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Running Head: INTERNET TELEVISION

The Rochester Institute of Technology

Department of Communication

College of Liberal Arts

Internet Television Use:

Motivations and Preferences for Watching Television

Online Among College Students

by

Christen M. Steinkamp

A paper submitted  
in partial fulfillment of the  
Master of Science degree  
in Communication and Media Technologies

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INTERNET TELEVISION USE: MOTIVATIONS AND PREFERENCES FOR  
WATCHING TELEVISION ONLINE AMONG COLLEGE STUDENTS

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Abstract

The present study examined the television viewing habits of college students to determine differences between motivations and preferences for watching television online versus on a broadcast receiver. A convenience sample of 136 RIT students responded to an online survey. The study found that like the TV viewers of the 1980s, television viewers today are still motivated by relaxation, escape, and the desire to pass the time and to socially interact with companions — no matter which medium. The ability to control the television experience, to choose when to watch programming, and the convenience that Internet television offers are reasons why college students are using alternatives to the traditional broadcast receiver.

Keywords: Internet television, Web TV, television, television preferences, television audiences

## Internet Television Use: Motivations and Preferences for

## Watching Television Online Among College Students

In the early days of television, viewers gathered around a small screen and marveled at the images of short comedies and dramas. In 1945, television viewers knew exactly what defined television—the broadcasting of moving images and sound, over the airwaves to homes for viewing on a television receiver (Noll, 2004)—and how to use it. Television was a time-dependent medium that operated on a schedule set by broadcasters. Audiences, in turn, made themselves available to view television programming at the time of broadcast and thus understood an unambiguous definition of television.

The invention of programmable video recorders in the 1970s substantially decreased audience dependence on fixed schedules, as viewers began using videocassette recorders (VCRs) and much later, digital video recorders (DVRs), to watch shows at their convenience. “Families that acquired VCRs and cable had the potential to record television programming...eliminate commercials, view segments out of order, watch favorite programming...rent first-run motion pictures, and subscribe to premium movie channels” (Matthews, 2003, p. 219).

Since the 1990s, digital technology, coupled with the expansion of the Internet, has continued to redefine television, insofar as viewing TV shows is no longer confined to the television set (Noll, 2004). Television can now be accessed from a personal computer, and various mobile devices such as a cell phone or PDA, making the physical television set no longer necessary. Viewers can also choose from alternative TV systems such as DirecTV, TiVo, and ReplayTV that function as digital recorders, interactive television programming, and network or

non-network sponsored Internet TV (Hansell, 2000). These media allow audiences to time-shift, and give audiences more control over their television viewing.

Internet television redefined the role and model of traditional, broadcast TV. In its simplest form, Internet TV is conventional television obtained over the Internet; video streaming provides television programs in real time (Noll, 2004). The implication is that consumers are able to pick and choose any video or television program for downloading and viewing at their convenience, thus converging the television set with the personal computer (Noll, 2004). Going beyond the convenience of viewer choice and control, Internet TV is believed to encourage new types of entertainment, education, and games that incorporate the Internet's interactive capabilities (Gerbarg & Noam, 2004).

The movement of television shows and movies to the Internet is arguably the single largest investment controversy in the media sector and that, according to one analyst, \$300 billion of market value tied to television production and distribution could be at stake as more and more programming is being offered online (Arango, 2009). NBC reports that seven out of 10 viewers were motivated to watch a television show only after sampling it online first (Holson, 2008). While some viewers are embracing the complementary nature of the Internet and television to view video content, the societal problem is that audience motivations for watching television online are unclear and audience preferences for Internet TV have yet to be determined.

Providing insight into the subject of audience motivation and behavior, the uses and gratifications approach attempts to clarify the definition of audience activity, and to question why people use the mass media (Haridakis & Whitmore, 2006; Rubin, 1981). In taking this approach, the interactive nature of television viewing has been examined, yielding specific

categories of television viewers—those who watch out of habit, and those who seek information (Rubin, 1981). Mass media research has determined audience motivations for watching broadcast TV, audience adoption of digital television, and the social implications of television programming (Chan-Olmsted & Chang, 2006; Hall, 2007; Rubin, 1981). These studies help to explain how television audiences once behaved—during the time of a single television receiver—and serve as references upon which to compare the findings of the present study.

McRae (2006) suggests a growing preference for interactive instead of broadcast media—with a broadcast model delivering programming based on mass audience appeal, and an interactive model, via the Internet, delivering content that a user can navigate, explore, create, and construct. Several bloggers and self-proclaimed Web experts speculate the motivations for watching television online: low cost of entertainment, quality of picture, speed of downloading/streaming, and lack of interruptions (“New Chart...,” 2009; “Internet TV and...,” 2009). However, yet to be seen is a quantitative study that verifies or invalidates these assumptions.

