UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

IMPACTS OF TELEVISION HUMOR ON VIEWERS’ ENGAGEMENT,
ATTITUDES, AND MEMORY: THE MODERATING EFFECTS OF MOTIVATION
AND ABILITY

A THESIS
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
Degree of
MASTER OF ARTS

By
NAFIDA ADIB BANU
Norman, Oklahoma
2016
IMPACTS OF TELEVISION HUMOR ON VIEWERS’ ENGAGEMENT, ATTITUDES, AND MEMORY: THE MODERATING EFFECTS OF MOTIVATION AND ABILITY

A THESIS APPROVED FOR THE GAYLORD COLLEGE OF JOURNALISM AND MASS COMMUNICATION

BY

______________________________
Dr. Glenn Leshner, Chair

______________________________
Dr. Doyle Yoon

______________________________
Mr. John Schmeltzer
Acknowledgements

I would like to express my gratitude to my thesis committee chair Dr. Glenn Leshner for his cooperation and guidance. I would like to thank him for his patience to be my advisor for the last one year. His willingness to listen to my arguments, sincerity to check the study materials repeatedly and reading and editing my thesis drafts kept me motivated to finish the study. I cannot thank him enough for his flexibility to schedule meetings. I never imagined that I could get that much time, guidance, and learning experience from my thesis chair. To me, he is the example of an ideal advisor and mentor.

I would like to thank committee members Dr. Doyle Yoon for his careful reading and suggestion and Professor John Schmeltzer for his valuable feedback. Without support from my chair and committee members, it would not be possible for me to accomplish this task.
Table of Contents

Acknowledgements ...........................................................................................................iv
List of Tables .....................................................................................................................vii
Abstract ............................................................................................................................viii
Chapter 1: Introduction ......................................................................................................1
Chapter 2: Literature Review .............................................................................................5
  Late-night Humor Show .................................................................................................5
  Satire as a Humor Technique .........................................................................................6
  Parody as a Humor Technique .......................................................................................8
  Satire Show and Late-night Comedy Talk Shows ......................................................9
  Studies Related to the Effect of Humor on Engagement ........................................10
  Studies Related to the Effect of Humor on Attitudes ...............................................11
  Studies Related to the Effect of Humor on Memory .................................................16
  The Elaboration Likelihood Model ..............................................................................19
Chapter 3: Method ............................................................................................................24
  Participants ......................................................................................................................24
  Materials .........................................................................................................................24
  Design ..............................................................................................................................24
  Stimuli .............................................................................................................................25
  Measures .........................................................................................................................27
    Moderating variables .................................................................................................27
    Control variables .......................................................................................................27
  Dependent variables ....................................................................................................28
Procedure ............................................................................................................. 29
Analytic Strategy ................................................................................................. 30
Chapter 4: Results .............................................................................................. 32
Engagement .......................................................................................................... 32
Attitudes toward the Presidential Candidates .................................................... 33
Memory ................................................................................................................ 34
Interaction Result of the Motivation Variable .................................................... 35
  Engagement ....................................................................................................... 35
  Attitudes toward the presidential candidates .................................................... 36
  Memory ............................................................................................................ 36
Interaction Results of the Ability Variable ......................................................... 37
  Engagement ..................................................................................................... 37
  Attitudes toward the presidential candidates ................................................... 37
  Memory ............................................................................................................ 38
Chapter 5: Discussion .......................................................................................... 39
Limitations ............................................................................................................ 42
Future Research .................................................................................................. 43
Contribution .......................................................................................................... 44
Conclusions .......................................................................................................... 45
References ............................................................................................................ 48
Appendix: Questionnaire .................................................................................... 54
List of Tables

Table 1: Summary of Hierarchical Regression Analysis of Late-Night Humor Show Predicting Engagement, Attitudes, and Memory ........................................................... 78
Table 2: Summary of Demographic variables ................................................................ 80
Table 3: Pretest table .................................................................................................... 81
Abstract

This study explores the impact of late-night television humor on viewers’ engagement, attitudes, and memory. Existing literature has pointed to the effects of late-night comedy viewing on attitudes (Young, 2004), candidate evaluation (Baumgartner & Morris, 2006; Baumgartner, Morris & Walth, 2012; Young, 2010), scant attention has been paid on engagement with the humor show and memory. This study suggest that late-night television humor had negative effects on audiences engagement with the video and memory of the premise of a given experimental condition but positive effect on forming attitudes toward the satirized character. Impact of humor is tested with a two condition (high satire and low satire) between-subject design in which participants answered survey questions on engagement with the video, attitudes toward the presidential candidates, and memory after exposure to either high satire humor or low satire humor on the topic of 2016 Presidential debates. The results of satire x motivation (represented by strength of party identification – SPID, attention to government and politics, and intensity of political ideology – IPI) and satire x ability (represented by prior political knowledge) indicate that humor impacts mostly to the participants who had high motivation and ability. Future lines of research are discussed.
Chapter 1: Introduction

Late-night comedy shows and political satire are increasingly popular in today’s society (LaMarre et al, 2014). Scholars are showing interest on the socio-political influences of these shows (LaMarre et al, 2014). The present line of research covers the effects of late night shows on candidate evaluation (Baumgartner & Morris, 2006, Young, 2004), political contents of late night comedy shows (Niven et al, 2003), effects on knowledge (Baum, 2003, Prior, 2003), individual political perceptions, attitudes, opinions, and behaviors (LaMarre et al., 2009).

The purpose of this thesis was to examine which levels of humor (high and low satire) have effects on engagement, attitudes toward the presidential candidates, and memory. The thesis sought to find out if audiences can process different humor techniques presented in the late night shows in the same way. Therefore, this study tried to extend the existing research on effects of humor on engagement, attitudes and memory.

This study examined two things: (1) if there is any difference in how viewers process satire based humorous messages; (2) if motivation and ability play a role in humorous message processing. In order to examine these, the following research questions were proposed: Does satire (as a humor technique) have an effect on attitudes, memory and engagement? Do motivation and ability have affected the strength of the relationship between satire humor and engagement, attitudes toward the presidential candidates, and memory?

