Digital Movie Piracy; A Perspective on Downloading Behaviour through Social Cognitive Theory

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Abstract

The current article attempts to refine and specify a model based on other researchers' applications of the Social Cognitive Theory originally posited by Bandura to allow the behaviour and attitudes downloaders exhibit to be analysed and compared to the amount of movies they consume (measured as an monthly average estimate). The new model is then tested against data obtained from college students as well as from a technological lifestyle forum. After the revisions these analyses suggested were applied, the model explained nearly 23% of the variance in the number of movies downloaded. The most important factors in this model were, among others: the drives to see many different and new movies, the social environment and its perceived attitude toward the behaviour, and the degree to which downloading has embedded itself in the daily routine. Because the Dutch government and lobbyists are superficially unclear about the current legislature, the unique opportunity existed to study the impact of knowing about legislature on the behaviour. Other results indicate an unexpected openness to an alternative film-distribution method where both the producers and the consumers get an honest deal, presenting options to release the current political and social tension without prosecuting an increasing portion of the population.

Introduction

When groundbreaking new technologies find their way into the commercial markets and end users' hands, unforeseen psychological and sociological consequences have often surprised both legislators and analysts alike. The World Wide Web is a prime example of a technological breakthrough that upset social status quo. The phenomenon discussed in the current study, however, did not come about through this revolution of interconnectivity before the turn of the millennium, though it was heavily dependent on it. Downloading files larger than a still picture was simply a pipe dream during the early infrastructural stages of the internet. Instead, the smaller technological advances made during that time enabled users to share their files with increasing ease and speed, and thus slowly brought about the 'downloading culture'. The current state of the internet allows for users to download full movies in less than the time it takes to watch them, making file sharing quickly accessible to anyone with an internet connection.

Because of this, the continuous rise in the number of users, and their right to privacy, it is difficult for anyone to oversee what files are being shared. It is known, however, to anyone with a modicum of online aptitude, that not all of these files are meant to be shared by their creators. Sharing communities circulate vast amounts of copyrighted property amongst its members, in almost all cases without any compensation to the property owners. Exact statistics on this topic are hard to compile, due to the decentralised manner in which modern sharing methods operate. Most of these programs involved direct peer to peer sharing (for an overview of technologies in this field, see Johnson, McGuire & Willey, 2008), in which each user uploads and downloads files at the same time. Users are usually only connected to each other, making any form of centralised tracking extremely difficult. Oberholzer & Strumpf (2004) managed to compile a dataset based not only on survey responses, but indeed tracking statistics. Though their data hail from 2003, when the sharing community was still in its infancy, the larger networks boasted millions of simultaneous active users, a large number of which exchanged copyrighted material on a daily basis. While relevant data are hard to find, it is likely that downloading has only gotten more popular and embedded in society.

This fact continually upsets the major intellectual property markets, with many stakeholders in the music and movie industries waging war on not only the parties that facilitate file sharing, but often also on the offending individual users. The music industry specifically blamed the emerging

downloading culture as the primary cause of the drop in sales they have reported. Though Oberholzer and Strumpf (2004), using empirical data gathered online, failed to correlate these phenomena significantly it has not stopped the industries or indeed other researchers from taking this apparently spurious connection as verified (e.g., Al-Rafee & Cronan, 2006). Researchers then operate their theories from this perspective, vilifying the downloading community as parasitic and criminal (Yar, 2005).

Past Models of Downloading Behaviour

From whichever viewpoint the researchers operate, many have tried to explain why users continue this behaviour despite attempts to discourage it (e.g., Al-Rafee & Cronan (2006), Cronan & Al-Rafee (2008), LaRose & Kim (2007), Taylor, Ishida & Wallace (2009)). Because of the complexity of this issue, it is apparent that differences in downloading behaviour and affinity cannot be accounted for by the variance in a single observable factor. A number of behavioural models have therefore been employed to discover which factors underlie an individual's downloading behaviour. Prior to establishing a new model, the dominant models will be reviewed.

Cronan & Al-Rafee (2008) posited a specific revision of the Theory of Planned Behaviour, which highlights several factors. These factors include intention to perform behaviour, attitude towards behaviour, subjective norms – the way an individual thinks his social environment feels about the behaviour –, the perceived behavioural control an individual reckons he/she has over the behaviour, the extent to which the individual has performed this behaviour in the past, and lastly one's moral obligation, described as "*the feeling of guilt or the personal obligation to perform or not to perform a behavior*" (Cronan & Al-Rafee, 2008, page 530). In this study, all of the latter factors influence the first, intention, which in turn affects downloading behaviour.

Taylor, Ishida & Wallace (2009), adapted the Model of Goal Directed Behaviour for use in explaining movie and film downloaders' behaviour. Apart from the factors Intention, Past Behaviour, Subjective Norms, which are similar in meaning to the model based on the Theory of Planned Behaviour, more emphasis is placed on what the individual's motivations and needs are. Hedonic and Utilitarian attitudes were measured, as well as anticipated negative emotions and anticipated regret.

Contrary to the two previous sets of researchers, LaRose & Kim (2007) are less insistent on blaming the downloading community for drops in revenue, and look to Bandura (2001), establishing an adaptation of the Social Cognitive Theory. After comparing it to a similar adaptation of the Theory of Planned Behaviour, Larose & Kim name the factors Intention to continue, Expected outcome (further specified as Social, Novelty Seeking & Economic expected outcomes), Self-efficacy – the extent to which an individual is confident in being able to perform behaviour –, Deficient Self-Regulation – the extent to which the behaviour is out of conscious control of the individual – and finally moral justifications and descriptive norms. Though similar to Cronan and Al-Rafee's version, LaRose & Kim point to the less conscious influences apparent in this behaviour, operationalized as deficient self-regulation.

Movies versus Music

Most of the previous researchers on this topic have focused on downloading music. It is the most widely controversial subject, not least because of the outcry voiced by several production labels and artists in the last decade. In discussing downloading activity, often the concepts of downloading music, movies and software are muddied, which can logically lead to inaccurate conclusions. Taylor, Ishida and Wallace (2009), expressly avoided this problem by categorizing the downloaders into movie and music seekers. The parameters of music downloads are often completely different from movie downloads. For example, it seems logical that due to bandwidth constraints, downloading a movie has in the past been more of a chore, discouraging potential downloaders. While an average MP3 music track numbers at about 3 Megabytes, the average AVI file for a 1.5 hour feature film is around 700 Megabytes. AVI can be called the current downloading community standard, though it is slowly being overtaken by newer formats that more readily support higher quality video as the bandwidth keeps growing larger for end users. Speculatively speaking, the way movies and music are consumed may

differ radically, and the same may very well go for software and television series. The latter, although very much like movies, differ from movies in an emphasis on shorter, episodic content, as well as availability. While movies can easily be bought through import when unavailable in a potential buyer's region, series often come with a larger price tag, without appropriate subtitles/voice-overs or are simply not available for purchase at all.

While all of these influences are speculative, they illustrate the fact that without comparing the categories rigorously, it is ill-advised for researchers to overlook which format they're researching. The current study will focus on the exchange of movies. For the sake of exactness, the specific focus will be commercially produced entertainment films that can either be purchased on DVD (possibly imported) or currently seen in movie theatres.

Legislature

Unfortunately, in spite of the mostly negative viewpoints legislators and industry lobbyists hold towards downloading and the topic's controversy, the Dutch government has failed to clarify the current applicable laws. Indeed, a minor qualitative investigation has yielded that the Dutch people are largely unaware of the fact that simply downloading a movie is completely legal on its own (Engelfriet, 2008, text is in Dutch). Both music and movie files are legally downloadable. However, downloading computer software or uploading any of these three file types is punishable by law. These freedoms stem from the urge to protect a consumer's autonomy; it is fully legal to create copies of certain media for home use. The law doesn't specify whether a user needs to have purchased this item her- or himself. Also, the legislators acknowledge the difficulty in demanding from all downloaders to completely verify their sources before downloading. While certain lobbyists like the BREIN foundation (http://www.anti-piracy.nl/home/home.asp, text is available in English) strive to fully outlaw file sharing, the government is slow to react, leaving the current state of affairs only intelligible to those who take the time to look for them. A small Dutch political party, the Piratenpartij (http://www.piratenpartij.nl/ text is in Dutch), promotes changing copyright laws to legalize more aspects of file sharing. Although they failed to garner enough votes to be eligible to enter into the Dutch governing body, they have added to the controversy surrounding the topic.

The United Kingdom employs a more aggressive stance. Not only is downloading a movie (or any other media) completely illegal, the governmental bodies are taking steps to make the Internet Service Providers (ISP) liable to be prosecuted if they do not stop their customers' downloading (Elliot, 2008), though this might not be feasible. The United States also fully forbid downloading and uploading.