The current study explored television viewers’ motivations and preferences for watching television online. In particular, the researcher examined the behavior of college students, who are early adopters and heavy users of the Internet and are more likely to be online, check e-mail, download music files and use instant messaging than the general population (Jones, 2002). The present study sought to understand why television viewers are using Internet television, and if they prefer to watch programming online or on the traditional television set. Specific research questions guided the present study:

Research Question 1	What are the differences between self-reported frequency of Internet TV viewing and broadcast TV viewing among college students?
Research Question 2	What are the differences between self-reported motivations for watching full-episodes on broadcast TV and Internet TV among college students?
Research Question 3	To what extent do college students say they prefer Internet TV to broadcast TV?

### Rationale

#### *Social*

By studying why audiences choose to watch television on the Web and what new or different gratifications they seek via Internet television, we can better understand how television audiences have evolved since the late 1970s. On a larger scale, as the media environment expands with digital and interactive technology, media users must decide which technology best meets their needs. With new media technology adoption comes a change in audience motivation to use or disregard older forms of media. The present study provides insight into television viewer motivations in the digital age, and determines how audiences are using newer media (Internet TV) in conjunction with older media (broadcast TV). The study has implications for how television audiences are changing their media use following adoption of new media technologies.

*Scholarly*

Uses and gratifications research offers a reliable understanding of television audience motivation (Ferguson & Perse, 2000; Hall, 2007; Rubin, 1981). Due to the recency of Internet video programming over the past 15 to 20 years, there is little research on viewers who seek out and use alternative television forms. There is a need for additional research that questions why people are viewing Internet TV and if these reasons differ when viewing broadcast television. The present study offers baseline data describing Internet television usage among college students with which subsequent studies may compare their findings. Investigating these phenomena will yield new understandings about trends in television viewing. Additionally, none of the Internet uses and gratifications studies questioned participants' need or motivation to view television programming online. The present study questioned if and why this is an important use of the Internet.

### Literature Review

In order to study Internet television audiences, one must understand the definition of Internet TV and how audiences, up until this point, have been understood to use television and the Internet as separate media. A review of the relevant popular media and scholarly literature reveals the impact Internet TV has had on traditional broadcast television and how audiences are using the new medium.

Internet TV in its most obvious implementation is conventional television obtained over the Internet and accessed by a computer using video streaming technology (Noam, 2003). The development of Internet TV has given rise to several types of online programming (Pavlik, 2000). The first is the transfer of off-line television programming to the Internet for promotional

or non-promotional use. Promotional use encourages a Web user to watch a TV program on cable, broadcast or satellite after sampling it online first (Carey, 2004). News, sports, and entertainment contribute to this category by transmitting movie trailers, soap opera clips, and by repackaging news and sports content for the Web. A second type of online programming is Internet-original content, which includes the live feedback of Web cams, and supplemental Web material like extended Webisodes, movies, and interactive mini-productions that expand current plot lines (Pavlik, 2000; Stelter, 2008). This category oftentimes serves to complement regular TV programming and is labeled as two-channel TV or parallel broadcasting (Carey, 2004). A third category of online programming includes full-length television programs and films that are available as video streams or downloads. Short documentary or animated films, full-length motion pictures, and full-length sitcom or drama episodes also fall into this category. As Internet television expands its unique programming and gains wider audiences, supporters and critics of online TV recognize its potential to impact the traditional broadcast industry.

Since 2007, statistics monitoring online versus broadcast viewing have wavered. According to a Nielson study, more consumers are accessing television and movies online, with an estimated 81 million, of the 129 million people who access the Internet via a broadband connection, watching TV or movies online (as cited in Guthrie, 2007). Another study, reported by Integrated Media Measurement Inc., found that 20% of all TV viewing in the U.S. happens online. Of the 20%, 50% of online viewing was characterized as "TV replacement," 32% as "catch-up viewing," and 18% as "fill-in viewing" (as cited in Emigh, 2008). It is clear the television market is fragmented among broadcast, cable, satellite, digitally-recorded and online programming; however, TV Web sites are continuing to attract users. Nielson Ratings reported

that the top online Web sites for December 2009 included YouTube, with over 6 million streams and 105,000 unique visitors, followed by Hulu and Yahoo! (“Time spent viewing...,” 2010).

A study by Nielson-funded Council for Research Excellence (CRE) found that contrary to the suggestion that more Americans are rediscovering “free TV” via the Internet, computer video tends to be quite small with an average viewing time of just two minutes (a little more than 0.5%) per day (Zackon, 2009). CRE posits that TV in the home still commands the greatest amount of viewing, more so for the baby boomers, or those aged 45-54, than for those aged 18-24, who watch 335.7 minutes and 209.9 minutes of live TV per day, respectively (Zackon, 2009).