The literature suggested that late-night humor shows usually offered a ‘mixed dish’ of humor techniques (Holbert, 2014, p. 4). For example, a late-night
humor show that focuses only on political satire usually mixes ‘satire’ and ‘parody’ as humor techniques. Of these two techniques, satire-filled messages, considered complex messages, lead to biased processing that influence viewers’ learning outcome. For example, there is a possibility that people who understand the jokes in the show may not recall the comedian’s political message accurately (LaMarre et al., 2009). Second, viewers can recall host’s statements or viewpoints at a later time without remembering who said them. This means the source fades away over time in memory. Third, it is also possible that viewers forget that message was actually a joke. If that happens, people may be more likely to assume that the message was true. Parody, in the tradition of Saturday Night Live impersonations, is considered an inconsistent and lightweight form of political satire and often treated as “satirical subgenre” (Holbert, 2005). The basic difference between satire and parody is that: “satirical humor is aggressive and critical at its core” (Peifer, 2013, p. 158). On the other hand, “parody is not necessarily critical at its core” (Peifer, 2013, p. 158). Parody is the aesthetic contrast between a target text (e.g. a genre or a public figure) and the imitative parody text (Neale & Krutnik, 1990). However, viewers need to understand visual and contextual elements in order to fully understand the parody humor (Young, 2010).

Humor techniques of each late night show are different (Young & Tisinger, 2006). As stated earlier that political satirists offer a “mixed dish” of humor techniques in which elements of aggression, play, laughter, and implicit judgment are combined to attack a political subject (Holbert, 2014, p. 4). Within one specific mixture of humor techniques, jokes may still differ in their nature of attack by varying the degrees of aggression and play (Holbert, 2014). A joke, while employing the same techniques, may
be gentle (i.e., relatively more playful) in how it attacks its target. Sometimes, harsh and more aggressive jokes may be used (Holbert, 2014).

This study argued that viewers could not process all humor techniques to the same degree. For example, viewers may find it difficult to understand harsh and aggressive satirical commentary about a candidate, but may find it easy to understand the same message in a gentle but relatively more playful way. Existing literature talked about differential effects of political satire on audiences’ information processing, attitudes, and knowledge. Studies also measured differential effects of two distinct types of satire, Juvenalian and Horatian satire (Holbert et al, 2011) or made a comparison between satirical shows and television news (Kim & Vishak, 2006).

In a separate study, researchers Nabi, Moyer-Guse, and Byrne (2007) argued that late-night humor processing is largely superficial. In order to process humorous messages of these shows, audiences tend to rely on heuristics, signals, and cues (Nabi, Moyer-Guse & Byrne, 2007). Scholars were undecided whether, under certain circumstances, late-night audiences engage in more central processing (LaMarre & Walther, 2013). Studies on political entertainment film had found that engagement with the narrative of the film increases audiences intention to discuss politics (Landreville & LaMarre, 2011). To further the insights in the literature of late-night comedy shows, this study considered engagement with the humorous text as a dependent variable to measure whether or not the engagement of the audiences of high satire level is different than low satire level.

Several scholars used the Elaboration Likelihood Model to explain the effect of humor on attitudes (e.g. Polk et al., 2009; Young, 2008). The current study used the
same theory to know which levels of satire need more processing than others. The ELM offered an excellent model to understand how audiences’ cognitive responses to popular media shape attitudes (LaMarre & Walther, 2013).
Chapter 2: Literature Review

To answer the research questions stated earlier, this study conceptualized late-night humor shows, humor techniques commonly uses in Late-night humor shows, such as, satire and parody. Relevant literature reviewed to see existing articles on the impact of satire humor on audiences’ engagement, attitudes, and memory.

Late-night Humor Show

Baym (2005) termed late-night comedy shows (e.g. The Daily Show with Jon Stewart) as a hybrid blend of comedy, news, and political conversation. The prevalence of this hybrid forms started in the 1990s (Young, 2014). Late-night comedians, including David Letterman and Jay Leno, used political themes in the monologues of their shows throughout the 1990s. Several other political satire programs following the years of the 1990s emerged. These programs include The Daily Show with Jon Stewart (launched in 1999), Colbert Report with Stephen Colbert (launched in 2005), and Politically Incorrect with Bill Maher (launched in 1993). These changes in the media environment diminished the once-formal distinction between news and entertainment (Young, 2014).

Late-night shows such as The Tonight Show with Jay Leno, The Late Show with David Letterman and Politically Incorrect choose politicians as a target of jokes (Niven et al, 2003). Young (2004) found that most jokes on The Late Show with David Letterman and The Tonight Show with Jay Leno focused on the personal failings of presidential candidates. As Baumgartner & Morris (2006) concluded, “the content of political comedy is largely focused on personal traits of public figures rather than policy” (p. 5).
Satire as a Humor Technique

Satire, uses of ridicule, irony, or sarcasm to lampoon something or someone, derived from the Greek for Burlesque – an artistic composition designed to generate laughter (Bal et al., 2009). For centuries, satire had been used to criticize the abuse of power and the injustice penetrated by dominant parties (Bal et al., 2009). In the 18th century, political cartoons were known simply as ‘satires,’ and widely used in the British colonies to criticize English rule (Bal et al, 2009). Abrams (1999) talked about the functions of satire, saying “satire uses laughter as a weapon to diminish or derogate a subject and evoke toward it attitudes of amusement, disdain, ridicule or indignation” (P. 3).

Gray et al. (2009) defined satire by “four key elements: aggression, judgment, play and laughter.” Becker (2012) gave an example of The Colbert Report holding all the elements above. Colbert presents the absurdity of the current political climate in a biting and engaging way, presenting critiques that are incongruous with traditional perceptions of the political sphere (Becker, 2012). The critiques of Colbert are hostile, meaning these critiques contain scathing attacks and support the satirical elements of “aggression” and “judgment” (Becker, 2012).

Scholars tried to conceptualize satire based on its nature, targets, content, and types.