Al-Rafee and Cronan (2006) have pointed out another problem concerned with legislation; downloaders seem to have very little fear of getting caught. So while the Dutch laws seem to be unclear on whether or not it is illegal, downloaders in other countries usually do not display anxiety about their actions. Al-Rafee and Cronan (2006) mainly blame this on two points; those that get prosecuted usually aren't end-users, instead they are groups of people that openly lead the way for other downloaders, championing new technologies and uploading large amounts of pirated media. The second reason stated is that the media coverage of any end-user prosecutions that do appear is not wide enough. Better coverage of the consequences for file sharing communities would act as a deterrent, certainly combined with tougher laws.

Background environment

It has been an interesting decade for the 'digital pirates' of the world. From the turn of the millennium to now, many factors have affected the landscape. As can clearly be seen above, governments are only beginning to respond, with laws often not suitable for a country that is spending increasing amounts of time online. Internet bandwidth is soaring, placing the Netherlands in the top 10 of digitally included countries (Intel Digital Inclusion Index, 2010). In the year 2000, only 16 in every 1000 residents of the Netherlands had access to broadband internet. By 2007, this number has risen to 335.

But even before the internet's rise to power, movie piracy was already a known issue. The difference between the phenomenon researched in the present study and that observed in the 1980s and '90s is commercialism. Piracy used to be a thriving and profitable market, especially in the Russian Federation (Yar, 2005). Factories copied and printed copyrighted DVDs (and the older VHS technology) very cheaply. Because these fake prints are cheaper than the distributor's version, it is reasonable to assume that many consumers opted to purchase these instead of their original counterparts. Yar reported in 2005 that this type of piracy was still taking place. While this sector may even now remain profitable, it's safe to say that in the Western countries, downloading movies without paying for them has overtaken commercialist, organised piracy in the number of units moved.

New Model of Movie Downloading Behaviour

In order to chart the personal factors that might influence Dutch downloaders, all of the conditions above need to be taken into account. The instability and lack of clarity of laws, the quick changes in connectivity solutions and internet bandwidth - and the growing number of downloaders that feel comfortable using it -, but also the growing sense of community that people are finding online might all be important for a single user when deciding on whether or not to download movies. None of the models mentioned before employ all of these factors in their bids to explain variance. It is therefore beneficial to revise and add to these models in order to be more up to date.

The Social Cognitive Theory, posited by Bandura (1986) and adopted by LaRose (LaRose & Eastin, 2004; LaRose & Kim, 2007), will be the theoretical background. In a review on mobile communication technology use, Peters (2007) compared three models from competing theoretical backgrounds, one of which was the new model of media attendance posited by LaRose (2004) and inspired by the Social Cognitive Theory. Though its explained variance was not the highest of the models compared, the new model of media attendance showed promise in its flexibility to explain and predict media use. Peters (2007) also recommends applying this model to other media technologies.

Summarizing, the newer social cognitive theory model of normative influence posited and tested by Larose (2007) employs the following factors: Intention to continue as the dependent variable, Expected outcomes (divided into Social, Novelty Seeking and Economic expectations), Self-efficacy, Deficient Self-Regulation, Moral Justification and Descriptive Norms all as explanatory variables.

Firstly, to improve clarity on the dependent variable, it will be changed to Number of Downloads. This signifies the estimated number of movies downloaded per month, self-reported by the user. This presents the chance to categorize the users into the severity of their habit.

Because of the current uniquely unclear state of Dutch laws, it seems logical to enter Knowledge of Laws as an Expected Outcome, while also indirectly as an explanatory variable of the number of downloads. This may shed light on whether the current course of action of lobbyists and legislators is proving effective as a deterrent.

To account for the differences between the researched medium in LaRose & Kim (2007) – which is music - and this study, Novelty Seeking was separated into two factors more applicable to movie downloading. The items LaRose & Kim used described a drive to sample new and rare music. While similar drives probably exist when it comes to movies, it can be argued that the same drives can be split into two different factors: Novelty Compulsion and Completionism.

Novelty Compulsion will measure the drive to see new and different movies. Evidence for the existence of this drive can be found in the fact that when an anticipated movie arrives at cinemas, bootlegged versions appear online the next day. These versions, known as CAMs, are recorded in a movie theatre by way of a camera/camcorder. The low video and audio quality of these files fail to dissuade eager viewers, with thousands of users signing into peer-to-peer networks to download them.

Completionism will measure a similar drive, to simply see (or have seen) a large number of

films. Completionist users will go out of their way to download rare films, but do not necessarily seek new experiences like Novelty Compulsion describes.

Self-efficacy and Deficient Self-Regulation will reappear largely unchanged, due to the stability of the variance explained in studies that employ them. The former measures an individual's confidence in his/her ability to download movies, while the latter detects how embedded downloading movies has become in the daily behaviour of the user. Deficient Self-Regulation also attempts to measure the level of addiction that the user exhibits, giving it a slightly negative connotation.

The Economic Expected Outcome factor will detect a possibly integral point in the decision to download; the subjective notion of the downloader that he or she is saving money by downloading. It is also queried whether or not the downloader believes that she or he watches more movies because it is possible to download them. Social Expected Outcome is altered slightly to reflect the fact that movies are social events for many consumers. While many downloaders may watch movies on their own, the social environment might exert an influence over the way the behaviour is perceived. A social milieu that has a negative view on downloading may change the attitude of a downloader, causing them to download less.

Descriptive Norms will, therefore, very likely be influenced by the social environment. This factor measures the attitude the individual has regarding the downloading of movies, and how he projects this to his environment. Subjects will be confronted by the term used for them by opponents of downloading, i.e., 'movie pirate', to see how they view themselves in that regard.

The final factor, Moral Justification, is closely linked to Descriptive Norms because it attempts to measure the moral attitude an individual has to the behaviour. Subjects are asked about their coping methods (compensating for downloading by buying films, placing the responsibility elsewhere). Although this factor is closely linked to Descriptive Norms, the latter is about the norms present in the downloader's culture while Moral Justification concerns the beliefs the individual holds regarding the ethicality of downloading.

All of these factors integrate into a new model to explain why certain users download more than others (Fig. 1). Expected Outcomes, Deficient Self-regulation, Descriptive Norms and Moral Justification influence the Number of Downloads directly, while Knowledge of Laws, Self-efficacy and the Social environment exert their influence indirectly through Expected Outcomes and Descriptive Norms respectively. Only Expected Outcomes is a latent variable, its data measured through the outcome categories it holds; Completionism, Novelty Compulsion, Economic, Knowledge of Laws, and Social expected outcomes.

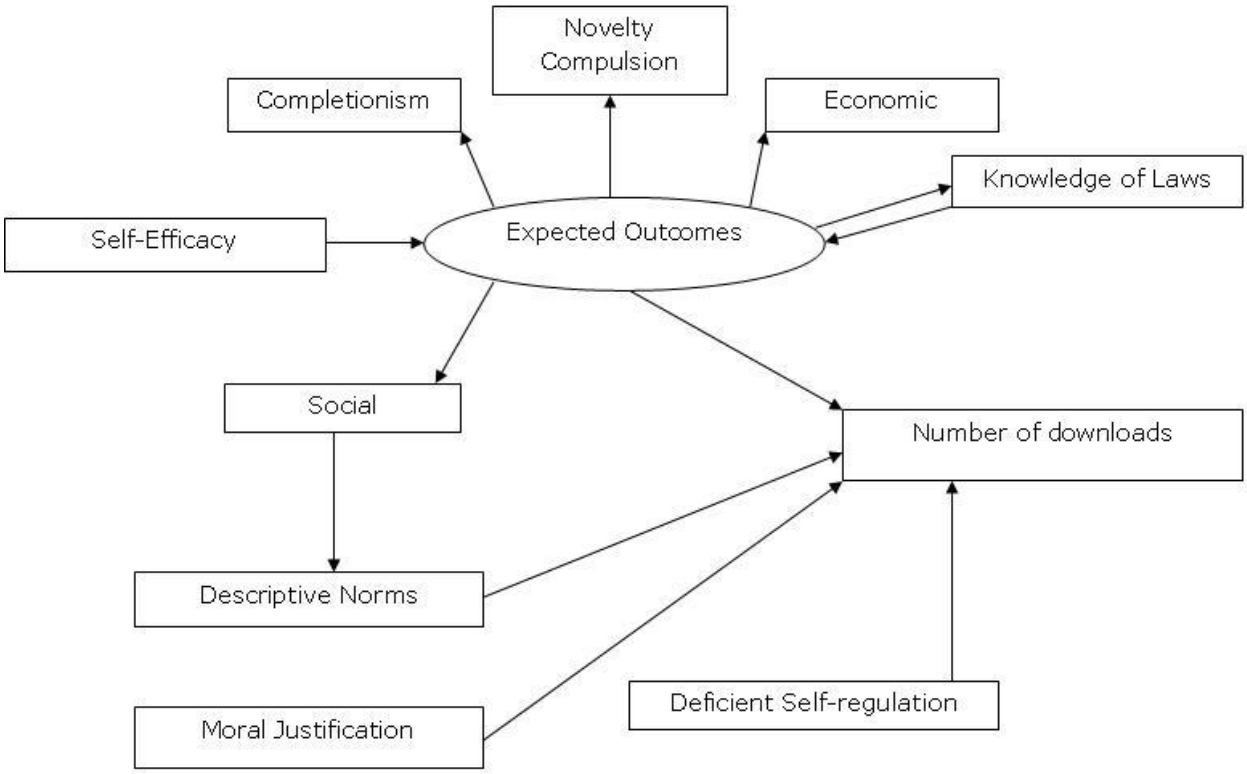

Fig. 1: Conceptual Social Cognitive Theory Model of downloading behaviour.

