

New Era of TV-Watching Behavior: Binge Watching and its Psychological Effects

AZZA ABDEL-AZIM MOHAMED AHMED
Abu Dhabi University, UAE

Binge TV-watching marks a new era of TV-watching behavior among youth. It is a result of dependence on new media and the widespread usage of smart phones connected to the Internet. The study investigates binge-watching among a sample of Arab residents in United Arab Emirates. It examines how binge-watching might correlate to depression and loneliness. A constructed questionnaire was designed to collect data from a sample of 260 Arab residents living in Abu Dhabi from different age groups. The results showed that YouTube and the TV program websites are the main sources that respondents use for binge-watching. The most popular devices used for binge TV-watching are smart phones and laptops. The findings revealed that binge-watching is more significant among the younger age group. Also, the results showed a significant positive correlation between binge-watching and depression, while there was no significant correlation between binge TV-watching and loneliness.

Key words: Binge TV-watching, depression, loneliness, United Arab Emirates, Arab residence

In the Arab Media Outlook Annual Report: "Arab Media: Exposure and Transition" (2015), it was highlighted a general shift of TV audiences to other platforms that has been witnessed on a global level, but TV as a media platform has proven resilient to this effect in the Arab world (p: 41). Digital video recorders and the Internet have changed the way people view television in that these technologies allow viewers to watch at their own convenience and pace (Damratoski et al., 2011: 72). Phalen and Ducey (2012) introduced a new concept called the "multi-screen environment" of TV watching, in which an individual can watch any TV content once he/she is connected to the internet using mobile devices, computer screens, tablets, or iPads. They predicted that technology is to enforce more people to utilize DVRs and the Internet to watch television on their schedule without commercial interruptions. Recently, Devasagayam (2014) stated that "companies such as Netflix and Hulu have made fortunes on giving US people the ability to watch almost any show at the touch of a button" (p: 40).

Binge-watching is a very different experience for consuming regular TV shows. It originated in the 1980s when some TV stations in the USA started featuring reruns of certain series' episodes in marathon sessions. When DVDs becomes available for home viewing, their high-storage capacity allowed viewers to watch entire seasons, making it easy to say to oneself "just one more" ("Binge watching in the U.S.", 2017).

Correspondence to: Azza Abdel-Azim Mohamed Ahmed, College of Arts and Sciences, Abu Dhabi University, Al Ain Campus, Al Ain City, PO Box 1790, Al Ain, United Arab Emirates.
E-mail: azza.ahmed@adu.ac.ae

Devasagayam (2014) explained that “the word bingeing is most often related to food and obesity, as it is defined as: a rapid consumption of a large amount of substance in a short time period” (p. 40). Applying the same notion to television, Matthew and Kim (2015) indicated that binge-watching is the experience of watching multiple episodes of a program in a single sitting. Because of advances in technology and the relatively low cost of unlimited bandwidth, more people are binge-watching their favorite television shows and movies than ever before. Media bingeing is rapidly becoming the viewing habit of choice for many television fans in the west. It seems that it would be the same in the Middle East among teenagers and youth.

Theoretical Framework and Literature Review

It is becoming apparent that traditional television viewing is declining while internet websites that provide instant access to television content keep growing. Studies have shown that online video-watching among young adults is skyrocketing. Nine in ten internet users ages 18–29 say they watch content on video-sharing sites, and 36 per cent report doing so on a typical day. (Damratoski et al., 2011: 69, 72).

Bury and Li (2015) discussed three modes of TV-watching the world has witnessed over the past decade. They introduced an overview of these three modes connected to specific stages of digital convergence. The first is digitally time shifted viewing, which recorded television programming using devices, such as the DVR, PVR, and VCR back to the 1970s until the 1990s. The second is online viewing associated with computer technologies; however, this mode blurs the boundary between television and new media. This was from the mid-1990s until the early 2000s. The third and most recent mode to emerge as a result of digital convergence is mobile-viewing. It is enabled by streaming and downloading technologies, but involves a device such as a smart phone, iPod Touch, or tablet. Such devices facilitate the viewing behavior for a longer time than via the traditional TV screen. By this point, binge-watching emerged and nowadays has become the most popular TV-viewing habit among people from different ages and nationalities.

Binge-Watching—A New Media Phenomenon

Binge TV-watching seems to be a relatively new phenomenon. Wheeler (2015) described binge-watching behavior as “watching back-to-back episodes of the same program in a single sitting” (p. 27). Similarly, Walton-Pattison et al. (2016), defined binge-watching as “watching more than two episodes of the same TV show in one sitting” (p. 3). It has been also described as “consuming a minimum of two episodes in one sitting, with a session average of 2.3 episodes”, as stated in a Netflix survey (2016). This phenomenon has not been widely studied in the Middle East and the west.