Nature: The central tendency of satire is to attack an object with “a blend of amusement and contempt” as satirists take the roles of a “skeptical and bemused observer” (Holbert et al., 2011). For example, The Daily Show with Jon Stewart uses satire to reveal artificiality of both elected officials and journalists who cover them.
(Holbert, 2005). The same show uses the preexisting genre of national television newscast as a format to satirize the news media industry and political leaders (Holbert et al, 2011). The basic aesthetics of the program, like opening music and studio setting, seeks to mock TV newscasts (Holbert et al, 2011). Saturday Night Live produces political satirical skits. Even real world politicians, such as New York City Mayor Rudolph Giuliani and Senator John McCain, appeared as hosts for the program (Holbert, 2005).

Targets: Satire targets were categorized into four distinct forms: episodic, personal, experiential, and textual. Episodic targets are specific actions or events (e.g. satire on a court ruling). Personal targets encompass the personality failings of a particular individual who is making news (e.g. Vice President Dick Cheney’s proclivity for secrecy) (Holbert et al, 2011). The experiential target is broader in nature than other types of satire, and reflects particular social norms worthy of debate or ridicule (e.g. Americans’ reliance on automobiles and its impact on the environment). Textual targets refer to the use of language itself as worthy of satirizing (e.g. extreme forms of politically correct language used on American college campuses) (Holbert et al, 2011). Of these four types, late-night humor shows generally used ‘personal targets’ while portraying a presidential candidate.

Content: The content of different satire shows varies in nature. In general, the focuses of these shows are on drama, sensationalism, human-interest themes, and personalities and often feature a lower level of public affairs information (Baumgartner & Morris, 2006).
For example, The Daily Show with Jon Stewart used political satire on personal traits of the candidates (e.g., how well they are liked or how honest they are) rather than policy (Baumgartner & Morris, 2006). The host used to make entertaining punch lines based on negative caricatures of the candidates. In addition to making fun of the candidates, this show frequently ridiculed the electoral and political process as a whole.

Most late-night shows focused on personality failings of the candidates. Young (2004) found that both Leno and Letterman devoted a sizable portion of their commentary to the personality failings of Bush and Al Gore. Al Gore was labeled as stiff and dull, whereas Bush was labeled as unintelligent (Young, 2004).

**Parody as a Humor Technique**

‘Parody’ is another common humor technique used for political candidates. Saturday Night Live has been doing parodies of presidential candidates since its beginning season in 1975 (Baumgartner et al, 2012).

Parody is defined as “humorous imitation of politicians” (Matthes & Rauchfleisch, 2013). Berger (1976, 1993) described “imitation” as “mimicking on copying someone’s appearance or movements while keeping one’s own identity at the same time” (Buijzen & Valkenburg, 2004). Saturday Night Live invites popular actors to play the role of a popular public figure. In scholarly words, it’s called political parody, often alternatively referred to as “impersonations” or caricatures (Peifer, 2013). According to Berger (1976, 1993), “impersonations” refer to “taking on the identity of another person, intentionally or unintentionally” (Buijzen & Valkenburg, 2004).

In communication research, impersonation parodies are often combined with late-night political comedy like The Daily Show and Late Show with David Letterman
Peifer (2013). Political parody is also considered a satirical subgenre (Holbert, 2005). Peifer (2013) cited a Saturday Night Live parody sketch where political figures might be implicitly endorsed.

According to Young & Tisinger (2006), The Daily Show is rooted in parody and satire. It lampoons the typical news program with headlines, interviews, and field correspondents.

**Satire Show and Late-night Comedy Talk Shows**

Holbert (2005) conceptually separated diverse sets of political media in nine typologies to determine the outcome derived from these messages. Late-night humor shows were placed in two typologies: traditional satire and entertainment talk show interviews with politicians.

Holbert (2005) conceptualized late-night satire programs in the category of ‘Traditional satire.’ ‘Traditional satire’ includes television shows like ‘The Daily Show with Jon Stewart’ or the political sketch comedy of ‘Saturday Night Live.’ The driving force of these shows is the presentation of political satire (e.g. The Daily Show with Jon Stewart). Saturday Night Live devoted well-defined segments of the program to the presentation of political satire (Holbert, 2005). These shows do not provide explicit statements of political facts. Political humor is offered to the audiences, but audiences need to play a very active role in determining the true meaning of the humorous stories. This study operationalized ‘satire shows’ with the shows ‘Colbert Report’ and ‘Saturday Night Live’.

‘Entertainment talk show interviews with politicians’ considers late-night talk shows like ‘Larry King Live,’ ‘Oprah’ and ‘The Late Show with David Letterman.’
These shows had explicit discussions of politics, public policy, and the personal attributes required of a leader (Holbert, 2005). This study operationalized ‘The Tonight Show Starring Jimmy Fallon’ and ‘Jimmy Kimmel Live!’ as ‘Late-night comedy talk shows.’ These two shows explicitly discussed election debate, policy stands of the presidential candidates and the personal attributes of the presidential candidates. The discussions were not always in the interview form. Many times the host of the show explicitly discussed politics, policy and candidates. The host usually uses humor while presenting.

As stated earlier, this study sought to narrow down the analysis of late-night humor shows into one humor techniques, satire, with two levels: high satire and low satire. The study took the theoretical explanation of Petty and Cacioppo’s (1986) Elaboration Likelihood Model in order to explain that different humor levels result in different effects on engagement, attitudes, and memory. Following Holbert (2005) typology of late-night satire program, this study considered humor techniques used in these late-night satire and entertainment comedy talk-shows: The Late Show with Stephen Colbert, Late Night with Seth Meyers, Saturday Night Live, The Tonight Show Starring Jimmy Fallon, and Jimmy Kimmel Live!). The topic of these shows is 2016 presidential debate.

**Studies Related to the Effect of Humor on Engagement**

Engagement is defined as “a convergent process, where all mental systems and capacities become focused on events occurring in the narrative” (Green & Brock, 2000, p. 701). According to Busselle & Bilandzic (2009), “the extent to which an audience becomes engaged, transported, or immersed in a narrative influences the narrative’s
potential to affect subsequent story-related attitudes and beliefs.” Studies found that participants who reported being engaged in a narrative also reported story consistent beliefs and attitudes (Green & Brock, 2000). This is explained in two ways: engagement reduces counterarguing by involving viewers in the narrative (Moyer-Guse, 2008) and engagement is positively related to the agreement with story-related attitudes (Busselle & Bilandzic, 2009).

