generally do not try to hide their actions, and otherwise feel that they are law-abiding citizens. Bryce and Rutter (2005) found that while participants were aware of the illegal nature of sharing unauthorised copies of music files, such behaviours were considered widespread and normal, as well as being 'less wrong' than buying counterfeit CDs because of the lack of profits generated. Bryce and Rutter (2005) found similar results for illegal downloading of computer games. The variation in perceptions of how music can be illegally obtained was also highlighted by Wingrove et al. (2011), who found that students view illegal downloading and file-sharing as very different to shoplifting a CD. A slightly different view was found by Robertson et al. (2012), who also noted that downloaders were less concerned with the law, but that they were more likely to indicate that they would steal a CD if there was no risk of being caught. Findings such as these suggest that the illegal nature of digital piracy has little impact on the actions of offenders.

Bonner and O’Higgins (2010) similarly found that illegal downloaders of music ‘choose to morally disengage from the non-ethical nature of the act in an attempt to avoid feeling guilty about illegal downloading and also to avoid any blame being attributed to them personally’ (p. 1,341). Bonner and O’Higgins found that respondents felt that the act of illegal downloading is simply part of modern society, which could be considered to be a type of ‘everyone else is doing it’ neutralisation. While Jambon and Smetana’s (2012) college students treated illegal music downloading as a complex moral issue, they rarely treated it as a conventional issue of law, despite displaying otherwise intact moral judgement abilities.

While the majority of studies have found that many users consider piracy to be ethically acceptable, many of these have used undergraduate students as participants. An exception to this, carried out by Bhal and Leekha (2008), examined the attitudes of Indian software professionals, many of whom considered software piracy to be unethical. Bhal and Leekha did find that for those who considered such piracy to be ethically acceptable, in many cases participants used neutralisation techniques.
Activity 8.2 Use of neutralisations
Which do you think are the most common neutralisations used by downloaders of illegal content online? Are these different to the neutralisations used by uploaders of the same content? Do you think that there are differences in the neutralisations used by people who share different types of content (e.g. music, films, television programmes, software, ebooks, etc.)?

Summary box 8.5 Neutralisations and ethical positions
- Neutralisations are techniques that offenders use to reduce the guilty feelings that offending creates, and are similar to cognitive distortions.
- Sykes and Matza (1957) proposed five different types of neutralisations – denial of responsibility; denial of injury; denial of victim; condemnation of condemners; and appeal to higher loyalties.
- Other researchers have proposed further types of neutralisations, including Coleman’s (1994) ‘everyone else is doing it’.
- Neutralisations seem to be widely used by those engaged in digital piracy, although studies vary in findings related to the most commonly cited neutralisations.
- Many studies have found that those engaged in digital piracy do not see it as an ethical or legal problem.

The theory of reasoned action, the theory of planned behaviour and optimism bias
Nandedkar and Midha (2012) examined music piracy in light of the ‘theory of reasoned action’ (‘TRA’) and ‘optimism bias’. TRA was proposed by Fishbein and Ajzen (1975), and suggests that people make systematic use of information that is available to them at the time when making decisions about actions to take. Optimism bias refers to how an individual tends to believe that they are more likely to experience desirable events (such as having a long life, winning a lottery) and less likely to believe that they will experience negative events (such as divorce or serious illness) than an average person (Weinstein, 1980). Both the TRA and optimism bias have been explored and applied to many psychological and economic phenomena. Nandedkar and Midha found that optimism bias had an effect on attitudes towards piracy – people believed that they were less likely to experience the negative aspects of piracy-related behaviours, such as prosecution, poor quality products or lack of respect from significant others. Nandedkar and Midha therefore suggest that strict laws are insufficient when attempting to deter piracy, and that instead, people need to be made more aware of their susceptibility to optimism bias.
The TRA was later extended to the ‘theory of planned behaviour’ (‘TPB’; Ajzen, 1988), which incorporates perceived behavioural control into the TRA, considering the person’s beliefs about how likely it is that they have the resources, ability and opportunity to carry out the behaviour. The TPB has also been applied to digital piracy by some researchers. For example, Goode and Kartas (2012) considered how the TPB affected choice of video game consoles, and the ability to pirate console software was a significant factor for purchasers. Blake and Kyper (in press) also found that the TPB can help to explain intentions to share media files over peer-to-peer networks. The TPB has been found to be a more appropriate model for predicting piracy than other models (Yoon, 2012).

Knowing the psychological traits and techniques of those involved in illegal downloading may help in the development of solutions to this problem. The following section considers potential methods by which offenders might be penalised, along with how illegal downloading behaviours might be reduced.