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Hypotheses

Going from this model, the following hypotheses emerge:

H1. Deficient Self-regulation will be directly and positively related to the number of downloads.

H2. Moral Justification will be directly and positively related to the number of downloads.

H3. Descriptive Norms will be directly and positively related to the number of downloads.

H4. All of the Expected Outcomes will be positively related to the number of downloads, which are:

- **H4a.** Completionism
- **H4b.** Novelty Compulsion
- **H4c.** Economic Expected Outcomes
- **H4d.** Knowledge of Laws
- **H4e.** Social Expected Outcomes

H5. Knowledge of Laws will be directly and positively related to Expected Outcomes (indirectly to the number of downloads).

H6. Social (expected outcomes) will be directly and positively related to Descriptive Norms (indirectly to the number of downloads).

H7. Self-efficacy will be directly and positively related to Expected Outcomes (indirectly to the number of downloads).

An important side-note regarding **H5** and **H4d**: It is expected that due to the positive legislature as far as downloading movies is concerned, downloaders with a clearer understanding of the current laws will be motivated to download more. Anxiety about getting caught is expected to drop sharply (if it was present to begin with), leading to a higher download figure. This would mean that by muddying the transparency of the current legal situation lobbyists and anti-piracy organisations are succeeding in their attempts to dampen downloading statistics.

Methods

Items

To transform the essentially latent constructs behind the factors into measured variables, questionnaire items were created. Because LaRose & Kim (2007) studied much of the same factors, several items were adopted from the previous study and translated into Dutch. Changes were made to account for the differences between the languages used and the media studied in these studies. The items were also made to be more specific, now solely pertaining to the act of downloading movies. The complete list of items can be found in the Appendix, table 2. Because several factors were entirely new, original items were created based on content. The factor Knowledge of Laws is unique in that it allowed for direct and objective measurement of the knowledge respondents possessed. Two items were included that posed the respondent questions about downloading/uploading legality. These items were inserted after those concerning self-reported Knowledge of Laws to ensure honest and unframed responses.

To achieve optimally accurate responses, the items had to be phrased from a downloaders' perspective. Because of this, it is in almost all cases difficult for non-downloaders to give correct and relevant responses. The study is therefore not focused on whether or not the respondents in the sample download, but the quantity of movies they download. Short explanations were given after each technical word to ensure that even the least technologically savvy respondent is able to understand the items.

Because of the explorative nature of this study, items were included outside of the range of the model's factors. Respondents were asked about their interest in a hypothetical online film sharing service provided the costs are not too high. They were also asked if, in the event that such a service was offered, they would download less movies through the current channels. One item concerning fear of getting caught was implemented, though because of the results Al-Rafee and Cronan (2006), it is not expected to vary a great deal. Several items concerning the downloading characteristics were created; The media format most often downloaded (e.g., the earlier mentioned CAM or a conversion from retail DVD, among others), the environment the respondent watches the films in most often (alone or with friends), the preferred downloading method (peer-to-peer networks or centralised pirate servers), and lastly the uploading habits of the respondents. This last item is taken into account because of the contrast in legality between simply downloading and in sharing files fully. Many downloaders report feeling a sense of commitment when downloading to also upload at least the same amount of data. This phenomenon appears to be the driving force of peer-to-peer networks, ensuring their continued survival in spite of the illegality involved in uploading data to the network. Lastly, the amount of physical movies the respondent has in her/his home is queried. Downloaders with a large collection of movies might be said to be compensating for their downloading behaviour, complementing their responses on the items regarding Moral Justification.

Data-analysis

All data analysis is done on Windows-based personal computers using SPSS 16.0 and the newer PASW Statistics 18. To test for direct effects between two factors, both univariate analyses of variance and independent samples t-tests will be used. In order to test model fit, Amos 18.0 is

employed[1]. To evaluate model fit, both the Tucker-Lewis Index (TLI) and the Root Mean Square Error of Approximation (RMSEA) are observed. In the former, a value above 0.90 implies good fit while a value above 0.95 implies great fit. In the latter, values lower than 0.08 are appreciated while below 0.05 again points to great fit. Because of the large sample size, the Chi-squared test of fit is ignored.

In order to transform the essentially nominal responses gained in the two knowledge-based questions into quantifiable data, the most accurate response was given the value 1, while the others were set to 0.

Survey

Measurement took the form of an online questionnaire, divided into 6 pages. After the first page's introductory information, the second page featured basic gender/age items, as well as a check to see if the respondent was a student at the University of Twente. The respondents were then asked how many movies they normally download per month. If the reply is “I don't download any movies”, the respondent gets linked through to the last page of the questionnaire. The downloaders then respond to the 41 factor-related items. To allow for greater variance resolution, a 7-point Likert scale was used, ranging from 'completely disagree' to 'completely agree'. The two last pages are devoted to the items outside of the current model's range. Respondents who do not report downloading movies are still asked about their social environment's attitude on downloading as well as the knowledge-based questions.

Recruitment

Recruiting subjects followed a three-phase strategy. Firstly, an invitation was posted on a University of Twente newsgroup. All prospective respondents were promised a chance to win a prize, and two 25 euro prizes were raffled among the respondents who entered contact information at the end of the questionnaire. The sample expected from this phase would consist of technologically informed university students, many of which frequent the newsgroups. The topics of the newsgroups posted in were the discussion of movies and (television) series and other miscellaneous topics.

The second phase consisted of entering the study into the University experiment management system. This phase rewarded full respondents with credits. The sample expected from this phase would consist of young Psychology and Communication Studies students. This population is made up of predominantly 18-22 year old females, and the sample was expected to be representative of (the downloading users' portion) this group.

The last phase moved away from the University of Twente, and instead into a Dutch online technological forum. Moderators of this forum allowed for one recruiting post, during which a perfunctory discussion was flared up to attract more respondents. The sample expected from this population of course consisted of technologically wise but otherwise diverse Dutch citizens, with a bias toward younger, male respondents.

Respondents

The questionnaire was started a total of 436 times. However, 14 percent (62 entries) proved to be incomplete or bogus entries. The resulting dataset of 374 was then divided into those respondents that download movies, and those that do not. Likely due to a bias in recruitment, only 26 non-downloaders filled out the survey. The 348 downloading respondents consisted almost entirely of males, with nearly 90% male respondents and a little over 10% female respondents. The mean age of this sample is 26.5 years, though the sample ranges from 14 to 51 years of age. Nearly a quarter of the respondents acknowledged being enrolled at the University of Twente. Psychology students proved to be the biggest single contributors to this portion, with 22 respondents. 12 students in Communication Sciences filled in the survey, and another 12 respondents entered Information Sciences. The remainder of the U.T. respondents was spread evenly across different fields. 263 respondents are not enrolled at the University of Twente. This part of the sample can therefore be

1 : Special thanks go to dr. Oscar Peters for his enthusiastic assistance in model analysis.

concluded to comprise visitors and participants of the online technological forum accessed in recruitment.

Because only those respondents that acknowledged downloading movies were shown the main questionnaire, the 26 non-downloaders were ignored for model analysis. The average number of movies downloaded per month for the resulting sample is 6.4, with a standard deviation of 8.8. Because respondents were asked to provide an estimate if they were unsure about the exact number, the mode is 5, followed by 2 and 10. Fortunately, not all subjects responded with such round figures. The large sample base allowed for minor pruning of incomplete responses (the 62 entries discussed earlier), ensuring no missing values remained in the main survey dataset.