There was an indication that binge-watching has become a daily habit for most teenagers. Petersen (2016) found out that the schedule of the participants of his qualitative research is determined to an extent by their binge-watching habit (p. 86). In the United Kingdom, Stamatakis et al. (2009), indicated that over one-third of adults spend at least four hours a day watching television. In the survey by Walton-Pattison et al. (2016), participants reported binge-watching a mean 1.42 days/week. On the other hand, Netflix (June 2016), the most popular website for binge-watching in the USA, stated that “instead of one episode per week, Netflix members choose to binge-watch their way through a series—that is, finishing an entire season in one week”. “Arab Media: Exposure and Transition” (2015) stated that approximately 50 per cent of In the United Arab Emirates’ viewers spend

between one and three hours watching TV per day. Emirati nationals watch the highest amount of television, with 53 per cent watching between three and six hours per day (p: 41).

Bury and Li (2015) concluded that while the majority of viewing still takes place in front of a television screen, the computer has achieved secondary screen status among North Americans and equal status among younger viewers and Europeans. Therefore, “media-bingeing is quickly becoming the viewing habit of choice for many television fans with the intensive usage of internet among teenagers” (Devasagayam, 2014: 40).

Bothun and Lieberman (2014) surveyed 1024 respondents online to learn how consumers are using video media content. They pointed out that: “Increasingly, consumers are rethinking how they access video content, with more people subscribing to direct-to-consumer online-streaming services, on-demand, and alternative forms of television—and moving away from the bundle” (P: 3).

It is noticeable that over the past 10 years, online-streaming services and similar viewing platforms are portals for viewers to immerse themselves in hours of endless content. Binge- watching is transforming the way people watch television and it might change the economics of the industry (Moore, 2015).

Many participants in the focus group of the Bothun and Lieberman (2014) study reported that most people do not watch a majority of TV regular channels. Having Netflix and HBO, they know specifically what they want to watch, so they find themselves watching so much more of the same program in one session. Devasagayam (2014) identified that the availability of shows without commercials makes it a preferable habit to view large strings of episodes, and is one of the motives of binge watching (p. 40-41).

Why People Binge-Watch

Some scholars studied the motive behind binge-watching and listed the various reasons mentioned by binge-watchers. Devasagayam (2014) marked the formation of one-sided, unconscious bonds between viewers and characters as one of the major motives of binge-watching. These bonds are considered one of the main factors influencing bingeing behaviors. In the same context, Tse (2016) introduced the concept of “togetherness” as an important element to understand teens’ motivations for binge-watching. He explained that,

“.... by using online platforms, audiences achieved a sense of togetherness in two ways: by connecting to others with the same interests in foreign programs and by re-associating with their home when they are abroad by consuming domestic programs” (p. 1547).

Kolotkin et al. (1987) concluded that people try to recreate feelings of happiness when bingeing on media. This feeling is commonly obsessed over as people find themselves thinking about a show’s events during the day.

Many participants of Petersen’s (2016) research pointed that they binge-watch to get some positive outcomes: a reward for hard work; a powerful way to experience a story; and a relief for stressed-out students (p. 87).

Devasagayam (2014) added another reason behind the new trend of media-bingeing that is “the apparent lack of physical side effects incurred by the viewer” (p: 41).

Psychological Effects of Binge TV-Watching

Sung, et al. (2015) suggested that binge behaviors are thought to be closely related to negative feelings (p.3). Several studies provided examples of research results proving the

correlation between binge-eating and body dissatisfaction, depressive symptoms, and low self-esteem, such as research performed by Stickney et al. (1999), and Stice, Presnell and Spangler (2002).

Nevertheless, Finn (1992) identified intensive television-viewing as a form of addiction; however, Devasagayam (2014) found that binge TV-watchers do not consider themselves as TV addicts due to “the lack of visible side effects that other forms of bingeing foster” (p. 42).

LaRosa et al. (2003) stated that “addicted media consumers feel compelled to consume media despite potentially negative consequences that make continued use appear irrational or out of control, even in their own eyes.” (p. 226). Kubey and Csikszentmihalyi (2002) specified some addiction-related criteria that might apply on heavy TV-watching:

“..... using it more often than one intends; thinking about reducing use or making repeated unsuccessful efforts to reduce use; giving up important social, family, or occupational activities to use it; and reporting withdrawal symptoms when one stops using it” (p. 40).

On the other hand, Kubey and Csikszentmihalyi (2002) assured that watching television, per se, is not a problematic (p. 40). The transition to problematic usage can begin if the behavior acts as an important or exclusive mechanism to relieve stress, loneliness, depression, or anxiety. “When this problematic media use becomes excessive, it, in turn, can cause life problems, confrontations with significant others, and an inability to stop media consumption once started.” (LaRosa et al., 2003: 230).

In a focus group study conducted by Devasagayam (2014), one individual admitted that he had watched full seasons in a single day “several” times. He added that the focus group members agreed on that “the free time given over the summer forced them to watch out of sheer boredom” (p. 42). In the same context, Petersen (2016) pointed out that while students in his study easily recognize the benefits they get from binge-watching, they fail to see the ways their habit might hurt them (p. 77). Binge-viewers may fail to control his/her time spent watching, although he/she can make a negative judgment on the binge behavior. They find themselves clicking the “next” button for one or more episode after another, even though they realize that there are things to do the next day or they need to sleep (Sung et al., 2015).

Kubey and Csikszentmihalyi (2002) reported that the sense of relaxation ends when the TV set is turned off, but the feelings of passivity and lowered alertness continue.