The literature suggested that humorous content (story line appeal) is able to engage viewers in the storyline (Boukes et al, 2015; Slater & Rouner, 2002). But the audience should perceive the content as funny or humorous (Boukes et al, 2015). Perceived funniness is the notion that people have positive thoughts toward humor if people perceive it as funny or do not take the cues seriously (Boukes et al, 2015). This study assumed that audiences who will report engagement with the humorous text will also report story-consistent attitudes.

**Studies Related to the Effect of Humor on Attitudes**

Studies measuring satire and parody had found effects on attitudes. Political parody had effect on forming negative attitudes toward the candidates. One of the popular examples of political parody was Tina Fey’s imitation of Sarah Palin in Saturday Night Live (Matthes & Rauschfleisch, 2013). During the 2008 election, Sarah Palin’s popularity went down after Tina Fey impersonated Palin on Saturday Night Live (Baumgartner et al., 2012; Young, 2010.). Several polls (conducted by Democracy Corps, Pew Research Center for the People & the Press, ABC News/ Washington Post, CBS News, Gallup/ USA, Cable News Network, Marist College Institute for Public Opinion, Women’s Voice Women’s Vote, and FOX News) revealed that favorability
ratings of Governor Palin declined after Saturday Night Live aired Palin’s parody (Young, 2010). Imitation of Sarah Palin by Tina Fey resulted in the negative evaluation of this politician. Baumgartner et al. (2012) found in their study that people who watched the Saturday Night Live clip said Palin’s nomination for vice president made them less likely to vote for McCain. The study was conducted in 2008. Data were gathered from an online survey panel of 18 to 24 years old. Partisan identification, ideological orientation, and overall media exposure were measured as control variables. The effects were mostly noticeable among self-identified Independents and Republicans (Baumgartner et al, 2012).

Literature suggested that humor requires high processing demands (Young, 2008). High processing demands reduce cognitive resources available to scrutinize message arguments (Young, 2008). Comprehending a joke typically involves more than language comprehension, and requires strategically recruiting background knowledge (Boukes et al, 2015).

Among all forms of humor, satires have been found especially hard to process. According to the resource allocation hypothesis, interpreting complex and sophisticated satire impedes one’s ability to properly scrutinize the underlying message (LaMarre & Walther, 2013). The resource allocation hypothesis suggests that message form (e.g. satire) requires individuals to divert cognitive resources to interpreting the joke (reconciling the gap between what the satirist said and what he/she actually meant), leaving few resources available for thinking about the arguments embedded in the political satire (LaMarre et al, 2014).
When audiences find humor hard to process, they often interpret political messages based on their own personal political beliefs (LaMarre et al., 2009). Stephen Colbert of “Colbert Report” used “deadpan satire” that created ambiguity among the audience (LaMarre et al., 2009). This specific type of satire uses a straight-face approach to joke telling: Stephen Colbert rarely broke character and maintained a level of seriousness as he parodied conservative pundits (LaMarre et al., 2009). Ambiguity required audiences to determine whether the source was sincere or not. Though audiences may be aware that the source was using humor, they still make a judgment on whether Colbert’s underlying meaning was sincere. When the audience judge the satirist to be sincere, the statements that the satirist made were judged as representing the satirist’s true beliefs. In this way, an audience member misidentifies the satirist’s beliefs and intentions. Entertainment setting led people not to be engaged in effortful cognitive processing of political information, and biased processing and misinterpretation emerged. In this situation, audience members interpret Colbert’s personal political beliefs, party affiliations and attitudes toward liberals in a manner consistent with their own personal political beliefs (LaMarre et al., 2009).

The sarcastic tone of the satire show has an impact on people’s attitudes that often results in the negative evaluation of the party candidate, especially if the candidates are less known. Studies found that viewers who watch satire mostly showed story-consistent attitudes. For example, The Daily Show with Jon Stewart poked fun at the candidates and at the same time ridiculed the electoral and political processes. This negatively framed political message made people cynical towards the candidates and political process (Baumgartner & Morris, 2006). Also, The Daily Show ridiculed
mainstream news media and journalists. This also make people cynical to the
mainstream media (Baumgartner & Morris, 2006). Effects (negative evaluation of the
candidate) usually were larger for the audience who was new to a satire show
(Baumgartner & Morris, 2006).

The sarcastic tone also impacts the audience’s emotions (for example, feelings
of pride, joy, happiness, sadness). Emotions were defined as motivational forces that
promote individuals’ attention, thought and action (Lee & Kwak, 2014). This study
defined emotions based on the bi-dimensional (negative and positive) valence model.
Positive emotions emerged when goals were fulfilled, and it (positive emotions)
reinforced existing behaviors (the disposition system). On the other hand, people
experience negative emotions when they encountered unfamiliar and threatening
stimuli. Negative experience disrupted normal patterns of behavior and induced novel
forms of activities to address the source of a threat (the surveillance system). Negative
emotions can function as a facilitator of political activism (Lee & Kwak, 2014). For
example, anxiety (a negative emotion) had been found to stimulate interest in electoral
politics (Lee & Kwak, 2014). The researchers proposed that the negative emotions can
result in negative evaluation of the politics (Lee & Kwak, 2014). To test the
proposition, an online experiment was conducted where participants were randomly
assigned to hard news, political satire, and control. News about government bailout was
chosen from both The Daily Show with Jon Stewart and NBC news. The political satire
clip from The Daily Show with Jon Stewart was humorous, sarcastic and critical of the
government bailout. The hard news clip featured selected stories of the government
bailout of big companies. The journalist commentary on this event was unambiguously
serious and objective (Lee & Kwak, 2014). Upon viewing the video clips, participants filled out an identical questionnaire to measure emotions, attitudes, and behavioral intentions. The results indicated that negative emotions significantly mediated the influence of political satire exposure on political participation. Political elites tend to derive greater participatory benefits from the viewing of sarcastic political humor via the indirect path of negative emotions.