Results

Pre-analysis

Before analyzing the model fit, the items were tested for common factors with a principal component analysis. Self-efficacy items, perhaps because of the stable item background, all pointed to one underlying factor. Descriptive Norms was not as stable, with the first of these items pointing to a completely different factor than the latter two. Economic, Completionism, and Knowledge of Laws expected outcomes and Moral Justification were all informed by separate single factors. Social and Novelty Compulsion expected outcomes, along with Deficient Self-Regulation, all had items coming from their respective factors, but showed some items that pointed to other factors as well. When the previously unified categories of Completionism and Novelty Compulsion are analyzed together, the common background these categories share becomes apparent. All items show an influence from one factor, all items from Completionism show influence from a second factor, while some items of both categories are affected by a third, disruptive factor.

Reliability analyses were then employed to check for faulty or reversed items. To test for reliability, the Crohnbach's alpha of the various item categories were compared to the alpha when items were removed from analysis. Self-efficacy items showed a strong reliability with a Crohnbach's Alpha of 0.760. Descriptive Norms fared worse, with the first item lowering the Alpha to 0.239. This item also appeared to point to a different factor than the other two items in this category. Removing this item from further analysis yielded an alpha of 0.539. Because the analysis also indicated reversed item phrasing, the remaining two items were recoded to opposite values. Moral Justification and Novelty Compulsion expected outcome, with respective alphas of 0.695 and 0.324, both allowed for a rise in alpha when an item was removed. Novelty Compulsion 3 and Moral Justification 5 were therefore discarded, yielding Moral Justification an alpha of 0.734 and Moral Justification one of 0.546. The rest of the categories all had alphas in the range of 0.450 to 0.7. They are as follows: Economic expected outcome 0.450, Social expected outcome 0.542, Completionism expected outcome 0.626, Deficient Self-Regulation 0.599, and Knowledge of Laws expected outcome 0.658. Interestingly, the unique item type employed in Knowledge of Laws (the knowledge pop quiz) did not detract from the category's reliability despite its limited range.

Model Analysis

For the relevant item categories, a covariance matrix is drawn (Appendix, Table 1). Before implementing the conceptual model elaborated on in the introduction, the latent variable Expected Outcomes is measured through its five categories. The link from Expected Outcomes to Knowledge of Laws is significant at 0.05 level, while Social, Economic, Completionism and Novelty Compulsion are all significantly related to Expected Outcomes at 0.001 level.

Proceeding with model analysis, the entire conceptual model is entered into the equations. The fit this model displays is extremely poor: the TLI is 0.063, the RMSEA is 0.186. All except two influences return insignificant. Descriptive Norms to Number of Downloads and Deficient Self-Regulation to number of downloads are the only significant links, though both stay significant at the 0.001 level.

Modification indices support adding a number of connections. Improvements to fit occur when links are added from Self-Efficacy and from Moral Justification to the Knowledge of Laws subcategory of Expected Outcomes, suggesting an influence from computer aptitude and moral attitude on the knowledge an individual possesses on legislature. A third connection can be established from Deficient Self-Regulation to the latent Expected Outcomes. Covariance links are suggested between the following categories: Deficient Self-Regulation and Moral Justification, Deficient Self-Regulation and the error residue of Descriptive Norms, and lastly between the error residues of Completionism expected outcomes and Novelty Compulsion expected outcomes. This last covariance confirms the notion conceived in the factor analysis on the mutual background of these two categories.

The new model achieved from implementing these modifications is certainly nearer to a good fit than the basic model from the introduction. While the TLI is still not as high as desired, it now returns 0.875. The RMSEA points to an acceptable fit: 0.068. Most estimates now imply significant connections, with the exception of the following: Self-Efficacy to Expected Outcomes (p = 0.636), Expected Outcomes to Number of Downloads (p = 0.062), Moral Justification to Number of Downloads (p = 0.241), the covariance between Novelty Compulsion expected outcomes and Completionism expected outcomes (p = 0.290) and finally Knowledge of Laws expected outcomes to Expected Outcomes (0.524). Three connections achieved significance at the 0.05 level only; Social expected outcomes to Descriptive Norms (p = 0.029), Deficient Self-Regulation to Number of Downloads (p = 0.025) and Expected Outcomes to Knowledge of Laws expected outcomes (p = 0.022). This full model is displayed in Figure 2.

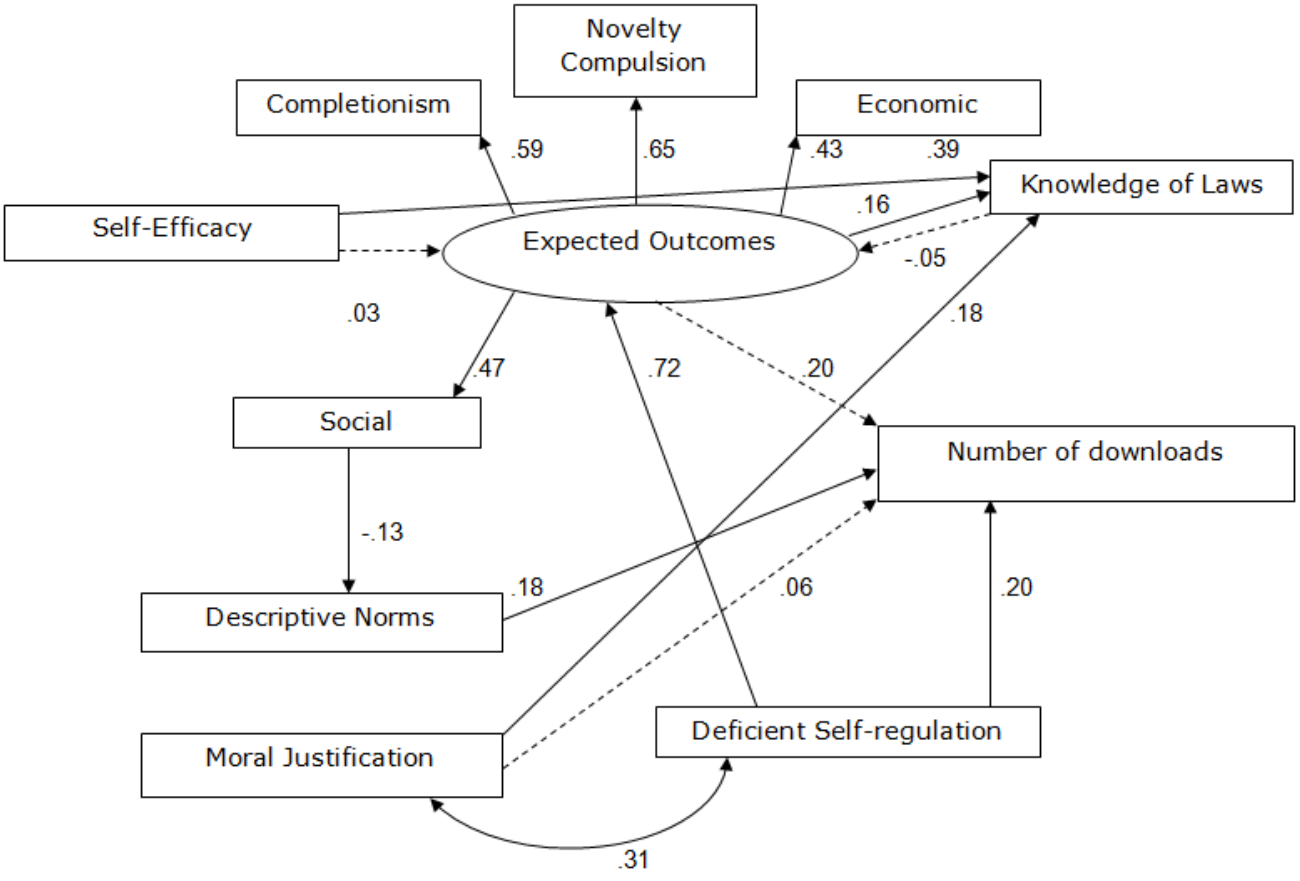

Figure 2: Full model of downloading behaviour. Only standardized estimates are shown and error terms are removed. Dotted lines indicate insignificant effects. All other effects are significant at p = 0.05.