On the other hand, Petersen (2016) examined how binge-watching affects the social and academic lives of college students. He stated:

“For many participants, the rhythm of their day was built around binge-watching. They scheduled a time to binge-watch and rewarded themselves after accomplishments. While the participants downplayed or were unaware of the effects of this new watching experience, their grades suffered, their social lives are ignored, and the schedule is determined to an extent by their binge-watching habit” (p. 86).

Furthermore, LaRose et al. (2003) demonstrated that depression and media habits formed to alleviate depressed moods undermined self-regulation and led to increased Internet usage in a sample of 465 college students. Consistently, Kim, Kyunghee, et al. (2005) found that the levels of depression and suicide ideation were highest in the Internet-addicted group in a sample of 1573 Korean high school students. Also, Ha, Jee et al. (2007)

reported that Internet addiction was significantly associated with depressive symptoms and obsessive-compulsive symptoms among a Korean sample. However, Lindsay and Larry (2004) concluded that Internet use was found to decrease loneliness and depression significantly, while perceived social support and self-esteem increased significantly.

Many recent studies proved that there is a relationship between the amount of time spent watching television and the likelihood of eventually being diagnosed with depression, meaning that if TV-viewing habits are excessive, a person is putting himself/herself at greater risk of suffering from this debilitating and life-altering condition.

Wheeler (2015) found that the higher participants scored in depression and loneliness, the more they reported watching television for both ritualistic and instrumental purposes, and the more they reported watching back-to-back episodes of television programs (p. 26). In addition, Sung et al. (2015) found that depression and loneliness were related to binge TV-watching among 316 respondents between 18 and 20 years old. The more an individual was lonely and depressed, the more episodes the individual watched (p. 15). Derrick, Gabriel and Hugenberg (2009) found that watching favorite television programs buffered against feelings of loneliness more so than other activities, including eating, surfing the web, listening to music, and watching regular programming on television.

Kubey and Csikszentmihalyi (2002) concluded that binge watchers commonly reflect that television has somehow absorbed or sucked out their energy, leaving them depleted. They tend to express having more difficulty concentrating after viewing than before. In contrast, they rarely indicate such difficulty after reading. After playing sports or engaging in hobbies, people report improvements in mood. After watching regularly scheduled TV, people's moods are about the same or worse than before (p. 72).

It is becoming important to study binge-watching and its possible psychological effects on youth in the Arab world. The present study attempts to extend the research of Sung et al. (2015) on examining the relationship between depression and loneliness, as possible psychological effects, and binge watching. It goes beyond the university student sample to a sample from an Arab country—the United Arab Emirates—and of a wider range of ages. The study also examines whether significant differences exist across demographic variables: gender, age, education, income, marital status, and country/region of residence. The lack of official census or academic information regarding the TV-watching habits among Emiratis and UAE residents in general adds importance to the current study because it gives some indications of TV-consumption habits in UAE.

Research Questions and Hypotheses

There is no literature on binge-watching in the Arab world. This makes it important to examine some research questions:

RQ1: What are the TV-watching habits among Emiratis and Arab residents in UAE?

RQ2: What media are used for binge-watching among Emiratis and Arab residents in the UAE?

RQ3: What are the favorite types of programs the Emiratis and Arab residents usually binge-watch?

RQ4: What is/are the device/s used for binge-watching among Emiratis and Arab residents?

RQ5: What is/are the place/s where respondents most often binge-watch?

Hypotheses

Based on the literature review of the research conducted in China, USA, and some European countries, the current research variables were identified and three hypotheses were formed

to be examined in the current study as follows:

H₁: There is a correlation between binge TV-watching and depression.

In other words, it is predicted that there is a difference between high- and low-binge watchers in their level of depression.

H₂: There is a correlation between binge-watching and loneliness

In other words, it is predicted that there is a difference between high and lowbinge-watchers in their level of loneliness.

H₃: Significant differences in binge-watching exist across demographic variables: gender, age, education, income, marital status, and nationality.

Methodology

Sampling and Data Collection

The sample consisted of 260 respondents; (135) of them are locals (Emiratis) and (125) are Arab residents of the United Arab Emirates living in Abu Dhabi, including Lebanese, Egyptians, Omanis, Syrian, Palestinians, Sudanese, Yemenis, and others. The respondents' ages ranged from 18 to 48 years old with a mean 25.8.

Data was collected from May to June 2016. Four undergraduate students of the Mass Communication Department at Abu Dhabi University collected the data from Abu Dhabi Emirate, UAE capital, and Al Ain City of Abu Dhabi. The following Table categorizes the sample according to its characteristics.

Table 1. Sample characteristics

Characteristics	Number of respondents	Percentage %
<i>Nationality</i>		
Emiratis	135	51.1
Other Arab nationalities	125	48
<i>Gender</i>		
Males	125	48.1
Females	136	51.9
<i>Age Groups</i>		
Less than 30 years	199	76.5
30 years and older	61	23.5
<i>Education level</i>		
Preparatory	14	46.9
Secondary	110	42.3
University studies	110	42.3
Post graduate	26	10
<i>Income</i>		
Less than AED 5000	6	203
5000 to less than AED 15000	77	29.6
15000 to less than AED 30000	29	11.2
AED 30000 and more	148	56.9
<i>Marital status</i>		
Single	171	65.8
Married without kids	15	5.8
Married with kids	59	22.7
Divorced	6	2.3
Widower	9	3.5
Total	260	100

A constructed questionnaire, including 20 questions measuring the research variables, was used to collect the data. The questions were written in Arabic, which is the mother tongue of most respondents, to make sure participants fully understood the questions and gave accurate responses.