The tone of two different types of satire (Horatian satire and Juvenalian satire) resulted in significantly different types of influence on audiences (LaMarre et al, 2014). Horatian satire is considered ‘lighter than Juvenalian satire’ and produces ‘wry smile on audience members.’ Juvenalian satire is more ‘acidic in tone’ (LaMarre et al, 2014) (p 3). The differences in tone result in different processing mechanisms on the audience’s side. For example, audiences showed a difference in argument scrutiny or subsequent political judgment. The Horatian Satire (which possesses a lighter tone) caused more message discounting and more message scrutinizing than Juvenalian satire, and it led to less agreement with the Horatian satire message. On the other hand, the discounting mechanism works while processing Juvenalian and Horatian satire. Horatian satires were perceived as funnier and less serious than Juvenalian satire—the bitter approaches of humor (LaMarre et al, 2014).

Some studies found that satire can sometimes invoke positive attitudes towards the satirized subjects. Viewers who took political messages in satire shows less seriously tend to had positive attitudes towards the subjects. Humor acts as “discounting cue,” a process wherein individuals are cued by the humor to discount political arguments embedded in satirical humor as ‘just a joke’ and ‘not serious’ (LaMarre et al,
Message discounting reduces one’s motivation to consider the merits of the political arguments within the satire (e.g., “because it’s just a joke, it isn’t relevant or worth consideration”) (LaMarre et al., 2014; Nabi et al., 2007). Through the ‘discount mechanism’ process, satirical content evoke more positive thoughts toward the subject than critical news (LaMarre & Walther, 2013). Audiences evoked positive thoughts about The Daily Show coverage in comparison with news media’s coverage of the same issue (LaMarre & Walther, 2013). People tend to scrutinize satirical messages rather than the message’s target, because they provide cues not to be taken seriously. Similarly, audiences developed less negative attitudes toward the “satire target,” because the audience perceives messages as funny (Boukes et al, 2015).

Literature also found that even though the audience faces difficulty interpreting complex forms of satire, the high-ability (measured by asking participants to list thoughts) late-night political comedy viewers generated more positive and less negative thoughts toward the satirized subjects than political news viewers (LaMarre & Walther, 2013). In comparison with political news, political humor offered a powerful way to engage viewers, influence attitudes and shape public opinion (LaMarre & Walther, 2013).

Studies Related to the Effect of Humor on Memory

Existing literature on political satire indicates that satire has a significant effect on various learning outcomes. Young and Tisinger (2006) found that the audience of The Daily Show (traditional satire program) appeared to be more politically knowledgeable, more participatory, and more attentive to politics than those who don’t
watch such shows. However, scholars argued that the overall body of research suggests inconsistent learning effects of political comedy (Warner et al, 2015).

A study by Chaffe, Zhao and Leshner (1992) found positive relationship between viewing talk shows and candidate-issue knowledge. Viewing shows such as Larry King Live and Donahue in the 1992 election was positively correlated with political knowledge. Individuals who paid more attention to talk shows were found to be more likely to say they intended to vote.

In a different study, Weaver and Drew (1992) didn’t found the impact of nontraditional media on audiences’ knowledge. These scholars had examined if exposure to talk shows and morning network shows on campaign issues, including debates, predicted more knowledge on the issue positions of the candidate (Weaver & Drew, 1992). They did not find any effect of these shows on knowledge.

However, watching presidential debates increased knowledge of viewers regarding issue positions (Sears & Chaffee, 1979). Debates appeared to help voters who were more interested in specific issues than in any particular candidate (Weaver & Drew, 1992). Watching debate had no effect on candidate evaluations or voter intentions, especially when compared with party identification and prior candidate preferences (Weaver & Drew, 1992).

Prior (2003) argued that talk shows like Letterman or Oprah and infotainment like Hardcopy or Entertainment Tonite had little effect on people’s memory (Prior, 2003). To examine the effect of people’s preferred news formats on their political knowledge, Prior (2003) had designed questions to measure soft news knowledge, hard news knowledge, and knowledge of the war on terrorism. The result found that people
who preferred news from newspapers or national TV news were consistently more knowledgeable about the war on terrorism.

Education is one antecedent variable that predicts both knowledge and attention to media news (Chaffee et al, 1994). Similarly, prior knowledge is also a strong predictor of exposure to media information (Chaffee et al, 1994). Studies of humor show found that issue knowledge is related to one’s understanding of the satire (LaMarre et al, 2013). That means audience members who have prior knowledge on the issue may be able to engage with the humorous narrative.

Political satire has some positive effects on issue knowledge (LaMarre, 2013). For example, viewing Colbert’s Super PAC comedy significantly predicted increase in issue knowledge (LaMarre, 2013). To understand satire, audience members need some prior knowledge about the topic. Political ideology was not found to significantly predict audiences’ perceptions of Colbert’s intended joke targets or his underlying policy message about campaign finance reform. But issue knowledge was found significantly related to satire perceptions. This suggests that issue knowledge was a better predictor of one’s understanding of the satire.

In addition to prior knowledge, prior viewing of the satire show results in the better recall of issue related information. Participants who were attentive to the previous coverage of the Colbert show answered questions correctly about campaign finance law (Warner et al, 2015). Even regular audiences of the talk show Rachel Maddow were able to answer questions correctly. The study shows differences between regular audiences and new audiences in terms of knowledge acquisition. In addition, political sophisticates in the political satire group showed greater political participation via the

**The Elaboration Likelihood Model**

A number of studies on measuring the effects of late-night comedy shows used the Elaboration Likelihood Model (e.g., LaMarre 2013; LaMarre & Walther, 2013; Polk et al., 2009; Young, 2008). The arguments of these studies were that understanding humor requires active audience participation (Young, 2008). The model suggests that information processing can be defined as taking a less effortful, peripheral route, or a more cognitively taxing, central route. The act of centrally processing a message and elaborating the information presented increases the likelihood of recall and long-term attitudes change (Young, 2008).

Based on individual ability and motivation to process information, the Elaboration Likelihood Model suggests that audiences process messages through two distinct “routes of persuasion” – the central route and the peripheral route. The central route is likely to occur “as a result of a person’s careful and thoughtful considerations of the true merits of the information presented,” and the peripheral route is likely to occur “as a result of some simple cue in the persuasion context that induced change without necessitating scrutiny of the central merits of the issue-relevant information presented” (Petty & Cacioppo, 1986) (p. 7).