Returning to the basic model from this point, one fact cannot be overlooked; Self-Efficacy has failed to significantly correlate with Expected Outcomes. Removing this category from analysis improves the base TLI (from 0.063 to 0.309) and the RMSEA 0,170, although the direct link from Knowledge of Laws expected outcomes to Expected Outcomes can no longer be sustained to be able to identify the model, and has to be removed. Starting with this basic model without Self-Efficacy, numerous modifications are available. Inserting covariance links between the following categories greatly improves the model fit: Deficient Self-Regulation and Moral Justification, Deficient Self-Regulation and Expected Outcomes, Moral Justification and the error term of Knowledge of Laws expected outcomes, Moral Justification and Expected Outcomes, and the error terms of Descriptive Norms and Novelty Compulsion. A direct regression weight is also recommended from Deficient Self-Regulation to Descriptive Norms, implying an influence of habit-driven downloading on the way in which a downloader views his behaviour compared to that of his or her environment. The fit measures now indicate an excellent model: The TLI has increased to 0.961 while the RMSEA has lowered to 0.039. Almost all of the connections in this model display significant effects at 0.01 level, with the exception of the direct effect of Moral Justification on the Number of Downloads, which has failed to show significance ($p = 0.350$). Three effects only show significance at the 0.05 level; Social expected outcomes to Descriptive Norms ($p = 0.013$), Expected Outcomes to Number of Downloads ($p = 0.037$) and Deficient Self-Regulation to Number of Downloads ($p = 0.024$). This model is displayed in Figure 3. The four predictors to the Number of Downloads show 22.8 percent explained variance. The estimates are thus; Expected Outcomes $\beta = 0.212$, Descriptive Norms $\beta = 0.186$, Moral Justification $\beta = 0.048$ and finally Deficient Self-Regulation $\beta = 0.195$.

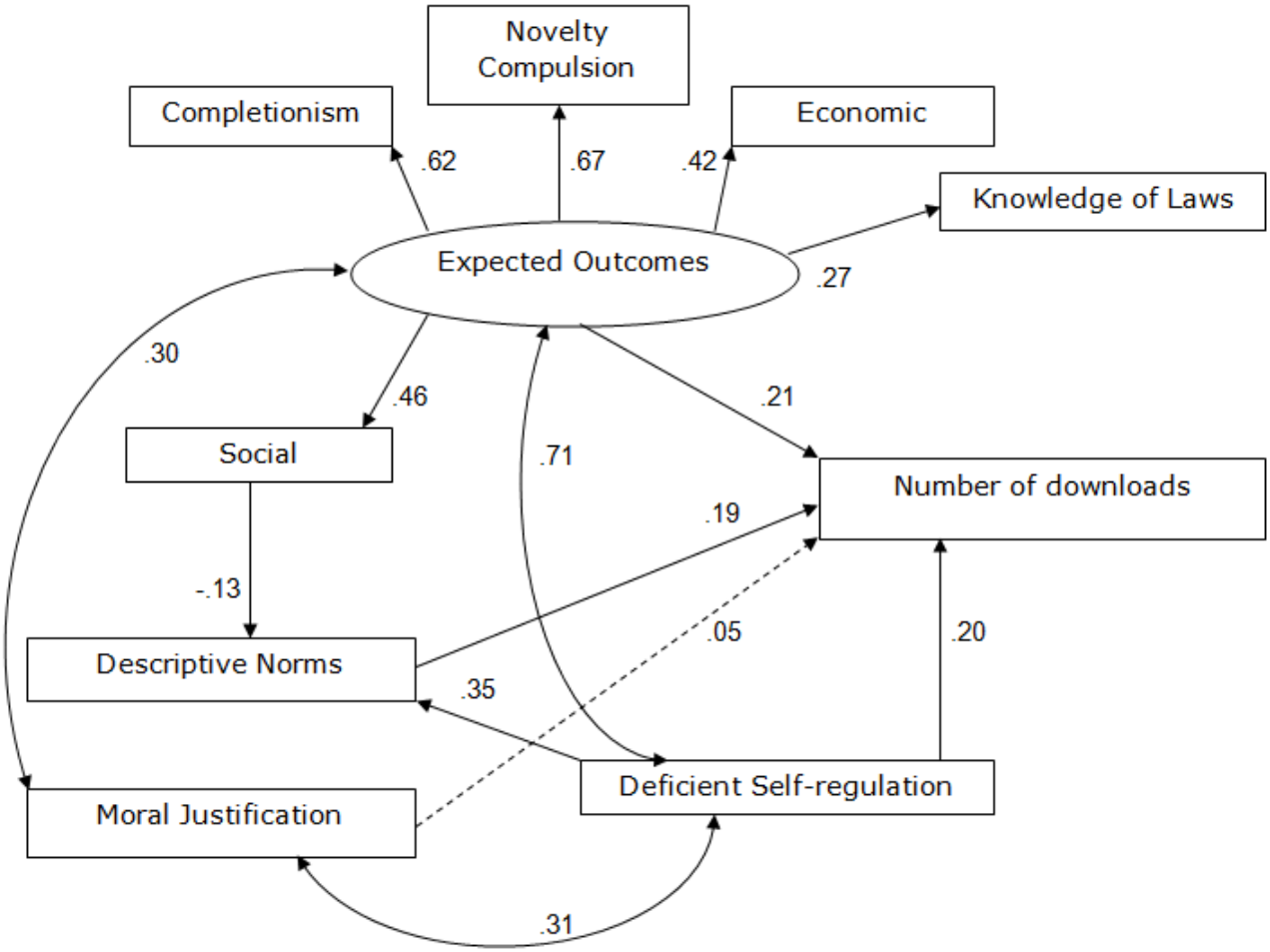

Figure 3: Model of downloading behaviour without Self-Efficacy. Only standardized estimates are shown and error terms are removed. Dotted lines indicate insignificant effects. All other effects are significant at p = 0.05.

The fact that Moral Justification has failed to show significance presents the option to also remove this category. Revisiting the model discussed in the introduction, Moral Justification's removal adds slightly to the model fit from that without Self-Efficacy (TLI raises to 0.359, RMSEA stays at 0.170). Following the modification indices, two direct effects and two covariance links are added. The direct link from Deficient Self-Regulation to Descriptive Norms returns, as well as covariance between Deficient Self-Regulation and Expected Outcomes and the error terms of Descriptive Norms and Novelty Compulsion. A new direct effect is proposed from Knowledge of Laws expected outcomes and Economic expected outcomes. With these four connections added, the model fit is optimal. The Tucker Lewis Index rises to 0.991 while the Root Mean Square Error of Approximation lowers to 0.020. This fit is supported by the significance of the effects; all links in this model show significance at the 0.05 level, with the links between Social expected outcomes and Descriptive Norms ($p = 0.012$), Expected Outcomes and Number of Downloads ($p = 0.024$), Deficient Self-Regulation and the Number of Downloads ($p = 0.021$) and lastly Knowledge of Laws expected outcomes to Economic expected outcomes ($p = 0.011$) only proving significant at this level. The covariance between the error terms of Descriptive Norms and Novelty Compulsion expected outcomes has a *p* value of 0.003, and beyond this, all effects are significant below 0.001. Figure 4 shows this model with its standardized estimates. 22.7 percent of Number of Downloads is explained by the three predictors Expected Outcomes ($\beta = 0.227$), Descriptive Norms ($\beta = 0.183$) and Deficient Self-Regulation ($\beta = 0.200$), a mere 0.1 percent

lower than the explained variance in the Number of Downloads in the model with Moral Justification.