Summary box 8.6 The theory of reasoned action, the theory of planned behaviour and optimism bias
- The theory of reasoned action, the theory of planned behaviour and optimism bias have all been applied to digital piracy.
- The theory of reasoned action (TRA) was proposed by Fishbein and Ajzen (1975), and suggests that people make systematic use of information that is available to them at the time when making decisions about which actions to take.
- Optimism bias was identified by Weinstein (1980) and refers to how an individual tends to believe that they are more likely to experience desirable events and less likely to believe that they will experience negative events than an average person.
- The theory of planned behaviour (TPB; Ajzen, 1988) incorporates perceived behavioural control into the TRA, considering the person’s beliefs about how likely it is that they have the resources, ability and opportunity to carry out the behaviour.
- The TPB has been found to be particularly useful in explaining digital piracy.

Punishment and solutions

As with many types of crime, the ideal solution from the victims’ perspective is if the piracy does not occur in the first place. Therefore this section will firstly examine potential methods of deterring new offenders from copyright infringement, as well as preventative methods, which attempt to make it difficult to commit the crimes. Other solutions, such as public information strategies and psychoeducational strategies, will also be considered.
Deterrence

Deterrence theory suggests that potential criminals will not engage in offending behaviours because of penalties they may associate with them. Piquero (2005) considered such theories in relation to intellectual property crime. Penalties associated with crimes can vary in severity and certainty. In most societies, the harshest penalties are normally reserved for the most serious of crimes – if we perceive an offender has received either an especially light or an especially severe penalty based on the nature of their crimes, we tend to feel that a further injustice has been done. The certainty of the punishment is important – if an offender feels that they are unlikely to be apprehended or punished, then they are more likely to proceed with the crime. If they feel that they will be punished (even if the punishment is relatively lenient), then they are less likely to offend. Because of this, it could be considered that it is more important that all offenders are punished rather than a smaller number of offenders receiving harsher sentences.

Related to this are the concepts of general and specific deterrence. General deterrence relies on social learning theory – if a potential offender sees a criminal being punished severely, then they may be less likely to commit a crime themselves. Specific deterrence suggests that an individual should be punished after they commit a crime, with the hope that their personal experience will prevent them from committing further offences. Attempts have been made at using both general and specific deterrence for copyright infringement.

Some individuals have faced severe punishments for illegal file-sharing, as prosecutors hope that this will serve as a general deterrent, hopefully discouraging others from committing the same crimes (McQuade, 2006, pp. 144–5). One example of this occurred in 2007, when the Recording Industry Association of America (RIAA) took legal action against Jammie Thomas-Rasset. The RIAA accused Thomas-Rasset of pirating almost 2,000 music files, but they sought damages for only 24 of them (BBC News Online, 25 January 2010). She was initially found guilty and fined $200,000, but following a retrial in 2009 the fine was increased to $1.92 million (it was later reduced again to $54,000).

Several high-profile cases, similar to that of Thomas-Rasset, received a great deal of media attention. Nevertheless, one problem with general deterrence of this nature is that many illegal file-sharers may feel that they will not be punished, as to prosecute all who engage in such piracy would place too extensive a burden on the criminal justice system. Indeed, while LaRose et al. (2005) identified fear of punishment as a possible deterrent, they noted that regular downloaders were unlikely to stop. Also, many of those who download relatively small numbers of songs, movies or software files may feel that their offences are so petty as not to warrant prosecution, especially compared to those who download greater numbers of files, or who upload content (McQuade, 2006). To a certain extent, this may be true, and copyright holders have more recently turned their attention to the file-sharing services instead. As such, it appears that general deterrence will be relatively ineffective for most home users of illegally copied content. It is, however, possible that specific deterrence may be more effective.

Some jurisdictions are considering ways of employing specific deterrence by penalising all those involved in illegal file-sharing activities. This may involve cutting off or
restricting the internet service of repeat offenders, normally following the issue of warning letters (see, for example, BBC News Online, 12 October 2010; BBC News Online, 26 June 2012), although this has met with considerable reluctance from some internet service providers (BBC News Online, 30 September 2010). Although this type of deterrence may seem easier and more practical to implement than attempting to prosecute all illegal downloaders, there remain some difficulties. For example, it may be difficult to enforce the punishment when an internet service is shared among several people or if it is possible that a computer has been hacked. Nevertheless, it is possible that if individuals perceive that they are more likely to be punished, they may abstain from the behaviour, as perceived prosecution risk has been found to impact intention to use pirated software (Liao et al., 2010).