Research Variables and Measurements

The questionnaire started with some questions aimed to learn more about TV and binge-watching habits. These questions asked about the number of hours watching television, type of TV content to which the respondents binge-watch, days of binge-watching and places they prefer to binge-watch, devices used, and the preferred media for binge watching. These questions help provide a broad idea about binge TV-watching in the United Arab Emirates.

In addition, the questionnaire included measurements of the research variables. The validity and reliability of the questionnaire were examined through a pretest among 15 per cent of the total sample. Some questions were modified and the order of the questions was changed according to the respondent's comments and feedback. Also, Alpha Cronbach was used to assure the reliability of the measurements of the variables.

Binge-Watching

It refers to the behavior of watching more than one episode from the same TV content consecutively in the same session. Three questions were used to measure respondents' binge-watching. The first asked the respondents to specify the number of hours they spent watching back-to-back episodes from the same TV content. Answers ranged from two hours to more than four hours per session. Those who answered two hours and more were classified as binge-watchers. The second question asked the respondents to identify how many episodes of the same TV content they would watch per session. Those who answered more than two episodes were classified as binge-watchers. The third asked about the number of days in the last week he/she binge-watched. Those who answered at least three days were classified as binge-watchers.

The respondents were categorized into two categories according to their answers: binge-watchers 116 (44.6 per cent) and non-binge-watchers 144 (55.4 per cent). Alpha Cronbach's α is (0.835).

Depression

Depression is defined according to the Center for Epidemiologic Studies Depression Scale (CESD) as "having a despondent mood; feelings of guilt, worthlessness, helplessness, and hopelessness; inability or lack of motivation to move; poor appetite; and trouble sleeping" (Radloff, 1977).

Depression was measured in this study by using seven items developed by Mirowsky and Ross (1992) to measure depression among different age groups.

An eight-point scale ranging from "none" to "seven" times a day was used. The respondents were asked how many days during the past week have they felt: "sad?", "felt you just couldn't get going?", "had trouble getting to sleep or staying asleep?", "felt that everything was an effort?", "felt lonely?", "felt you couldn't get rid of feeling sad and depressed?", and "had trouble keeping your mind on what you were doing?". Respondents

were classified according to their answers into two categories: High depressed (15.4 per cent) and low depressed (84.6 per cent). Alpha Cronbach's α is (0.700).

Loneliness

According to Weiss (1973), social loneliness refers to a deficit in one's social relationships, social network, and social support, whereas emotional loneliness indicates a lack of close or intimate companionship. In this study, a self-reporting UCLA (University of California, Los Angeles) Loneliness scale, developed by Russell and Ferguson (1978) and revised in 1996 (Russell, 1996), was used to measure the respondents' loneliness. It is a four-point scale ranging from often, sometimes, rarely, to never. It includes 20 items designed to measure one's feelings of loneliness and social isolation. Participants rated each item as either "I often feel this way", "I sometimes feel this way", "I rarely feel this way", "I never feel this way". Some of these items include: "I am unhappy doing so many things alone"; "I have nobody to talk to"; "I cannot tolerate being so alone"; "I lack companionship"; "I feel as if nobody really understands me"; "I find myself waiting for people to call or write"; and "There is no one I can turn to".

The total score ranged from 20 to 80. Then the respondents were divided according to their answers into two categories: High loneliness (61.5 per cent) and low loneliness (38.5 per cent). Alpha Cronbach's α is (0.862).

Demographics

The questionnaire also included demographic questions asking about each respondent's nationality, age, gender, income, education, and marital status. A pretest was conducted among 10 per cent of the total sample. Some questions were removed and some words were paraphrased to assure the full understanding of the questions.

Results

TV-Watching Habits among Respondents

The majority of the sample watches TV two to more than four hours a week (82.3 per cent) and only (17.7 per cent) watch it less than two hours a week. The programs they watch frequently are foreign dramas (36.5 per cent), Turkish-dubbed dramas (28.1 per cent), action movies (27.3 per cent), comedy programs (24.2 per cent), and documentary programs (23.8 per cent).

Media Used for Binge Watching

The respondents were asked what media they use for binge-watching. The results showed that YouTube comes out on top (36.9 per cent); then the website of the TV program (23 per cent); the cumulative episode's broadcast during weekends on TV (11.2 per cent); downloading torrents (9.6 per cent); Shahid.net (7.3 per cent); Internet streaming service (4.6 per cent); Netflix (3.5 per cent); and DVDs (1.9 per cent). Two respondents mentioned "popcorn time" and "kiss Anime" as their main method of binge-watching.

This result is similar to what was reported by Sung et al. (2015), who found that 92 per cent of the respondents use internet streaming for binge-watching, 18 per cent are using the program website, and 10 per cent are using download services for binge watching (p. 15).