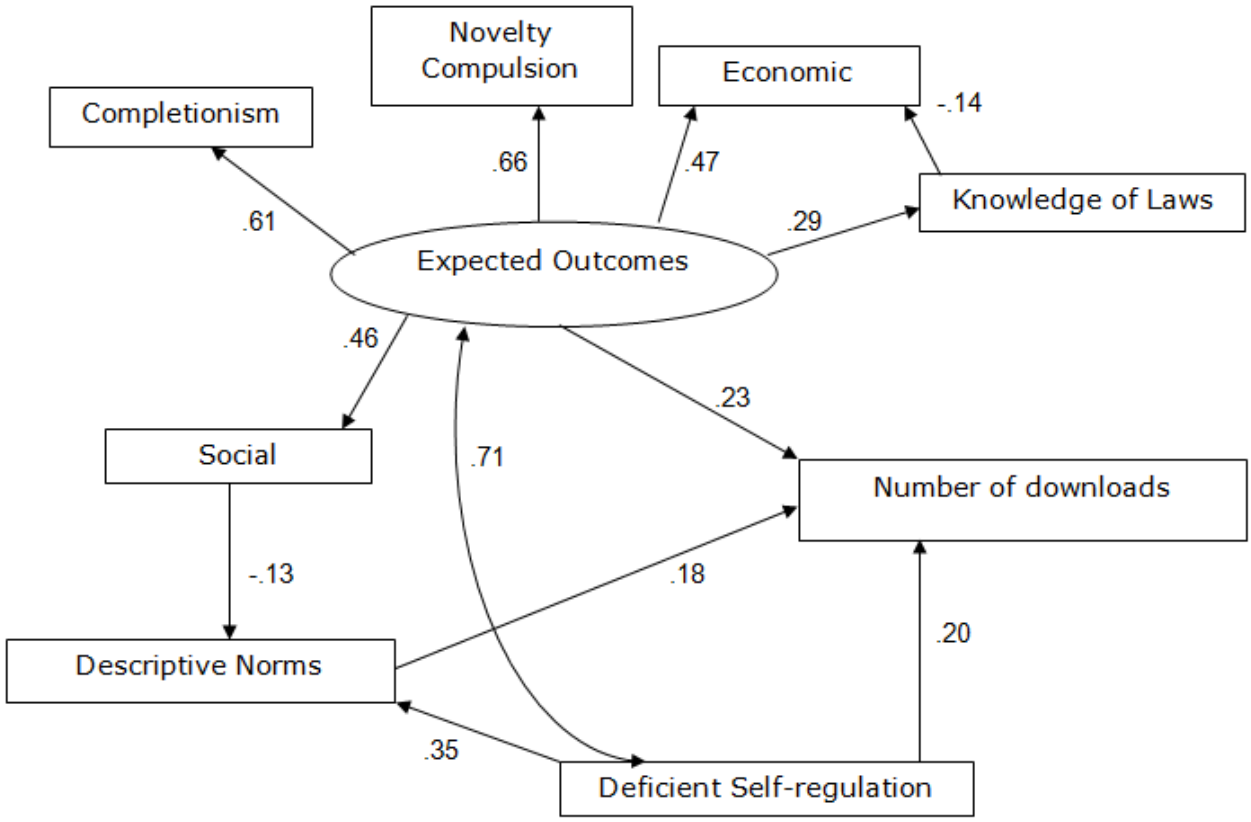

Figure 4: Final model of downloading behaviour, where both Self-Efficacy and Moral Justification are removed. Only standardized estimates are shown, and error terms are removed. All effects are significant at p = 0.05.

Now that the model in figure 4 shows satisfactory levels of fit, the hypotheses can be evaluated. The first hypothesis predicted Deficient Self-Regulation to have a positive effect on the number of movies downloaded per month. This hypothesis is supported by the current data, with a standardized estimate of 0.20 and a significance between 0.05 and 0.01. The second hypothesis is rejected because Moral Justification did not show significance. Its standardized estimated effect in the two models was about 0.05. Descriptive Norm's effect on downloading proved to be significant even when applying an alpha of 0.001, leading to the conclusion that hypothesis 3 holds true with this dataset.

The following 5 hypotheses (H4 a through e) are all confirmed in this sample, because the five subcategories of Expected Outcomes are significantly influenced by this factor. Summarizing, the five subcategories had the following standardized estimate from Expected Outcomes; Completionism 0.61, Novelty Compulsion 0.66, Economic 0.47, Knowledge of Laws 0.29 and Social with a standardized effect of 0.46. All five of the effects are significant below 0.01. Expected Outcomes also showed significance when tested for an influence on the Number of Downloads, with a β of 0.23.

Because the influence of Knowledge of Laws expected outcomes on the Number of Downloads as a link in this model had to be removed to allow model computations to proceed, its direct effect is measured separately. In a Univariate Analysis of Variance, its influence did not prove significant at an alpha of 0.05 ($F(21, 327) = 1.44$ with $p = 0.097$). Though still barely significant at 0.10 level, this result supports removing the link from analysis. Because the effects of Knowledge of Laws expected

outcomes on Expected Outcomes directly and the Number of Downloads indirectly could not be calculated, the fifth hypothesis is disregarded.

Social expected outcomes showed a significant effect on Descriptive Norms with a standardized estimate of -0.13 (p = 0.012). Why this estimate is negative will be discussed in the Conclusions and Discussions section. For now, hypothesis 6 is accepted on the basis of this sample.

The last hypothesis posited in the introduction regarded the influence of Self-Efficacy on the Expected Outcomes. In both of the earlier revisions of the model, Self-Efficacy did not significantly correlate with this latent variable. Removing this variable from the model in fact boosted its fit greatly and elevated the influence of Expected Outcomes on the Number of Downloads to significance. Self-Efficacy as a category returned values averaging 6.37 out of 7, with a tight standard deviation of 0.88 (as displayed in table 2 in the Appendix). Hypothesis 7 is rejected.

Other analyses

Several items were added to the survey to probe the current downloaders' attitudes on factors outside the model discussed previously. While this section will focus more on simply displaying the data gathered, one item is worth comparing to the data used in the model; the fear of being prosecuted. In keeping with the discovery of Al-Rafee and Cronan (2006) that downloaders show little fear of getting caught, the average value returned for the entire sample is 6.0 out of 7, where the item is posed negatively (i.e., “I am not in the least afraid of getting arrested for my down- or uploading behaviour”). Only 12.9% of respondents admitted neutral or anxious attitudes. A univariate analysis of variance proves this item did not affect the number of downloads significantly ($F(6, 342) = 1.011$, p = 0.418). However, a significant effect was detected from the Knowledge of Laws expected outcomes on prosecution anxiety ($F(21, 327) = 2.172$, p = 0.002).

Two-third of the downloaders sampled in this study responded positively to the proposition of a service that offers downloads for a minor fee (average 4.9 out of 7), with 55% displaying a willingness to download less movies through current channels when such a service would exist (average 4.5 out of 7). The comments section proved a place for many to vent caveats about this option; the service would have to offer a variety in content to match the downloading communities. Many filesharing communities offer movies that have since gone out of print through age or lack of sales. Staggered release schedules (films arriving on DVD in the U.S. before they do in the E.U., for example) also cause frustrations in eager viewers. Of course, the fees such a service would charge need to be affordable, although many respondents have pointed out they agree to the fees most video rental stores charge.

Four items were included to explore the way in which downloaders consume the movies. The first asks respondents about the format in which usually often download movies. While most viewers (71.0%) opt for the community standard DVDrip (a video file transferred from an original DVD source), it's swiftly being overtaken by the BluRay format (70.7%), which takes advantage of the ever-increasing market penetration of HD-capable monitors and television sets. Only 1.4% of respondents acknowledged usually downloading the aforementioned CAM-versions, waylaying the suspicion that downloaders choose early viewing opportunity over the quality of the format. The other formats inferior to DVDrips in quality, Telesync (which consists of CAM video and directly captured audio) and R5 (a Russian DVD source that is usually published before those in other regions), attract 4.0% and 26.4% of the downloading community respectively. While the R5 quality is certainly superior to CAM and Telesync versions, it's still a trade-off between early viewing and version quality.

Moving on to watching movies as a social activity, a little under 50.6% of the sample prefers to watch movies alone, evenly divided among watching on a computer or television screen. 44.3% of viewers prefer to watch movies together, with most of these get-togethers taking place in front of the television (35.9% of the total sample). The remaining downloaders did not select a preference.

The method most often used in downloading movies is the peer to peer bittorrent client, with over 42% of respondents using it to automatically download their movies from peer clouds. 39.4% of

respondents prefer to download from Usenet, a downloading service that charges minimal monthly subscription fees. A third category of downloaders download files directly through File Transfer Protocol (F.T.P.) servers, together with Usenet clients bypassing the need to upload files back into the community.

Such clear categories do not exist as far as uploading movies is concerned. While 44.5% of users do not have the option or obligation to share their downloads through to others, the largest portion after that (17.8%) simply doesn't pay attention to their uploading. Other downloaders either upload to a set ratio of downloaded to uploaded data (14.7%) or just leave their files available for download for extended periods of time (8.9%).

The last non-model-related item asks for the amount of copyrighted works the respondent purchased or received through regular commercial channels. 35.6% of all downloaders own somewhere between 1 and 25 DVD or BluRay discs or VHS tapes. Another 36% of downloaders have between 25 and 100 movies in their possession. Only 4.6% of respondents do not own any original hardcopies. Another univariate analysis of variance using Number of Downloads as dependent variable fails to show significance at 0.05 level, only appearing significant at an alpha of 0.10 ($F(6, 342) = 1.918$, $p = 0.077$). A graph depicting this relationship is shown in Figure 5. This low level of significance gives the impression that owners of large collections of movies download more, but it is not enough to confirm compensation-related coping methods.