Some propose that cable television will not be affected by Internet TV like the old media industries of print, music, and broadcast television have. Major media conglomerates like Time Warner, Viacom, and NBC Universal have made protecting cable TV a top priority. In order to prevent viewers from cancelling cable subscriptions—a viable option according to the Sanford C. Bernstein research group that found about 35% of people who watch videos online might cut their cable subscription within five years—Time Warner executives have proposed to offer their cable shows online for free, provided a viewer is first authenticated as a cable or satellite subscriber (Arango, 2009). The actions of top media conglomerates in response to Internet TV are not surprising. Every major broadcast network has found multiple channels to provide its shows online. Cable and satellite networks must allow access to its programming using multiple channels as well, or risk losing paying customers to free online video.

*Breaking into Web TV*

Pavlik (2000) proposes that television on the Internet is not just television anymore; it presents new opportunities to restructure the television industry and alter how programs are produced. Internet TV, in particular, is being embraced by major networks and niche markets. Sports and news syndicates were the first to test new video formats by repurposing on-air video, and producing video specifically for Web viewers (Tedesco, 2000). In 1999, NFL.com began live transmission of video to three locations outside the U.S. to online fans with high-bandwidth Internet access (Pavlik, 2000). The National Basketball Association (NBA) began producing two-minute highlight packages of nightly games and streamed Web packages for special events (Tedesco, 2000). With the goal of combining the immediacy and depth of information from NBA.com with its current television programming, NBA executives saw the Internet as an opportunity to offer fans complete coverage of the league (Pavlik, 2000). Television news executives had a similar vision. The leaders of ABC News recognized the Web as a vehicle to bridge the traditional news cycle of morning and evening news (Tedesco, 2000). Additionally, CNN.com, MSNBC.com, and the network Web sites of CBS, ABC and NBC are among the leaders in providing online video news (Pavlik, 2000).

Critics say that consumers are not ready for Internet television and that technical requirements or plain disinterest are deterring viewers from watching TV online. A media research firm, Points North Group, found that of a sample of 1,000 Internet users, only 12% report watching an entire TV program online at least three to four times a week, while only 28% expressed "strong interest" in watching regular TV shows on their computer (cited in Malone & Higgins, 2005). Vice President Cheng of digital media at ABC predicts that until the technology

gets easier for the end user, Internet TV will only attract a niche clientele (Malone & Higgins, 2005). Perhaps Internet TV should aim to attract a new audience type. As Carey (2004) suggests, “Web video offers the potential to find new audiences for existing video content that currently reaches a limited market and to help recover some of the lost audience for television” (p. 188). Historically, people have changed viewing habits many times (Carey, 2004), so it is likely traditional audiences will reach out and embrace Web options to view video, or at least take steps to learn more about it.

#### *Television and Internet Audience Research*

As Internet television redefines how content is disseminated and provides smaller markets the opportunity to disseminate content, understanding the motivations of television and Internet audiences becomes increasingly important. Significant research suggests that television viewers have specific reasons for watching television, and that Web users invoke a different set of needs for Internet use (Coffey & Stipp, 1997; Ferguson & Perse, 2000; Lu & Lo, 2007). In order to explore the differences in motives for broadcast TV and Internet TV viewing, one must understand how audiences use the two media.

Literature from the early and late 1990s is often critical of television and Web convergence, fueled by arguments that PC use is bound to reduce TV viewing time, that people do not have enough time to use their PCs and view television, that activities like Internet surfing are more interesting than television, and that children are growing accustomed to computers and will grow up using TV much less than older generations (Coffey & Stipp, 1997). However, these assumptions were unconvincing to researchers and as new data accumulated, new assumptions in favor of media convergence rose. In an ethnographic study of broadband users, Carey (1996)

interviewed 18 people in 12 households and made observations about how they interacted with Web content. Along with discovering the various locations of computers within the household (bedrooms, living rooms, and dens), Carey (1996) determined that the Web users in his study used multiple browsers, bookmarked the sites they frequently visited, used e-mail as a functional alternative to the telephone, and reported watching less television as their Web usage increased. Based on additional observation, Carey (1996) uncovered ways that the Web and TV were used together: using TV as background noise while surfing the Web, alternating between watching TV and surfing the Web, watching TV and surfing the Web simultaneously, visiting the Web site of a TV program before/during/after watching the program on a television set, and chatting online about a TV program that was currently on. He also suggests that broadband users had a latent appetite for Web-delivered video since many users discovered video clips over time and began to watch them more frequently. In some of the same ways Internet TV is used today, the broadband users of Carey's study accessed news clips, sports clips, and some short films, hoping to be the first to view breaking news and special news events. Although not noted by the author, the overall findings may reveal a novelty effect, given the attractiveness of the Internet as a new medium. Carey (1996) does identify that his hypotheses merit additional long-term quantitative research using larger audience samples.