This introduced the idea of creating content for the specific media used for binge-watching that was identified by Bury and Li (2015) when defining what they called “mobile television”.

“It refers to content specifically created for the mobile device or content created for viewing on the television set or the web but viewed in whole or in part on a mobile device” (p. 295).

Favorite Programs—Respondents Usually Binge-Watch

The results revealed that the Turkish Drama has the highest percentage (68.5 per cent), followed by the Western Drama (31.2 per cent), Comedy Programs (26.1 per cent), Khaleej Drama (21.9 per cent), Documentaries (16.5 per cent), and Egyptian Drama (14.6 per cent). There are some scattered low percentages for Japanese Anime, Cooking programs, Talk shows, Puzzles, Reality shows, and scientific programs.

Moore (2015) found that the most favorite types of TV shows that attracted university students to binge-watch were: Fantasy (*Game of Thrones*), Drama (*The Walking Dead*), Crime (*Sons of Anarchy*), Comedy (*Big Bang Theory*) and Action (*Arrow*).

Device Used for Binge-Watching

The respondents were asked about the media devices they use the most in binge-watching. Table (2) shows the results.

Table 2. Device respondents use for binge-watching (n=260)

Method used	Per cent
Laptops	26.2
Smart mobile phones	21.5
Internet TV	20.8
iPad	18.1
Personal computers CPU	11.5
All possible media	1.9

The results show laptops are the most popular devices used by respondents in binge-watching, then smart mobile phones, internet TV, iPads, and last the personal computers CPU.

Place in which Respondents Binge-Watch

Table 3. Preferred places for binge-watching (n=260*)

Place	per cent
Home	97.1
In plane	50.3
At University	31.1
In car	23.9
In mall or coffee shop	23.9
Gem	12.7
Others	4.3

* Respondents can select more than one place for binge-watching

The results revealed that home is the most popular place the respondents select for binge-watching. This might indicate that other activities outside the home to which free time is allotted are diminished recently. Being at home while binge-watching might explain the results that 66.5 per cent of respondents binge-watch alone and 21.9 per cent binge-watch with family members.

The plane is a location in which to kill time during the long journey. Unexpectedly, 31.1 per cent of respondents mentioned university in which they binge-watch. On the other hand, the results showed that only 11.2 per cent of respondents binge-watch with friends.

Hypotheses Test

H_1 : *There is a correlation between binge TV watching and depression*: It is predicted that there is a difference between TV binge-watchers and non-TV binge-watchers in their level of depression. T-Test was used to examine this hypothesis.

Table 4. Difference between binge-watchers and non-binge-watchers in their level of depression

Binge watching & Depression	Mean	Std. Deviation	t-test	Significance
Low	1.250	.663	8.277	.004
High	1.379	.787		

df= 258

The results support the first hypothesis and showed a significant difference ($p = .004$) between high and low binge-watchers in their level of depression. The mean value explained that high-binge watchers (mean 1.379) tend to be more depressed than the low-binge watcher (mean 1.25). Therefore, the first hypothesis was accepted.

This result backs the research of Wheeler (2015) who found in a sample of college students that the higher participants scored in depression; the more they reported watching back-to-back episodes of television programs (p.27).

H_2 : *There is a correlation between binge-watching and loneliness*: In other words, it is predicted that there is a difference between TV binge-watcher and non-TV binge-watchers in their levels of feeling lonely. T-test showed that there is a difference between respondents with high and low levels of loneliness in their level of binge watching.

Table 5. Difference between binge-watchers and non-binge-watchers in their level of loneliness

Binge watching & Loneliness	Mean	Std. D.	t-test	P
Low	2.1944	.98434	1.814	.179
High	2.2759	.96537		

df= 258

Respondents who are high in their level of loneliness tend to be high binge-watchers. However, the difference is not significant. Therefore, the second hypothesis is rejected.

This result doesn't support Wheeler's results (2015) who reported that the higher research participants scored in loneliness the more often they reported viewing television due to ritualistic motivations (p. 27).

The results are partially similar to the Sung, et al. (2015) findings who found that the more an individual was lonely and depressed the more TV episodes the individual watched. They explained that "those who feel negative emotions, such as loneliness and depression, may binge-watch TV series to stay away from their negative feelings." (p. 15).

H₃: *There are significant differences in binge TV-watching across the demographic variables: Gender, age, education, income, marital status, and nationality.*

Binge-Watching, Depression and Loneliness among Males and Females

T-test was used to examine the difference between males and females in all research variables: depression, loneliness, and binge-watching. The following Table shows the t-test results:

Table 6. Difference between males and females in research variables

Gender	Loneliness			Depression			Binge watching		
	Mean	T test	P	Mean	T test	P	Mean	T-test	P
Males	2.13	7.475	.005	1.20	20.332	.000	1.91	.248	NS*
Females	2.31			1.40			1.88		

*NS means not significant

T-test revealed that there is a slight difference in two variables: depression (p = .000) and loneliness (p = .005); while there is no difference between them in binge-watching. The mean values show that the females have higher depression and loneliness levels than males.

This result supports Moore's (2015) findings. She reported that there is no significant relationship between females and genres of binge-watched television shows.