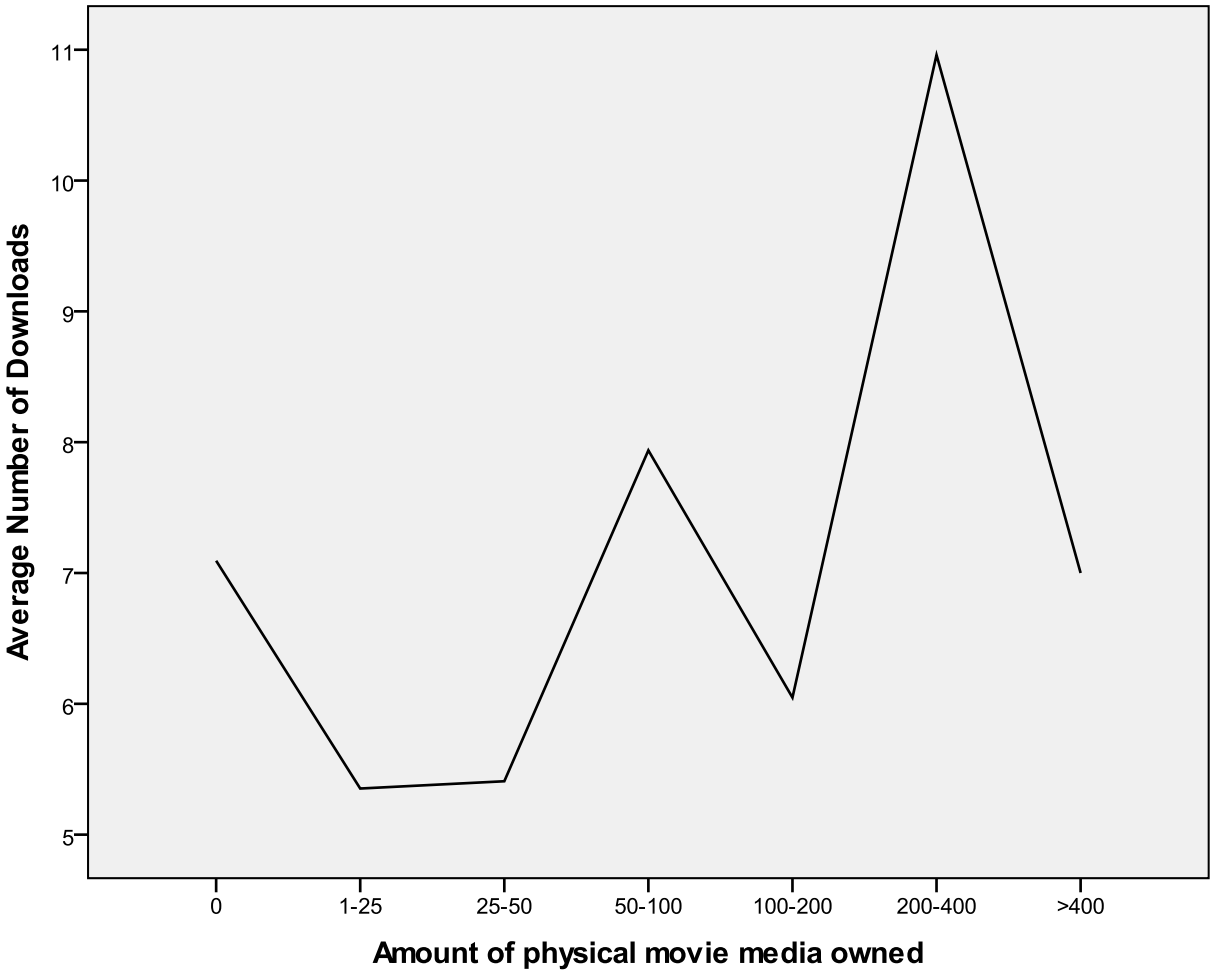

Figure 5: Relationship between number of downloads and amount of physical movie copies owned. This relationship is only significant at an alpha of 0.10.

Although the non-downloaders were directed past most of the items in the survey, 3 questions were answered by both groups; the final Social expected outcomes item and the two knowledge-based questions on legislature. Although the group sizes are wholly different (348 versus 26), independent samples t-tests were performed on these three items. Because they were drawn from the same sample, equal variances are expected between the groups. Any differences struggle to show significance. Interestingly, the first knowledge-based question is completely insignificant (p = 0.677) with an 95% confidence interval showing neither group as the more knowledgeable. The second question did return significantly more correct answers for the downloading group (t(372) = 2.096, p = 0.037 when equal variances assumed).

Conclusions and Discussion

It is clear that the model proposed in the introduction needs to be revised. Not only have Self-Efficacy and Moral Justification failed to significantly affect the Number of Downloads, but the oversight of mathematical impracticalities with the two-way connection between Knowledge of Laws expected outcomes and the latent Expected Outcomes also forced a change in the proposed model. The resultant final model of downloading behaviour, seen in Figure 4, surely benefits from these results, and shows greater parsimony.

Judging from the acceptance of hypothesis 4, it is clear that deeply embedded habits correlate with a higher level of consumption. Peters (2007) noticed the same effect when applying the new model of media attendance, but noted that for established technologies this effect is of greater impact on its use than the expected outcomes used in that model. The current data point to a near-tie in this regard; the estimated standardized effects of Expected Outcomes and Deficient Self-Regulation are very similar. This leads to the conclusion that while downloading as a whole is an established activity, its particulars (like the knowledge state and economic interest) are still in constant shift, leading to both a habituation to downloading as an awareness of the expectations.

Moral Justification did not fare as well as Deficient Self-Regulation; it failed to show significance in both versions of the model that featured it, and its standardized estimate never rose above 0.06. The current generation does not seem to harbour a great amount of moral qualms about downloading movies. This conclusion is easily reached when the average response of the downloaders regarding the proposition “I can download as many movies as I want” is 6.04 out of 7 in agreeance (Appendix, table 2). Added to this are the data from our model computations, which show that variance in the items from Moral Justification do not correlate significantly with changes in the number of downloads.

The data show that Descriptive Norms does have a significant influence on the dependent variable although, in achieving homogeneity among its items, one of the three items needed to be removed. The sample surveyed did not respond the same to the proposition 'I'm proud of being a 'movie-pirate'' as they did to the other items regarding comparisons to others. This reflects a negative attitude toward the label 'pirate' or at least its usage in the survey.

Looking at the standardized estimates, Completionism and Novelty Compulsion comprise the majority of Expected Outcomes. The fact that these effects are greater than that of Economic expected outcomes might indicate that while downloading movies is cheaper than renting or purchasing them, this does not have as large an effect on the model as do the drives to see rare and new movies. A possible explanation for this is that buying movies and wanting to see movies are showing an increasing disconnect; Downloaders do not download because they would otherwise have to spend money, they do so because they want to see a lot of movies.

While Knowledge of Laws is a valued component of Expected Outcomes, any direct effect on it is questionable. However, it is still worth noting the significance of this variable in the current model in light of the unique circumstances that exist in the Netherlands today. It seems clear that while lobbyists' efforts to dampen downloading activity by attempting to keep the population confused on the subject of legislature are arguably effective, the introduction of more definite legal constrictions will

have an effect on how much the people will download.

The significant influence of Knowledge of Laws on the Economic expected outcomes displays a negative estimate, raising a new question; Why is the attitude and knowledge of the current laws on the subject of downloading lowering the economic expected outcomes? The significance of this effect cannot be overlooked, and possibly presents a new avenue of inquiry.

When looking at the influence of Social expected outcomes on the Descriptive Norms, another negative estimate becomes apparent. Social expected outcomes measured the perception of the environment's attitude toward downloading, which could lead to a better understanding of the downloading behaviour this environment exhibits in Descriptive Norms. Descriptive Norms was posed negatively (i.e., “I know lots of people who download more than I do”), but because the responses were recoded the effect this category had on the number of downloads was still positive. It can therefore be argued that a clearer perception from the respondents of their social circles leads to a higher number of them believing their peers download more than they do.

Returning to the rejection of the last hypothesis, it can now easily be argued that self-efficacy doesn't play a major role in predicting downloading behaviour, were it not for the mean item score and its standard deviation. These datapoints imply a focused sample, which is probably the result of the high response attained from the technological forum – a population certainly not inexperienced in operating a computer. Another possible reason for the lack of influence of Self-Efficacy on the rest of the model is that downloading movies might not require a great amount of skill. The internet is still maturing, and with the vast amount of programmers – and hobbyists – willing to devote time and resources to developing easy to use (often) open-source software, navigating the web and exploring its possibilities is getting progressively less complex. Bittorrent clients often come pre-installed with the advanced options set to optimized defaults, ensuring even the most casual internet users have access to and are able to participate in the downloading communities.

The final model achieved from these analyses represents a community undergoing major shifts. The internet is becoming ever faster and easier to use, and it brings about social changes to which many stakeholders are taking offense. As self-efficacy and moral justification influences fade, for an increasing amount of consumers downloading becomes second nature, and an activity that for many seems like a criminal pursuit does not occupy much conscious thought in the minds of downloaders.