As the television and Internet continued to co-exist and interact over the last 10 years, more recent studies explore the unique dynamics of each medium, such as television audience satisfaction, Internet users' Web gratifications, and how the Web may be a functional alternative to television. Lu and Lo's (2007) investigation of television audience satisfaction recognized the importance of audience satisfaction research and its implications for increasing audience loyalty,

enhancing television program reputation, and creating more effective TV advertising strategies. The authors hypothesized that connectedness and TV program performance were two indicators of audience satisfaction. Connectedness is the level of intensity viewers ascribe to their relationships with the characters and contextual settings of a TV program, and TV program performance is the extent to which the program meets a viewer's expectations (Lu & Lo, 2007). The outcome of a telephone survey asking respondents to evaluate their viewing motivations yielded results supporting the hypothesis. Lu and Lo (2007) concluded that connectedness is a newly-developed construct of audience viewing behavior, and that an intense relationship with TV characters is not easy to develop. The findings of this study are consistent with the work of Rubin (1981), who studied the nature of television viewing motivations, viewing behavior and attitude gratifications. Among the five viewing motivations Rubin found, companionship was an important factor influencing how audiences felt about the programs they watch and the people with whom they watch (Rubin, 1981). Both studies confirm the idea that television audiences continually seek a deeper connection with the programs they watch, and come to develop high expectations for TV programs. When examining Internet users, similar findings suggest that online audiences are also interested in relationship building.

In order to determine the types of gratifications that drive consumer use of the Internet, Stafford and Gonier (2004) asked AOL members to rate the relative importance of 45 characteristics of, or reasons for using, the Internet. Four main themes were derived from the survey data, indicating that AOL members use the Web as a search tool, as a source of information, as a source of communication, and as a socialization venue (Stafford & Gonier, 2004). Both the communication and socialization factors suggest that users view the Internet as

an interpersonal communications channel that allows them to stay in touch with others and chat with friends. The study also identifies relaxation, interaction, entertainment, and freedom as significant reasons for using the Internet—reasons that researchers Rubin (1981) and Ferguson and Perse (2000) also found to motivate television viewers.

Just as media convergence examines how old media collaborate with new, researchers Ferguson and Perse (2000) question the similarities between television (old media) and Web surfing (new media). The authors relied on uses and gratifications theory to assert that people use media they believe will help them achieve their goals, and that since few media are uniquely able to fulfill all goals, people must select from functional alternatives (Ferguson & Perse, 2000). The authors surveyed a sample of young adults who had both Internet access and computer experience to understand how the computer effects time spent on other activities, more specifically, if Web surfing is a functional alternative to television viewing. Respondents indicated the extent of their agreement with 27 statements about their reasons for surfing the Web, how often they surfed the Web for 12 different purposes, and marked which of the top 100 Web sites they had visited in the past week. The study's most striking finding was that entertainment was the most frequent use of the Web, and the most frequently visited Web sites were those that offered entertainment or sports (Ferguson & Perse, 2000). Like television, the Web is seen as a source of diversion. Ferguson and Perse (2000) argue that if the Web can offer more entertainment, with just as much convenience as television, it could replace television viewing. Watching television to pass time is usually the third-most cited reason for TV viewing (Rubin, 1981). Ferguson and Perse (2000) found that the Web does not replace television as a way to pass time, and that users do not typically use the Web for relaxation. The authors believe

there are more functional similarities between Web surfing and television viewing than there are differences, and that major broadcast networks are probably wise to establish Web sites to cross promote their programs (Ferguson & Perse, 2000).

The findings of Ferguson and Perse (2000) have important implications for the present study. Just as the authors argue that Web-provided entertainment may replace entertainment obtained from broadcast television, perhaps the video streaming technology of online television will displace broadcast television viewing. The review of literature displays the variety of research on both television and Internet audience gratifications, as well as explains how Internet television is defined and adopted. The present study expanded on the research of Internet audiences to understand if viewing Internet TV is among television viewers' media priorities.

## Method

### *Sample and Procedures*

A convenience sample of currently-enrolled students at Rochester Institute of Technology (RIT) was selected to participate in an online survey about television use. In order to acquire an acceptable sample size, students were selected from within the College of Liberal Arts (COLA). The sample was contacted via e-mail and requested to participate in an online survey, hosted by RIT Clipboard. Both the initial e-mail and the online survey instrument (Appendix A, B) informed participants about the nature of the study and indicated that participation is voluntary and much appreciated.