According to Petty and Cacioppo (1986), audiences will process a message through the central route if they have high levels of motivation and ability. When elaboration likelihood is high, people will assess information in relation to the
knowledge that they already possess, and arrive at a reasoned attitude (central route) (Petty & Wegener, 1998).

Motivation consists of several variables that affect a person’s conscious intentions and goals in processing a message. The variables are: personal relevance (e.g. is the topic related to a person’s self-interest), persuasion context (e.g. is a forewarning of persuasive intent provided?) and need for cognition (e.g. is the recipient high or low in need for cognition?). This study considers the first variable -personal relevance (measured by the intensity of political ideology (IPI), attention to government and politics, and strength of party identification (SPID) as the moderating variables that impacts processing humor.

Ability variables in the ELM are: features of the message itself (e.g. is the message understandable?), the persuasion context (e.g. is external distraction present?), and the message recipient (e.g. how much topic-relevant knowledge does the person have?). This study operationally defined ability as ‘prior political knowledge.’

Both motivation and ability need to be present to process a message centrally. The act of centrally processing a message and elaborating the information presented increases the likelihood of recall and long-term attitudes change (Young, 2008).

If motivation is high but the ability is low, a person may rely on simple cues such as source credibility in order to evaluate the message. In the peripheral route, attitudes are determined by positive or negative cues in the persuasion context (Petty & Cacioppo, 1986). When elaboration likelihood is low, information scrutiny is reduced and attitudes change can result from less resource demanding processes that do not require effortful evaluation (peripheral route) (Petty & Wegener, 1998) For example, if
audiences are low in ability (political knowledge) or low in motivation (party identification/ party ideology) they will rely on host credibility or negative/ positive cues in the humor content to form their attitudes toward presidential candidates.

Satire is hard to process. This study expected that satire has an impact on audiences’ perception of presidential candidates. Based on ELM’s assumptions, this study acknowledges that ‘motivation’ and ‘ability’ have an influence on audiences’ information processing. An audience who has no interest in politics will not give the effort to process a satire-filled message. That means, an audience who has the high level of party identification and political ideology would be motivated to process a political message, therefore, he/she would process the message through the central route. Those who have a low level of party identification and political ideology will choose the peripheral route to process a satire-filled message.

Ability is another factor that leads to processing a message through the central route. Ability is operationalized as ‘prior political knowledge’ of an individual. This study assumes that people who have the prior political knowledge (or ability) about a presidential candidate would be less influenced by the humor type. On the other hand, those who have little or no ability would be affected by humor type.

As ELM assumed, these two factors (motivation and ability) have an impact on audiences’ information processing. This study used these two factors as moderating variables to examine the effect of humor types on audiences’ knowledge and attitudes toward the presidential candidate. According to the Elaboration Likelihood Model, the level of elaboration depends on ability and motivation level of the individual. The individuals with high level of ability and motivation can process a message centrally.
Based on the assumption of ELM, following hypotheses are proposed:

H1a: Satire and motivation will interact on engagement with the video such that participants with high motivation will experience greater engagement with the video in the high satire condition than in the low satire condition.

H1b: Satire and motivation will interact on attitudes toward the candidate such that participants with high motivation will have more positive attitudes toward the candidate in the high satire condition than in the low satire condition.

H1c: Satire and motivation will interact on memory such that participants with high motivation will have better memory in the high satire condition than in the low satire condition.

H2a: Satire and ability will interact on engagement with the video such that participants with high ability will experience greater engagement with the video in the high satire condition than in the low satire condition.

H2b: Satire and ability will interact on attitudes toward the candidate such that participants with high ability will have more positive attitudes toward the candidates in the high satire condition than in the low satire condition.
H2c: Satire and ability will interact on memory such that participants with high ability will have better memory in the high satire condition than in the low satire condition.
Chapter 3: Method

Participants

The data were collected using Amazon MTurk. Adults aged 18 and above were invited to participate in the study for a small cash payment. The questionnaire was distributed among the respondents inside the United States. The study design required responses only from US citizens. Among the total 228 participants, only three participants were non-US citizens.

Materials

The questionnaire includes a battery of questions on intensity of party ideology, strength of party identification, attention to government and politics, prior political knowledge, engagement and attitude. A set of questions were asked to test the memory of participants. Questions were drawn from the information presented in the manipulation videos. In addition, demographic questions and humor show viewing frequency were asked in order to have control in subsequent analysis.

Design

This study employed a fractionated 2 (satire: high/low) x 2 (motivations: high/low) x 2 (ability: high/low) between subjects’ experiment. Satire was a manipulated independent variable. Motivation and ability were moderator variables, but analyses were considered using either motivation or ability. Therefore, motivation and ability were not fully crossed.

Participants were randomly assigned to either the high satire condition or the low satire condition. By random assignment, 134 (58.8%) participants participated in
the high satire condition and 94 (41.2%) participants participated in the low satire condition.

Questions measuring moderating variables (motivation and ability) and current attitude toward the candidates were asked at the beginning. After watching each video, participants answered the questionnaire to measure dependent variables: attitude toward the candidates, and engagement with the video. After finishing watching all of the videos, participants were asked memory questions. Videos and memory questions were randomly ordered. Lastly, demographic questions were asked. A total of 80 questions were asked in high satire condition and a total of 81 questions were asked in low satire condition (low satire condition asked one additional memory question).

**Stimuli**

This study operationalized satire by using different video clips that had been taken from these shows: The Late Show with Stephen Colbert, Late Night with Seth Meyers and parody skits from Saturday Night Live, The Tonight Show Starring Jimmy Fallon and Jimmy Kimmel Live!

A pretest was conducted in order to properly separate videos in high satire and low satire groups. Total 64 videos were downloaded from YouTube. From them, 30 videos were selected for the pretest. Each video clip talked about one candidate. Three groups of participants watched and rated satire level of each video.

A satire scale was developed in order to rate the videos. Participants were asked to rate each video on the following items: ridicule, mock, sarcastic, derogatory, spoof, impersonation, mean, attack, and stupid. Each item was rated on a seven-points Likert scale, anchored by 1=strongly disagree and 7-strongly agree. In addition, participants
were asked to rate the humor level of each video. The reliability of these nine-items were high (α=.847).