Binge Watching, Depression and Loneliness among Age Groups

The t-test and mean values showed that the younger the age, the higher the tendency for binge-watching (p = .000). This indicates that the binge-watching phenomena is widely spread among the younger age group. This result is similar to what was found in the USA—the highest prevalence of marathon-viewing is among the very young, as, presumably, they have the most free time on their hands and the least responsibilities. Almost 42 per cent of 14- to 25-year-olds claim to binge-watch at least once a week, compared to the 30 per cent of 26- to 31-year olds who report doing so (Binge watching in the U.S, 2017).

Table 7. Difference in research variables among age groups

Age groups	Loneliness			Depression			Binge watching		
	Mean	T test	P	Mean	T test	P	Mean	T-test	P
Less than 30 yrs	2.13	55.846	.000	1.30	.243	NS*	1.95	18.895	.000
30 yrs and more	2.54			1.32			1.68		

* NS: Not significant

In the meantime, the higher the age the more the respondents feel lonely ($p = .000$). However, the difference is slight. As for income, the results showed that there is no difference among income groups in their level of binge watching, depression, or loneliness. This means that the income does not have any effect on any of the research variables.

Binge-Watching, Depression and Loneliness among Emiratis vs. Arab residents in UAE

T-test showed no significant difference between Emiratis and Arab residents of UAE in the three research variables: binge-watching, depression, and loneliness. Also, the results showed that education level does not make any difference in the level of binge-watching, depression, and loneliness.

Marital Status: The variable was examined as an intervening variable between binge-watching and both depression and loneliness. The results showed a positive effect of binge-watching in terms of single or married status on the research variables. The following table shows the results:

Table 8. Difference in research variables according to marital status

Marital status	Loneliness			Depression			Binge-watching		
	Mean	T test	<i>P</i>	Mean	T test	<i>P</i>	Mean	T-test	<i>P</i>
Single	2.150	23.999	.000	1.344	7.333	0.007	1.720	30.840	.000
Married	2.432			1.216			1.297		

The t-test showed significant differences between single and married respondents in their binge-watching, depression, and loneliness. The results revealed the singles are higher binge-watchers (Mean=1.72) than married respondents (mean=1.29). Singles are higher (mean=1.344) also in depression than married. However, married respondents are higher in feeling lonely (mean=2.432) than singles (mean=2.150).

Discussion and Conclusion

This research explored the binge-watching or marathon-viewing of TV programs and drama among a sample of (260) residents living in UAE. It examined the relationship between binge-watching and two psychological variables: depression and loneliness.

The results showed that 44.6 per cent of the sample is made up of binge-watchers. They use all possible media devices to binge-watch; YouTube is the most used medium, then the website of the TV programs. To satisfy this watching habit, some use an illegal website for binge-watching: Downloading Torrents. Western Drama and comedy TV content are among the top favorite TV content the respondents tend to binge-watch.

Almost half of the respondents use laptops and smartphones in watching TV content online. This might prove the important role the new technologies play in encouraging binge-watching. The results revealed that most of respondents tend to binge-watch alone mostly at home. This result raises a question of "isolation" caused by the adoption of new technologies, in which an individual creates a virtual zone to live in and withdraws from his/her real life. Using a smartphone to access the social media and other websites in order to kill or pass free time at home is a recent phenomenon that leads to many negative psychological consequences among adolescents, teenagers, and adults in the Arab world. Also, 31 per cent of respondents mentioned that they binge-watch at the university. This

leads to two implications. The first is that the new TV-watching behavior might affect the academic performance of the students. The second is that respondents might binge-watch at university where they meet their friends and classmates and use binge-watching for the purpose of involvement and company. However, the results showed most respondents tend to binge watch alone and only a few binge-watch with friends. This might lead to an increase in the possibility of feeling lonely even while watching TV content.

Moreover, the binge-watching differed among the respondents according to their demographic variables. It is higher among the younger age group “less than 30 years old” and among singles and less prevalent among the older age group and married respondents. There is no difference between males and females in their binge-watching. This is supported by other research results conducted among university students in Hong Kong and the USA (Statista, 2016; Wheeler, 2015; Moore, 2015, and Sung, et al., 2015). Also, it was found that education and nationality do not make any difference in the levels of binge-watching, depression, and loneliness.

The results showed that both depression and loneliness are higher among females than males and higher among the older (30 years and more) than younger age group (less than 30 years old). In addition, married respondents feel lonelier than singles while the singles are more likely to be depressed than the married. Single respondents tend to binge-watch when feeling depressed. In the meantime, married respondents are less into binge-watching when feeling depressed. There is an indication that females tend to binge-watch when they are depressed or feel lonely; while it is not the case with males. These results require more elaboration through further psychological research.