To ensure that a reliable and effective survey was used, the survey instrument was pretested on 10 currently enrolled COLA students. After completing the pretest, comments were reviewed to address issues concerning question clarity, and adequacy of response scales. With

this information, the survey instrument was modified and an estimated time for completion was added to the initial e-mail message.

### *Operational Measures*

The survey instrument directed participants to think about broadcast television as “what you watch using a remote and TV set,” and was meant to be understood as watching shows on broadcast, cable or satellite channels only. Digital-recording systems that can sync up with these channels were not part of the researcher’s definition of broadcast television. The survey directed participants to think about Internet television as “watching full episodes on hulu.com, nbc.com, abc.com or the like,” and does not include user-generated content, or downloadable movies.

**Frequency:** Questions 1 and 4 asked participants how often they watch both broadcast TV and Internet TV. In order to answer RQ1 and operationalize frequency, the survey asked participants to think back on their broadcast TV and Internet TV viewing within the past week, and to choose from a scale of 0-10 hours, 11-20, 21-30, 31-40, 41-50, or 51 or more. The scale was constructed based on an average of 28 hours per person per week of broadcast television viewing in the United States (“Television viewing...” 2010). The survey also asked participants to identify what type of television program they watch most frequently (Questions 2 and 5) to determine the differences between television content and television medium. For example, were participants seeking out more comedy on the Internet or on broadcast? Drama? Sports?

**Motivations:** According to Papacharissi and Rubin (2000), motives are general dispositions that influence people’s actions taken to fulfill a need or want. In order to answer RQ2, the motivations for watching broadcast television and Internet television were measured. Motivation statements were drawn from past uses and gratifications studies, and items were

extracted from survey questionnaires developed by Rubin (1981) and by Ferguson and Perse (2000). Within Rubin's survey, different reasons for watching television, including relaxation, companionship, and entertainment were provided. These motivations were characterized as interpersonal motivations, and for the present study, these interpersonal television motivations were combined with computer-mediated motivations for using the Internet, such as time-shifting and control. The computer-mediated motivations were extracted from Ferguson & Perse (2000) and Papacharissi & Rubin (2000). Both interpersonal and computer-mediated motivations for watching broadcast television and Internet television were drawn and adapted to generate a 17-item motivations list. This list inquires about:

Relaxation (1)	Social interaction (6, 12, 14, 17)
Information (7, 15)	Companionship/Interpersonal (10, 12, 14, 17)
Escape (4)	Control over TV experience (2, 3, 10, 11, 15, 16)
Time-shifting (2, 8, 11)	Passing time (9)
Convenience (8, 16)	Habit (13)
Entertainment (5, 10)	

The 17-item motivations list provided possible reasons for using any of the television receivers, and is the same list used for Question 3 and 6. Response options for each statement used a four-point ordinal scale that asked participants to indicate their level of agreeableness with the 17 statements (strongly disagree, disagree, agree, or strongly agree).

**Preferences:** In order to answer RQ3, Questions 7-11 of the survey instrument asked participants about their preferences for watching television. These questions were based on hypothetical situations; participants were asked if they would rather watch television on the Internet or on broadcast—all things equal, when they have a lot of classes, when they have more free time, when they are watching alone, and when they are watching with friends. The situations reflect circumstances that college students may experience. By providing different situations, the

extent to which participants prefer broadcast TV or Internet TV was examined.

Question 13 was an open-ended question that allowed participants to share any additional information that would help the researcher understand their use of television. Participants were asked to make any comments, which included criticisms, or questions, that would provide additional insight or inquiry into the subject of television use. This question gave participants an opportunity to share their thoughts, since the survey instrument was primarily a series of closed-ended questions.

**Personal Attributes:** Questions 14-16 collected demographic characteristics of the survey respondents, including gender, age, and year in school. These questions were asked to help describe the sample.

### Results

A total of 136 participants responded to the online survey instrument. Of the 136, 51 students (or 37.5%) self-identified as being male, and 85 students (or 62.5%) as female. Ages ranged from 18 to 59 with the average age being 23. Additional demographics revealed 15 first-year (or 11%), 27 second-year (or 19.9%), 28 third-year (or 20.6%), 23 fourth-year (or 16.9%), and 43 graduate-level students (or 31.6%) responded to the survey.

When asked how much time was spent watching broadcast television in the past week, 72.1% of students indicated watching 0-10 hours, and 14.7% indicated watching 11-20 hours. Students responded to a similar question that asked how much time was spent watching Internet television in the past week. Results indicated that 77.9% of students watched 0-10 hours, and 10.3% of students watched 11-20 hours. A t-test revealed a slightly significant difference between hours spent watching broadcast television and Internet television ( $t = 2.24$ ,  $df = 120$ ,  $p =$

.027). The low frequency of television hours watched (0-10 hours/week) on both broadcast and Internet television is reflective of a college students' busy lifestyle, which typically includes school work, extra-curricular activities, and socializing.