The videos need to be statistically different based on their satire level, while controlling for their humor level. After collecting pretest data, the videos were separated based on their differences in means. An independent sample t-test was conducted to test if the videos in high satire group were statistically different than low satire group. To do this, a video clip with the lowest mean from the high satire group (M=5.40, SD=0.80) was compared to the video clip with the highest mean from the low satire group (M=4.44, SD=0.99). The satire score for the lowest rated video clip in the high satire group was significantly different than the highest rated video clip in the low satire group (t (32)=3.09, p=.004 (See Table 3).

In order to be sure the high and low satire clips did not vary on humor, an independent sample t-test was conducted. Results indicated that the clips in the two satire groups did not differ on humor (t(32)=-0.497, p=.622 (See Table 3).

Based on the result, the eight videos that had a mean of 5.40 and above were considered as high satire videos. Similarly, the eight videos that had a mean of 4.44 and lower were considered as low satire videos.

The total time of the video clips was nearly equal in both satire groups. The video clip of the high satire group was 3 minutes 57 seconds long. The video clip of the low satire group was 4 minutes 2 seconds long. In terms of content, video clips in both conditions were focused on images of the candidates and their shortcomings during debate presentations.
Measures

Moderating variables. The moderating variable “motivation” was measured by asking questions on the individual intensity of political ideology (IPI), the strength of party identification (SPID), and attention to government and politics. On a 7-point scale, participants rated their political ideology, party identification and attention to government and politics. The scales were derived from ANES 2012 and 2016 pre-election data. Both IPI and SPID were created by recoding typical ideology and party identification scales (1-7) so that stronger conservative/liberals and stronger Republicans/Democrats were scored higher (3) than less strong (2 or 1) and neutral responses (0).

The moderating variable “ability” was measured by asking three questions on prior political knowledge. The questionnaire was derived from ANES 2016 pilot study. The correct answer was coded as 1 and the incorrect answer was coded as 0 (See Appendix). Thus, the range of possible scores was 0-3.

Interaction terms were created by multiplying each moderator with the independent variable.

Control variables. Six variables were included as controls. They were: humor show viewing frequency and five demographic variables (age, race, gender, education, and registered to vote or not).

The findings from the control variables summarize here (See Table 2). In high satire condition, the mean response for watching political humor shows on television was $M=3.71, SD=1.69$, the mean response for watching political humor shows online was $M=3.73, SD=1.52$, and the average age of participants was $34.7, SD=12.78$. 69.33%
participants were Caucasian (white) and 30.67% participants were non-white; 30.67% were male participants and 69.33% were female participants. The most represented level of education was bachelor’s degree (42.67%), followed by high school graduate (26.67%), master’s degree (16%), associate degree (12%) and professional degree (2.67%). Registered voters were 88% of the participants. There were no non-U.S. citizens.

In the low satire condition, the mean response for watching political humor shows in television (7 point scale ranged from ‘not at all’ to ‘a lot’) was \( M=3.65, SD=1.66 \); the mean response for watching political humor shows online (7 point scale ranged from ‘not at all’ to ‘a lot’) was \( M=3.72, SD=1.83 \). The average age of participants was 35.3, \( SD=11.56 \). A total of 67.89% participants were Caucasian (white) and 32.1% participants were non-white. A total of 56.88% were male participants and 43.12% were female participants. The most represented level of education was bachelor’s degree (38.53%), followed by high school graduate (29.36%), associate degree (13.76%), master’s degree (11.01%), professional degree (3.67%), and doctorate degree (3.67%). There were 90.83% registered voters among the participants. There were three- (3) non-U.S. citizens. The data from these three non-U.S. citizens did not removed.

**Dependent variables.**

*Engagement.* Engagement questions were asked at the end of each video. The engagement scale was derived from Bussele & Bilandzic (2009).

Three questions were asked to measure engagement. They were: “I found my mind wandering while the video was on”, “While the video was on I found myself
thinking about other things”, and “I had a hard time keeping my mind on the video”.

Each of these questions was asked after showing each video. That means, each of the questions was asked eight times. This study averaged the individual score of wandering, thinking and mind and created engagement variable. Responses from each question were reverse coded. These three items to measure engagement were highly correlated ($\alpha=.826, \text{N}=24$)

*Attitudes toward the presidential candidates.* Attitudes toward the presidential candidates were measured by asking participants to rate the presidential candidate after they finished watching each video. On a 7 point scale where one (1) means negative and seven (7) means positive, participants were asked to rate each Democratic and Republican presidential candidates of 2016 who appeared in the video. A separate variable “rate” was created by averaging all of the eight attitude questions.

*Memory.* This study measured memory by asking participants information presented in the videos. For example, “Who is the former Virginia senator?” The correct answer was coded as 1 and the incorrect answer was coded as 0. For testing memory, 12 questions were created from the information of high satire videos and 13 questions were created from the information of low satire videos (See Appendix A).

**Procedure**

At the very beginning, the researcher asked for consent from the participants. Participants 18 years and older were asked to participate in the research. Upon agreement, the participants were asked to watch humorous video clips based on Democratic and Republican presidential debates of 2016 and answer the questionnaire after each video. The participants were informed about the length of the videos and that
their participation will not take no longer than 20 minutes. In addition, participants were informed that their participation in the study were voluntary and they can stop answering questions any time.

No risks were associated with being in this research. Participants were compensated for their time and participation. Each participant received one dollar ($1) as compensation. No identifying information of the participants was collected. The research records were stored securely and only approved researchers had access to the records.

After giving consent, participants were directed to the first set of questions. Questions measuring moderating variables were asked first. Participants were next directed toward the first video clip. After watching the first video clip, participants answered engagement and attitude questions. Participants continued watching the next seven video clips and answering engagement and attitude questions. After finish watching all eight clips participants were asked memory questions. Once the memory section began, participants could not go back to the video clips. After finish answering memory questions, participants answered demographic questions. The questionnaire finished by thanking the participants.