The results disclosed that binge-watchers are higher in depression scores than non-binge-watchers. The mean value revealed that the more respondents are depressed the more they binge-watch. Therefore, depression might make the person attempt to escape from his condition to watch more TV content that releases the stress. This result supports the findings of Wheeler (2015). In addition, Sung et al. 2015 concluded that depression is related to binge watching. They specified that the more an individual was depressed, the more episodes the individual watched (p. 15). Uses and gratification literature provide media scholars with many signs of having “escape from reality” as one of the major motivations for intensive TV-watching. Viewers tend to watch more TV to forget temporarily about everyday life stress caused by work or university assignments or social life in general. However, the cause and effect cannot be claimed; it is unknown whether depressed people tend to binge-watch more for the reasons mentioned, or the binge-watching leads to depression as viewers might regret spending many hours in one session watching a whole session of a TV program. This might need further investigation.

The current study found no significant correlation between binge-watching and loneliness. In other words, the difference between binge-watchers and non-binge-watchers in their level of loneliness was not significant. This result is not consistent with the results of Wheeler 2015 and Sung et al. 2015. Loneliness might be a result of a lack of social needs satisfaction to have good company and social life engagements. In the meantime, the results revealed that more than half of respondents (61.5 per cent) scored higher on the loneliness scale, especially among females and among the “30 years and above” age group. It seems that binge-watching is not the favorite choice for respondents to relieve their loneliness, mainly among the higher age group. They might prefer using social media or traveling to other Emirates to get away from feeling lonely. It is suggested more studies be conducted on a multiple samples of the Arab countries for further investigation.

Limitation: Although this research is limited to a certain segment of Arab population, it is a preliminary step from which future research can stem and grow. Continuation of this research could bring valuable information and understanding into the relational interactions between television viewing behaviors and psychological factors in the Arab world. The results of this research might be considered as a leading point for some upcoming studies to further understand the new type of TV-watching trends resulting from the adoption of internet-related technologies.

Binge TV-watching is a phenomenon that is related to media symbiosis; people are using new media to watch TV content even more than they used to. A collaborative work should be dedicated to identifying a specific definition of binge-watching. More research should be conducted to test binge-watching and its relations to other factors, such as self-control, attachment, and well-being. Also, it is recommended more research is conducted to examine the motivations and the expected outcomes of binge-watching.

More research might investigate and analyze the TV content that teenagers and adult are binge-watching to have better information on the motivations and consequences of this new TV-watching behavior.

References

- Arab Media: Exposure and Transition* (2015). Arab Media Outlook Annual Report (2011–2015). Dubai Press Club, Retrieved on 23rd October 2016 from: <http://www.arabmediaforum.ae/userfiles/EnglishAMO.pdf>
- Binge watching in the U.S. Retrieved on 23rd March, 2017) from: <http://www.statista.com/topics/2508/binge-watching-in-the-us/>
- Bothun, Deborah and Lieberman, Matthew (2014). Feeling the Effects of the Video Quake: Changes in How We Consume Video Content. *Consumer Intelligence Series* PwC. December 2014. Retrieved on: 2nd October 2016 from <http://www.pwc.com/us/en/industry/entertainment-media/publications/consumer-intelligence-series/assets/pwc-video-consumption-report-2.pdf>
- Bury, R., and J. Li (2015). "Is It Live or Is It Time Shifted, Streamed or Downloaded? Watching Television in the Era of Multiple Screens", *New Media and Society*, 17(4): 592–610.
- Damratoski, K. J, Field, A. R., Mizell, K. N. & Budden, M. C. (2011). An Investigation into Alternative Television Viewership Habits of College Students. *Journal of Applied Business Research*, 27(1), 69–76.
- Derrick, J.L., Gabriel, S. & Hugenberg, K. (2009). Social Surrogacy: How Favored Television Programs Provide the Experience of Belonging. *Journal of Experimental Social Psychology*. (45) 352–362.
- Devasagayam, R. (2014). Media Bingeing: A Qualitative Study of Psychological Influences. *Marketing Management Association Spring 2014 Proceedings*, 40–44.
- Finn, S. (1992). Television "Addiction?" An Evaluation of Four Competing Media-Use Models. *Journalism Quarterly*, 69(2), 422–435.
- Ha, J. H., et al (2007). Depression and Internet Addiction in Adolescents. *Psychopathology* 40(6):424–430
- Hargraves, Hunter (2015) (TV) Junkies in Need of an Intervention: On Addictive Spectatorship and Recovery Television. *Camera Obscura*. Vol. 30 Issue 88, 71–98.
- Kim, Kyunghye, et al. (2005) Internet Addiction in Korean Adolescents and Its Relation to Depression and Suicidal Ideation: A Questionnaire Survey. *International Journal of Nursing Studies*. 43(2): 185–192.