Another concept, learning theory, is related to deterrence. This is described in Chapter 1 and is different to social learning theory as it focuses on the impact of reward and punishment on behaviours, rather than how we learn from those around us. Piquero (2005) applied learning theory to intellectual property crime. The rewards of such crime are apparent – acquisition of a vast collection of music, software, movies and television programmes at little or no expense. It is interesting to note that LaRose et al. (2005) found that downloading behaviour was reduced by poor quality downloads – hence a less desirable reward. Since LaRose et al.’s study, internet connection speeds and overall quality of content have improved significantly, so this is possibly not as much of a factor as was previously the case. Several of the potential punishments relate to the consequences if the person is caught – such as the fines or reduced internet connections outlined above – and Wingrove et al. (2011) noted that concerns regarding punishment have a strong impact on self-reported downloading behaviour. Nevertheless, there can be other potential deterrents. For example, Wolfe et al. (2008) noted that fear of malware may influence people’s intentions to engage in digital piracy – the risk of damaging their equipment may diminish the desirability of the content. Learning theory suggests that for as long as punishments seem unlikely or minor, and the rewards remain attractive, it is likely that offending will occur, especially when it is easy to commit the offence.

The perceived negative consequence need not be financial or material in nature, it may instead be emotional. Wang and McClung (2012) found that if college students felt that they would be likely to experience guilt after illegal downloading, then they were less likely to engage in the activity. They also noted that those students who perceived there to be greater social approval for the activity were more likely to download. It would seem that if people do not expect important others to approve of the action, or if they expect to feel guilty after the action, they may be less likely to engage in piracy.

**Activity 8.3 Learning theory and deterrence**

How can learning theory be applied to reduce digital piracy? In what ways could benefits of offending be reduced? How can perceived punishments be increased? What is the best way of communicating these changes in rewards and punishments to potential offenders?
Summary box 8.7 Deterrence
- Deterrence theory suggests that potential criminals will not engage in offending behaviours because of penalties that they may associate with it.
- Penalties associated with offending can vary in both severity and certainty.
- Certainty of punishment seems to be more important in deterrence than severity.
- Both 'general deterrence' and 'specific deterrence' have been used to reduce digital piracy.
- General deterrence relies on social learning theory – if a potential offender sees a criminal being punished severely, then they may be less likely to commit a crime themselves.
- Specific deterrence suggests that an individual should be punished after they commit a crime, with the hope that their personal experience will prevent them from committing further offences.
- General deterrence may be less effective for digital piracy, as most offenders see their crimes as too petty to warrant major legal responses.
- Learning theory focuses on the relative rewards and punishments of a behaviour. If an offender feels that the rewards outweigh the punishments, they are more likely to offend. For digital piracy, rewards refer to the content obtained. Punishments may refer to fines, risk of malware, or negative feelings such as guilt.

Preventative controls
In addition to deterrent controls (that attempt to dissuade users from attempting to commit an act), copyright infringement might also be avoided by using preventative controls, that make criminal activities harder or less rewarding (Piquero, 2005). Many preventative controls have been used to target piracy, to various extents of effectiveness. For example, digital media can be encrypted (Higgins, 2007), CDs can be developed that will not work in computers (Jewkes, 2010), or a user may be required to install monitoring software when installing a new application, which will report any instances of illegal copying to the development company (Stephens, 2008). Other possibilities include restrictions in the code of legally downloaded files that prevent excessive copying of the file, or writes identifying information about the purchaser into the file, so that if copies are illegally distributed at a later time, the source of the file can be identified (Stephens, 2008).

These technological controls may provide useful means of dissuading some offenders, but more motivated offenders can frequently find ways of circumventing such techniques. Nevertheless, they may help to reduce the problem, as the more difficult it is to engage in the activity, the more likely it is that individuals with impulsive natures will be discouraged from completing it (Higgins, 2007). It is, however, important to note that computer usage policies, put in place by universities, workplaces and other organisations, should not be seen as technological controls. Indeed, Cronan et al. (2006) found that university computer usage policies were...
ineffective at preventing misuse – many students had never even read the policy. Worryingly, those students who had read the policies had committed even more misuses than those who had not. It is possible that these students were aware that their actions were probably infringements, and they read the policy in order to determine what punishments were likely, or how the university managed such transgressions.

Other solutions

A further potential method of preventing copyright infringement involves the use of public information campaigns. These seem to primarily focus on young people, as the group most likely to be involved in illegal downloading (Wall and Yar, 2010). These campaigns aim to demonstrate to children and teenagers that illegal copying is a form of theft, and as such is similar to stealing a physical possession, but Wall and Yar indicate that these strategies may not work, and may be overcome by potential offenders through the use of neutralisations (p. 267). Similarly, D’Astous et al. (2005) found that many anti-piracy arguments, such as stressing the negative consequences for the artists, or the unethical nature of the offence, had no effect on user behaviours.