Limitations and Recommendations

Despite budgetary constraints, the current research was able to use a pool of 436 respondents. The trade-off was that 75.6% of the usable portion of this pool consisted of visitors and contributors to the technological forum described in the recruitment phase. While more age-diverse than the portion derived from the University, one unifying factor was constant with all these respondents; an interest in technology and the digital universe. While this sample is well-suited for an exploratory study which focused on the ins and outs of downloading films, it can be said to lack variety when it comes to computer skills. The previously reported tight standard deviation Self-Efficacy returned supports this theory. Three possible directions emerge from this realization. Firstly, self-efficacy could be considered to not play a vital role in predicting downloading behaviour. Secondly, a different sample might return wholly different results on this variable category. Lastly, the items used in this study were meant to be answered by the entire spectrum of the downloading community, leading to generalized propositions. More specific items to separate the heavy from the casual downloaders might create greater variance.

The paths open to the category Moral Justification are less clear. It certainly covaries with Deficient Self-Regulation and showed a direct positive influence on the Knowledge of Laws. Although exerting some influences within this model it cannot be said to have any great effect on how much films respondents download. It is recommended to keep this variable in the background in future research, along with the factor dedicated to fear of getting caught. In the current online and social cultures, it simply doesn't seem to register as deviant behaviour - let alone theft, which is how organisations as BREIN term it.

The dependent variable applied in this study is different from previous research in that it allowed for greater response variance than a measure of intention. The fact a large number of respondents rounded off their answer means they do not keep definite track of how much they download. While the reported figures might be further away from the truth than seems positive for quantifiable research, a lot can be said on the importance of perception in this matter. If the respondents had been asked on a 7 point Likert scale to estimate their downloading behaviour, the item would show a marked similarity to Descriptive Norms in that it would force them to think of what the researcher thinks 'a lot' is. Though LaRose & Kim (2007) had the respondents compare their behaviour only to their own, i.e., “Download more than last month” (page 272, item list), it would be interesting to investigate the phrasing of the dependent variable deeper. Perhaps combining three different versions of this variable would yield more accurate results. At the very least it would provide insight into the more stable and true method.

Returning to sample issues, a similar problem comes into view. The current survey focused heavily on the act of downloading. It was therefore very difficult to accommodate respondents who did not download. The three items mentioned in the Other Analyses section that were posed for the 26 non-downloaders as well as the downloaders do little to waylay the notion that a very large portion of the population goes unheard. Ultimately, future research would do well to access those that do not download media to get the full picture. The difficulty these eventual studies face is most certainly in achieving a representative sample.

As indicated in the final model presented in this study, the number of movies one downloads is heavily influenced by how deeply embedded the behaviour is in the daily routine. In all probability, efforts to reduce downloading movies without paying distributors need to start there. Another method of reducing the tension surrounding downloading movies is to take an in-depth look at what the problem is. While it is most certainly outside of the scope of this article to imply there is not an issue, other investigations into profit reductions of media sales have not always correlated these faltering sales with the rise in downloading activity (Oberholzer & Strumpf, 2004). Add to this the findings in the current study that there is most definitely an interest for a service to distribute movies to consumers digitally without bypassing the need for payment of the artists involved in making them, and it becomes clear that simply demonizing the downloading community might not be the only or even most effective strategy available to stakeholders and governments.

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Appendix:

Table 1: Covariance matrix of the model categories. The numbers displayed in the top row point to the categories in the first column.

Covariance Matrix	1	2	3	4	5	6	7	8	9	10
1. Number of Downloads	77.68									
2. Self-Efficacy	8.82	27.89								
3. Economic E.O.	6.36	0.90	17.61							
4. Social E.O.	4.42	-0.71	4.83	19.61						
5. Completionism E.O.	15.06	1.38	5.00	7.58	37.29					
6. Deficient Self-Regulation	22.08	6.06	7.72	8.71	15.97	36.24				
7. Knowledge of Laws E.O.	7.85	11.17	0.02	1.60	5.63	7.37	23.42			
8. Descriptive Norms	7.42	2.45	0.95	-0.25	3.45	5.22	1.32	8.41		
9. Novelty Compulsion E.O.	13.88	5.20	7.03	7.55	15.08	15.22	4.11	4.23	30.88	
10. Moral Justification	7.11	3.58	3.73	2.08	5.11	8.59	5.98	0.53	3.88	19.52

Table 2*: Items used in survey. Presented in original language (Dutch). Contact author for translations.*

Category/Item	Mean	Standard Deviation
Self-Efficacy	6.37	0.88
Ik heb het downloaden van films onder de knie.	6.44	1.30
Het is voor mij niet moeilijk om spyware en virussen te vermijden terwijl ik films download.	6.28	1.61
Ik weet hoe ik downloadsoftware moet gebruiken (Usenet clients, P2P	6.28	1.50

clients).		
Ik ben voldoende in staat goed werkende versies te vinden van films die ik wil downloaden.	6.48	1.01
Ik kan vaak de films vinden die ik zoek.	6.22	1.19
Als ik een film ga downloaden hoef ik er niet over na te denken hoe ik dat ga doen.	6.50	1.12
Descriptive Norms	4.76	1.49
Ik ben er trots op dat ik een 'filmpiraat' ben.	3.52	1.56
Ik ken veel mensen die meer films downloaden dan ik.	5.09	1.86
Ik download minder films dan de gemiddelde student.	4.42	1.73
Deficient Self-Regulation	2.99	1.00
Soms download ik films zonder erover na te denken.	3.27	2.08
Het downloaden van films is een gewoonte voor me geworden.	4.31	1.99
Ik download zoveel films dat het mijn leven ontregelt.	1.21	0.68
Ik vind het erg vervelend als ik door omstandigheden als bijvoorbeeld verbindingsproblemen geen films kan downloaden.	2.84	2.01
Ik download vaak een bepaald aantal films per week, ook als er geen bij zitten die ik heel graag wil zien.	1.53	1.10
Als ik nu nooit meer films zou kunnen downloaden zou ik dat heel erg vervelend vinden.	4.76	2.04
Moral Justification	4.63	1.10
Het is niet mijn verantwoordelijkheid om filmpiraterij (het onbetaald downloaden van films) te voorkomen, maar die van de filmindustrie.	4.30	1.75
Iedereen downloadt films, dus ik mag het ook.	3.25	1.84
Filmpiraterij is geen (ernstig) probleem.	4.94	1.70
Ik mag van mijzelf zoveel films downloaden als ik wil.	6.04	1.82
Ik compenseer voor mijn downloadgedrag door films die ik goed vind te kopen.	4.07	2.15
Expected Outcomes		
Economic	4.97	1.40
Door films te downloaden bespaar ik veel geld.	4.24	2.19
Als ik alle films die ik download zou huren, kopen of in de bioscoop ging zien, zou dit te duur voor mij zijn.	5.00	2.13
Ik kijk nu meer films dan dat ik zou kijken als het niet mogelijk was deze te downloaden.	5.67	1.73
Social	2.53	0.89
Ik download vaak films om samen met vrienden te kijken.	4.07	1.93
Ik praat vaak met vrienden over films die wij downloaden.	4.22	1.92
Ik voel me verbonden met een downloadgemeenschap (P2P-netwerk als BlackCats of Demonoid).	2.25	1.69
Als mijn vrienden het downloaden van films zouden afkeuren zou ik het waarschijnlijk minder doen.	2.09	1.28
In mijn vriendenkring is het normaal om veel films te downloaden.	5.18	1.57
Novelty Compulsion	4.22	1.39
Ik wil het liefst nieuw uitgekomen films zo snel mogelijk zien.	4.23	1.97
Ik let goed op of er nieuwe films te downloaden zijn.	3.94	2.05
Als ik films download neem ik het liefst een voor mij onbekende film.	4.09	1.77
Ik zoek altijd nieuwe ervaringen als het om films kijken gaat.	4.13	1.71
Als ik van een film hoor die ik nog niet heb gezien wil ik die vaak graag downloaden.	4.60	1.69

Completionism	3.66	1.22
Het liefst zou ik alle goede films wel willen downloaden.	4.67	1.97
Ik probeer goede films die ik heb gedownload en gezien zo lang mogelijk te bewaren.	4.25	2.24
Ik wil zoveel mogelijk films gezien hebben.	3.33	1.86
Ik moet soms lang zoeken voordat ik een film kan downloaden die ik nog niet gezien heb.	2.76	1.64
Ik probeer vaak zeldzame films te downloaden	3.30	1.90
Knowledge of Laws attitude	4.88	1.50
Ik ben op de hoogte van de Nederlandse wetten omtrent het downloaden van films.	5.43	1.68
Ik volg de ontwikkelingen rond rechtzaken over het downloaden van films (zoals die rond Piratebay en BREIN/BAF).	5.16	1.82
Ik ben me bewust van de hoofdstandpunten van de Piratenpartij.	4.05	2.15
Knowledge of Laws objectified	0.78	0.35
Knowledge question 1: Downloading legality (correct: true/false).	0.84	0.37
Knowledge question 2: Uploading legality (correct: true/false).	0.73	0.44