The survey asked participants to indicate what type of program they watch most frequently on broadcast TV and Internet TV. The majority of students indicated watching comedy/sitcoms the most (40.44% for broadcast and 39.71% for Internet), and dramas second (25% for broadcast, 36.76% for Internet). Where broadcast and Internet differed was in frequency of watching sports and news. Students watched more sports (11.76% on broadcast versus 0.74% on Internet) and more news (8.09% on broadcast versus 1.47% on Internet) on broadcast TV than on Internet TV. Since sports games and news coverage are broadcast in real-time, students are able to stay current and up to date more readily. While Internet TV offers news and sports, there is less incentive to watch yesterday's news online, or review game highlights the day after a game is over.

### *Television Motivations*

RQ2 asked about the differences in motivation for watching broadcast TV and Internet TV. Participants were asked to indicate their agreeableness with 17 statements regarding their use of broadcast and Internet television. Each of the 17 statements were categorized as interpersonal motivations (relaxation, companionship, entertainment, information, escape, social interaction, passing time, and habit), or computer-mediated motivations (time-shifting, convenience, and control). There was a significant difference between the motivations for watching broadcast TV and the motivations for watching Internet TV when it came to computer-mediated motivations such as control, time-shifting, convenience and the interpersonal motivation of social interaction.

A Wilcoxon Signed Ranks Test, which examines the difference between related samples of ordinal level data, revealed that broadcast television and Internet television differed significantly regarding control over what one is watching ( $z = -7.210$ ,  $p = .000$ ), with Internet allowing more control (Statement 3). There was a significant difference between broadcast television and Internet television regarding the convenience motivation ( $z = -7.465$ ,  $p = .000$ ), with Internet television being more convenient. Of the 136 participants, 70 strongly agreed and 45 agreed that “it’s convenient to see shows when I want” using Internet TV (Statement 8). Convenience and control motivations were once again significant, with Internet TV offering more convenience and control ( $z = -7.842$ ,  $p = .000$ ). Seventy participants strongly agreed and 41 agreed that Internet TV “let’s me choose when to watch my favorite TV program” (Statement 16). Internet TV significantly differed with broadcast TV regarding the ability to time-shift ( $z = -7.981$ ,  $p = .000$ ), with 60 participants strongly agreeing and 49 agreeing that Internet TV “allows me to alternate a TV program around my schedule” (Statement 2).

Broadcast television and Internet television differed significantly regarding social interaction ( $z = -6.65$ ,  $p = .000$ ), with broadcast TV allowing more social interaction. Of the 136 participants, 32 strongly agreed and 72 agreed that broadcast TV allowed “something to do with friends or family” (Statement 6). The survey revealed a slight difference between broadcast and Internet TV’s ability to entertain, with broadcast TV being slightly more entertaining ( $z = -2.97$ ,  $p = .003$ ). Since participants indicated more social interaction with broadcast TV, perhaps being surrounded by good company and good conversation is conducive to an increased sense of entertainment (Statement 5).

*Television Preferences*

RQ3 asked to what extent college students prefer Internet TV to broadcast TV. Five survey questions asked students about their television preferences in specific situations. On days that students had a lot of classes, there was a significant difference between broadcast and Internet, with a Chi-Square test revealing Internet TV being the preferred medium ( $\chi^2 = 6.62$ ,  $df = 1$ ,  $p = .01$ ). On days that students had more free time, 63% preferred to watch broadcast TV, which significantly differed with a preference for the Internet ( $\chi^2 = 9.53$ ,  $df = 1$ ,  $p = .002$ ). When watching television alone, preferences were split between Internet (48%) and broadcast (51%), yielding no significant results. However, when watching with friends, students overwhelmingly preferred broadcast (85%), a significant difference from Internet ( $\chi^2 = 67.77$ ,  $df = 1$ ,  $p = .000$ ). All things being equal, 60% of participants preferred to watch broadcast television, yielding a significant difference from Internet ( $\chi^2 = 5.77$ ,  $df = 1$ ,  $p = .016$ ).

Results confirm that broadcast television fosters social interaction and is watched when students have more free time to devote to entertaining and socializing. Student preference for Internet TV when they had a lot of classes showcases the convenient nature of Internet TV to view television instantly. When pressed for time, Internet TV allows students to watch programming quickly and without commercial interruption.