Higgins et al. (2006) suggest that the effects of social learning could be reduced by encouraging university students to build friendships with peers who do not engage in digital piracy, though they acknowledge that such strategies would have to be carefully implemented and evaluated. Malin and Fowers (2009) suggest that the reduced self-control associated with digital piracy might be another avenue for exploration in crime reduction methods.

Cockrill and Goode (2012) describe how not all of those engaged in DVD piracy are similar. They differentiated between four different types of individual – those involved in serious piracy (‘devils’), opportunists (‘chancers’), receivers (‘receivers’) and non-pirates (‘angels’). They found that there were differences in key predictor variables between the four groups, and therefore suggest that different anti-piracy strategies should be employed for each group in order to improve effectiveness. In particular, Cockrill and Goode indicate that the film industry needs to improve user awareness of the damage that piracy can cause, and that the ‘chancers’ were those who were most likely to be successfully deterred by current strategies.

A final potential strategy emerged from research conducted by Higgins et al. (2008), which examined digital piracy by undergraduate students. Over the course of four weeks, both the rate of digital piracy, and the use of neutralisations, decreased. Higgins et al. (2008) suggest that as participants recorded their behaviours, they reflected more on the criminality of digital piracy, and reduced their deviant behaviours. As their deviant behaviours reduced, they no longer needed neutralisations to justify their actions. Therefore Higgins et al. (2008) suggest that piracy might be reduced by education along with an attempt to improve moral conscience.

Evaluations of prevention strategies are relatively rare, but an experimental study by Al-Rafee and Rouibah (2010) in the Middle East tested the effects of different interventions on piracy intentions. They found that informing students about laws
relating to piracy had little effect, but that interventions that focused on religious teachings, or improving awareness of the harm that digital piracy can cause both contributed to a decline in piracy. These findings reinforce the studies described above that indicate that perceived legality of piracy seems to have little effect.

Summary box 8.8 Preventative controls and other solutions

- Preventative controls make criminal activities harder or less rewarding.
- They may include the use of technological means to make digital piracy more difficult to achieve, such as encryption.
- Technological preventative controls may dissuade some offenders, but others will find ways to circumvent such techniques.
- Computer usage policies have been found to be ineffective at preventing digital piracy.
- Public information campaigns have mostly been aimed at young people, although many anti-piracy arguments seem to have little effect.
- Arguments have been made that not all those engaged in digital piracy are similar, and so different intervention strategies should be considered for different groups (e.g. Cockrill and Goode, 2012).
- It is possible that raising potential perpetrators’ awareness of the harm that digital piracy may cause could reduce likelihood to perpetrate such activities.

Conclusion

Self-control, social learning and neutralisations all seem to be important factors in explaining online piracy, but research in all three areas is still quite limited. More research has been conducted examining the applicability of the theory of planned behaviour, which seems to explain digital piracy well. A major problem with many of the attempts to deter or prevent online piracy is the lack of evaluation of their effectiveness (Piquero, 2005), which would be an interesting area of future research. In particular, it will be of interest to examine if the specific deterrence methods (such as withholding internet connections) might have an impact on the overall levels of these offences.

Essay questions

(1) Evaluate the relative effectiveness of specific and general deterrence in reducing digital piracy.
(2) Describe how self-control and social learning theory can contribute to online copyright infringement behaviours.
(3) Explain how neutralisations are used by those involved in digital piracy to justify their actions.
Digital piracy and copyright infringement

(4) Using the research to date, consider the theory that those involved in digital piracy are morally different to those who are not.

(5) Evaluate the usefulness of the theory of reasoned action and the theory of planned behaviour in developing an understanding of digital piracy.

Additional reading

Books and articles

Matthew David’s (2010) book *Peer to Peer and the Music Industry: the Criminalisation of Sharing* (Sage Publications Ltd) provides a historical and criminological overview of music sharing.

The following journal articles consider various aspects of the psychological mechanisms thought to explain digital piracy.


Websites

The British Recorded Music Industry website considers online copyright infringement, commercial music piracy and file-sharing: www.bpi.co.uk/category/protecting-uk-music.aspx.

The Federation Against Copyright Theft (FACT) works to protect the UK film and broadcasting industry against copyright infringement: www.fact-uk.org.uk.

The United States Copyright Office website includes information about law and licensing: www.copyright.gov.