Binge Watching: Ahmed

- Kolotkin, R. L., Revis, E. S., Kirkley, B. G. & Janick, L. (1987). Binge Eating In Obesity: Associated MMPI Characteristics. *Journal of Consulting and Clinical Psychology*, 55(6), 872–876.
- Kubey, Robert and Csikszentmihalyi, Mihaly (2002). Television Addiction is No Mere Metaphor. *Scientific American, Inc.* retrieved on 14th October 2016 from <http://sites.oxy.edu/clint/physio/article/televisionaddiction.pdf>
- LaRose, R., Lin, C. A., and Eastin, M. S. (2003). Unregulated Internet Usage: Addiction, Habit or Deficient self-Regulation? *Media Psychology*, 5(3): 225–253.
- Lindsay H. Shaw and Larry M. Gant. (2004). In Defense of the Internet: The Relationship between Internet Communication and Depression, Loneliness, Self-Esteem, and Perceived Social Support. *Cyber Psychology & Behavior*. 5(2): 157–171.
- Liu, M. and Peng, W. (2009). Cognitive and Psychological Predictors of the Negative Outcomes Associated with Playing MMOGs (Massively Multiplayer Online Games). *Computers in Human Behavior* 25: 1306–1311. Retrieved on 15th October 2016 from: <https://msu.edu/~pengwei/Cognitive%20and%20psychological%20predictors%20of%20the%20negative%20outcomes%20associated%20with%20playing%20MMOGs.pdf>
- Jenner, M. (2014). Is this TVIV? On Netflix, TV11 and Binge-Watching. *New Media & Society*, 1–17.
- Matthew, Pitman and Kim, Sheehan (2015). Sprinting a Media Marathon: Uses and Gratifications of Bulge-Watching Television through Netflix. *First Monday*.20(10). Retrieved on 21st July 2016 from <http://firstmonday.org/ojs/index.php/fm/article/view/6138/4999>
- Mirowsky, J. & Ross, C. E. (1992). Age and Depression. *Journal of Health and Social Behavior*.33 (3): 187–205. Retrieved on 30th April 2016 from: <http://www.jstor.org/stable/2137349>
- Moore, Amanda E., (2015) “Binge Watching: Exploring the Relationship of Binge Watched Television Genres and Colleges at Clemson University” (2015). *Graduate Research and Discovery Symposium (GRADS)*. Paper 138. http://tigerprints.clemson.edu/grads_symposium/138
- Netflix & Binge: New Binge Scale Reveals TV Series We Devour and Those We Savor (June 2016). Retrieved on 20th July 2016 from <https://media.netflix.com/en/press-releases/netflix-binge-new-binge-scale-reveals-tv-series-we-devour-and-those-we-savor-1>
- Petersen, G. Theodore (2016) To Binge or Not to Binge: A Qualitative Analysis of College Students’ Binge-Watching Habits. *The Florida Communication Journal*, 44(1): 77–87.
- Radloff, L.S. (1977). The CES-D Scale: A Self-Report Depression Scale for Research in the General Population, *Applied Psychological Measurement*. (1) 385–401.
- Russell, D, Peplau, L. A. & Ferguson, M. L. (1978). Developing a Measure of Loneliness. *Journal of Personality Assessment*, 42, 290–29
- Russell, D. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66, 20–40.
- Stamatakis E, Hillsdon M, Mishra G, et al. (2009) Television Viewing and Other Screen-Based Entertainment in Relation to Multiple Socioeconomic Status Indicators and Area Deprivation: The Scottish Health Survey 2003. *Journal of Epidemiology & Community Health*, 63: 734–740.
- Stice, E., Presnell, K. & Spangler, D. (2002) Risk Factors for Binge Eating Onset in Adolescent Girls: a 2-year Prospective Investigation. *Health Psychology*, 21(2), 131.
- Stickney, M. I., Miltenberger, R. G., & Wolf, G. (1999). A Descriptive Analysis of Factors Continuing to Binge Eating. *Journal of Behavior Therapy and Experimental Psychiatry*, (30)3, 177–189.

- Sung, Yoon Hi, Kamg, E. Y., and Lee, W.N. (2015). A Bad Habit for Your Health? An Exploration of Psychological Factors for Binge-Watching Behavior. Conference proceedings. The 65th Annual Conference of the International Communication Association in San Juan, Puerto Rico, 21-25th May 2015.
- Tse, Yu-Kei (2016). Television's Changing Role in Social Togetherness in the Personalized Online Consumption of Foreign TV. *New Media and Society*, 18(8): 1547–1562
- Walton-Pattison, E., Dombrowski, S. U., and Pesseau, J. (2016) 'Just One More Episode': Frequency and Theoretical Correlates of Television Binge Watching. *Journal of Health Psychology*. DOI: 10.1177/1359105316643379:1-8
- Weiss, R. (1973). *Loneliness: The Experience of Emotional and Social Isolation*. (Cambridge, MA: MIT Press.
- Wheeler, Katherine S. (2015). The Relationships between Television Viewing Behaviors, Attachment, Loneliness, Depression, and Psychological Well-Being. Georgia Southern University Honors Program Theses. Paper 98. Retrieved on 23rd Oct. 2016 from file:///F:/Desktop%20June%202016/Binge%20TV%20watching/The%20Relationships%20Between%20Television%20Viewing%20Behaviors%20Attachmen.pdf

Dr. Azza A. Ahmed is a professor of mass communication in Cairo University, Egypt and Abu Dhabi University, UAE. She got many awards for excellence in research from international conferences in USA, Morocco and Paris. She was the vice-president of the Arab-US Association for Communication Educators. Dr. Azza was the Arabic editor of the *Journal of Middle East Media* (2005-2016). Her research interest includes: television effects, media credibility, new media usages and impacts. Dr. Azza established two mass communication programs in English and Arabic in Abu Dhabi University, UAE. She received *Khalifa* Award in education "Distinguished University Professor in Teaching" from United Arab Emirates in 2016.