## Discussion

Pioneering research on television usage revealed strong interpersonal motivations for watching television on the broadcast receiver. Some of Rubin's (1981) original findings are confirmed with the findings of the present study. Like the TV viewers of the 1980s, television viewers today are still motivated by relaxation, escape, the ability to pass the time, and to

socially interact with companions— no matter which medium. Ferguson and Perse (2000) found that the Web does not replace television as a way to pass time, or for relaxation. However, the present study found that relaxation and passing time were two interpersonal motivations felt by participants. While Web usage as a whole—including search, e-mail, surfing, and chatting, to name a few—may not provide relaxation and a means to pass time, the singular act of watching video or television programming does.

The emergence of Internet TV created several new computer-mediated motivations that were not available 30 years ago. The ability to control the television experience, choose when to watch programming and the convenience that Internet TV offers are reasons why today's college students are finding alternatives to the broadcast receiver. Survey respondents uniquely appreciated the convenience of Internet TV and preferred it on days they had several classes. In this instance, watching TV online was the preferred choice due to limited commercial interruption and the ability to watch video on demand. A slight majority of participants preferred to watch online when they were alone, perhaps due to increased focus and less distractions that watching with a group of people can produce. Because Internet television is uniquely user-controlled, participants felt a great sense of power in the ability to time-shift. Students who miss a broadcast episode are guaranteed online viewing of that episode within 24 hours or less. Time shifting allows users to start a program anytime, pause it, resume it, and pause again if so desired. Viewers are able to watch episodes repeatedly and out of sequence, perhaps making full-season DVD box sets less desirable.

Survey participants shared additional comments to help the researcher understand more about their TV motivations, habits or preferences. Among the 47 user comments, the ability to



feel part of a group when watching either broadcast or Internet TV, nor do they feel less lonely. Where these motivations may have been important to the viewers of Rubin's day, today's audiences are accustomed to using multiple media devices at once, splitting their attention in several directions and becoming expert multi-taskers. How can one achieve true companionship while watching an online program, texting a friend, and checking an e-mail? The asynchronous nature of the Internet offers several ways to be engaged at once, but is not providing personal companionship or a sense of belonging to its users.

The present study did, however, reveal user preference for broadcast television when watching with a group of people and when users had more free time. Sitting in front of a broadcast receiver with a group of friends facilitates relaxation and socialization, whether a user feels part of that group or not. Many living arrangements center comfortable furniture around a TV set; it is more likely a viewer will prefer this arrangement when they have extra leisure time.

In terms of the interpersonal motivation, connectedness, the findings of the current study are inconsistent with the findings of Lu and Lo (2007), who found that television audience satisfaction is determined by audiences' feeling connected to characters and plotlines. The present study found a split between participant agreeableness with statement 10, "I watch television because it allows me to connect with TV characters and plotlines." It seems regardless of the medium used, some participants felt connected to the show they watched, while others did not. Factors such as watching a show alone, or with friends, time of viewing and emotional state may influence participant's feelings on connectedness, along with their initial interest and long-term investment in the show itself.

### *Limitations*

The inherent limitations to any survey instrument are self-reported data and sampling bias. Since the survey instrument measured frequency, motivations, and preferences, it must rely on what participants say their motivations are, how often they remember viewing television, and what their preferences were at the time of survey completion. Additionally, an individual's understanding of each motivation may effect how he or she answered each question, as participants may define "convenience" in various ways.

The present study's findings are limited by a small convenience sample of students within the College of Liberal Arts (COLA) at RIT. The results are not conclusive until replicated on a larger sample, thus limiting the external validity of the study. The behaviors and habits of college students are unique to the college experience. The researcher should not expect to generalize the findings of the present study to older audiences, as adult populations presumably have more leisure time to spend watching television, and more money to spend on television accessories and technology than college students.

The survey instrument contained minor errors that may have confused or skewed a participant's response. The word "television" appeared as an option for Question 8 and 10, which should have read, "broadcast." For Question 6, the second statement should have read, "it allows me to *plan* a TV program around my schedule" and the eleventh statement should have read, "it allows me to *plan* my schedule around a TV program." These typographical errors did not seem to alter the results and participants seemed to have understood that "television" meant "broadcast;" however, the study should be replicated to know for sure. Additionally, when measuring frequency, the researcher should have added a "do not use" category. A participant

who did not use Internet TV had no other choice but to select 0-10 hours of Internet television viewing. Therefore, when analyzing the results, the researcher does not know who of the 77.9% respondents actually viewed some hours of Web TV versus those who did not use it at all.

The definition of television as it stands today is far different than at its inception in the 1940s. Even though participants were directed to a clearly written definition of what constitutes broadcast television (what you watch using a remote and TV set) and Internet television (watching full-episodes on Web sites like hulu.com), it is possible participants did not understand these definitions, or answered based on their own definitions. Participants may have created their own definition of the operational measures based on their typical TV viewing behavior, or the technology and TV access available to them.

Once more, there are options to view TV that the present study did not test for. One may use a remote and TV set to watch programming that is streamed through the Internet and digital-recording systems possess many of the same attributes as Internet TV, with the ability to time-shift. Television on demand and the Netflix model present ways to stream television episodes and movies directly to a personal computer or TV set. The researcher operated under the assumption that RIT students only had access to the cable or broadcast channels available in their residence hall or RIT apartment, and therefore did not own, or could afford, a DVR system.

### *Heuristic Value*

The heuristic value of studying Internet television is extensive. The present study could be modified to assess how older populations are adopting Internet TV, or how different cultures are adopting it (perhaps a new look at diffusion of innovation). Once we understand what does or does not motivate college students to use Internet television, a new question could ask: what

would it take to get college students/older populations to adopt Internet TV, or other forms of digital technology, for that matter? Researchers could inquire about the content of Internet TV to determine if content influences how Internet TV is used, or the frequency at which audience members watch Internet TV. A content analysis could assess the type of content available online, and make inferences about how Internet TV could expand to gain wider audiences. With the ability to skip television commercials cited as a reason for watching Web TV, researchers should study how the advertising industry is converting to the online format, and if its strategies have been successful thus far.

Television audience research on fan communities could predict how Internet television, including full episodes, original Webisodes and user-generated content, contribute to the activity of fan communities. How are fan communities embracing the online ability to time-shift, chat with other fans, watch supplemental video made especially for fans, and share their own ideas and videos? Do online fans have a high propensity to utilize Internet TV over broadcast TV—or do they participate in more parallel channel behavior than the general population? Researchers can learn how people are adopting new technology to fit their various needs. With Internet television in particular, researchers can tap into what is most important for a given population to adopt, use, and share Internet television.

Researchers can identify the specific components and features of Web TV and measure their effectiveness. Components such as downloading time, quality of video and audio, length and amount of commercials, availability of past episodes, and buffering speeds may influence the popularity of certain sites, and predict which sites will flourish as technology continues to develop.

In an attempt to compare apples to apples, the researcher of the present study instructed participants to think only about full-episode viewing on Web TV, however online video encompasses much more than full-episodes. Future research could examine all types of online video including Webisodes, user generated content, movies, behind the scenes footage, or trailers, to get a more accurate view of how users are viewing online video. Exploring other ways to access television—on demand, with digital-recording devices, hooking up the Internet to a TV screen, hooking a cable cord into a personal computer, and the list goes on—will reveal new motivations and features for watching TV. As Internet TV continues to evolve, the possibilities for future research are great. Understanding how audiences function and think is a vital piece to improving technology in a digital age.

### Conclusion

Television audiences can access TV through a variety of digital devices. The video-streaming ability of the Internet provides viewers greater control over their television experience. As television audiences of the mid to late 1900s have been understood through early uses and gratifications research, audience motivations of modern day are becoming more user-controlled, with an emphasis on user convenience. College students in particular do not need to plan a TV show around their schedule, but instead can time-shift, skip commercials and control when they watch programming. Although overall preference was split between Internet and broadcast TV, college students prefer broadcast when viewing with a group of friends, and Internet when they are busy. Ultimately, the participants of the present study are not completely shifting away from the broadcast receiver. The traditional television set still facilitates relaxation, escape, the ability to pass the time, and to socially interact with companions. The convenient nature of Internet

television is just that. Added perks like watching a missed episode and skipping commercials are useful when the situation calls for it. The vitality of Internet TV relies heavily on how effectively it engages and meets viewer's needs. Until Internet TV can completely satisfy all interpersonal and computer-mediated motivations for watching television, audiences will continue to use multiple receivers and fragment their TV viewing choices.









Appendix A: E-mail communication to students

Hello,

My name is Christen Steinkamp and I am currently working on my M.S. in Communication and Media Technologies. As a member of the College of Liberal Arts, you have been selected to participate in a study on Internet television and how you are using Web sites such as hulu.com or nbc.com to watch your favorite television programs. If you are willing, please click the following link to complete a short survey. It will only take about 5 minutes. Thank you!

Christen Steinkamp

















**Criticism**

- Questions 3 and 6 are highly dependent on what type of program it is, ie drama vs sports
- Your survey is STACKED in favor of internet TV and against traditional broadcast. You need some more unbiased questions. I definitely prefer internet TV to broadcast, but you need a better range of questions.
- Your survey assumes that everyone watches an extraordinary amount of TV and that those individuals base their life around the glowing idiot box. Personally I try to watch as little television as possible, internet or broadcast. I think your survey would be much more accurate if you took into consideration the fact that TV is not a controlling factor in many people's lives. For example, the question that asks, "What from of television do you watch when you have a lot of studying to do?" would greatly benefit from a no TV option, as would some others.