**Analytic Strategy**

To measure if the interaction between independent variable (satire: high/low) and the moderating variables (motivation and ability) impacted the outcome variables (engagement, attitudes, and memory) as predicted in the hypothesis, hierarchical multiple regression was used.
Separate hierarchical regression models were analyzed for each dependent variable. In the first block of each regression model, control variables (age, race, gender, education, humor show viewing frequency) were included. In the second block of the regression model, moderating variables (intensity of political ideology, the strength of party identification, attention to government and politics, and ability variable (prior political knowledge) were included. In the third block of the regression model, the experimental conditions (high satire and low satire) were included. Finally, in the fourth block of the regression model, interaction terms (interactions between political ideology, party identification, attention, and political knowledge each with satire) were included.
Chapter 4: Results

Results of the regression model are presented in two ways. First, results of the regression model of the Block 1 (control variables), Block 2 (moderating variables: motivation and ability), and Block 3 (main effect) are presented. Next, results of the regression model of the interaction terms are presented. Results of the interaction terms are presented based on the order of the hypotheses. The first three hypotheses will present the interaction results of the satire and motivation variables (intensity of political ideology – IPI, attention to government and politics, and strength of party identification – SPID) with engagement, attitudes, and memory. The last three hypotheses will present the interaction results of the satire and the ability variable (prior political knowledge) with engagement, attitudes, and memory.

Results of Block 1, Block 2, and Block 3 of the hierarchical regression model

Engagement

The hierarchical regression model for engagement is shown in Table 1. Block 1 (control variables) of the hierarchical regression model found that age was positively associated with engagement ($\beta=.176, p=.026$). Participants who were older had more engagement with the humor videos than participants who were younger. The other variables were not significantly related to engagement. Block 1 explained 3.7% variance in engagement, $p = .362$.

Block 2 shows the results of the moderating variables (motivation): Intensity of political ideology (IPI), attention to government and politics, and strength of party identification (SPID). Intensity of political ideology (IPI) was negatively associated with engagement ($\beta=-.176, p=.095$). Participants with the high intensity of political
ideology (IPI) had less engagement with the humor videos than participants with the low intensity of political ideology (IPI). Strength of party identification (SPID) was positively associated with engagement ($\beta = .174$, $p = .096$). Participants with the strong party identity (SPID) had more engagement with the humor videos than participants with the weak party identity (SPID).

Block 2 also shows the result of the moderating variable (ability): prior political knowledge. The result from block 2 (moderating variables - ability) did not find any significant association between ability (prior political knowledge) and engagement with the humor videos. Block 2 explained an additional 2.5% variance in engagement, $p = .345$.

Block 3 (main effect of satire) was not a significant predictor of engagement with the humor videos ($\beta = -.066$, $p = .398$). Block 3 explained 0.4% additional variance in engagement, $p = .398$.

**Attitudes toward the Presidential Candidates**

The hierarchical regression model for attitudes toward the candidates is shown in Table 1. Block 1 (control variables) of the hierarchical regression model shows that humor show viewing frequency on television was positively associated with attitude ($\beta = .175$, $p = .036$). Participants who watched television humor shows more often had more positive attitudes toward the presidential candidates than participants who watched less often. Gender was negatively associated with attitudes ($\beta = -.215$, $p = .004$). Since gender was coded as Male=1 and Female=2, that means males showed more positive attitudes toward the presidential candidates than females. The other variables were not significantly related to attitudes. Block 1 explained 8.7% variance in attitudes, $p = .017$. 
Block 2 shows the results of the moderating variables (motivation): intensity of political ideology (IPI), attention to government and politics, and strength of party identification (SPID). None of the variables was significantly related to attitudes toward the candidates.

Block 2 also shows the result of the moderating variable (ability): prior political knowledge. There was no significant association between prior political knowledge and attitudes toward the candidates. Block 2 explained an additional 2% variance in attitudes, \( p=.460 \).

Block 3 (main effect of satire) was a significant predictor of attitudes toward the presidential candidates (\( \beta = -.124, p=.106 \)). Satire was coded as 2=high satire and 1=low satire. Therefore, participants in the high satire condition had more negative attitudes toward the candidates than participants in the low satire condition. Block 3 explained an additional 1.4% variance in attitudes toward the candidates, \( p=.106 \).

**Memory**

The hierarchical regression model for memory is shown in Table 1. Block 1 (control variables) of the hierarchical regression model found that humor show viewing on television was negatively associated with memory (\( \beta = -.152, p=.070 \)). Participants who watched political humor show on television less frequently had better memory than participants who watched political humor show on television more frequently.

Age was positively associated with memory (\( \beta = .174, p=.024 \)). Participants who are older had better memory for information from the videos than participants who are younger. The other variables were not significantly related to attitudes. Block 1 explained 7.2% variance in memory, \( p=.045 \).
Block 2 shows the results of the moderating variables (motivation): Intensity of political ideology (IPI), attention to government and politics, and strength of party identification (SPID). Attention to government and politics was negatively associated with memory ($\beta = -0.190$, $p = 0.021$). Participants who had few or no attention to government and politics had better memory than participants who had more attention to government and politics.

Block 2 also shows the results of the moderating variable (ability): prior political knowledge. Prior political knowledge was positively associated with memory ($\beta = 0.276$, $p < 0.001$). Participants who were high in political knowledge had better memory. Block 2 explained an additional 11.2% variance in memory, $p < 0.001$.

Block 3 (main effect of satire) was not a significant predictor of memory. Block 3 explained an additional 0.6% variance in memory, $p = 0.288$.

**Interaction Result of the Motivation Variable**

*Engagement.* Block 4 tested H1a, which predicted that satire and motivation would interact on engagement with the videos such that participants with high motivation would experience greater engagement with the video in the high satire condition than in the low satire condition. The regression data of Block 4 (interaction terms) shows that the interaction between the satire condition and intensity of political ideology (IPI, representing motivation) was negatively associated with engagement with the video ($\beta = -0.655$, $p = 0.076$). Participants with low intensity of political ideology (IPI) in the high satire condition had more engagement with the videos. Because the satire x IPI interaction was in the opposite direction predicted by H1a, H1a was not supported. No other interaction term significantly predicted engagement. Block 4 explained an
additional 2.6% variance in engagement, \( p = .336 \). The total regression model explained 9.3% variance in engagement, \( p = .361 \).

**Attitudes toward the presidential candidates.** Block 4 tested H1b, which predicted that satire and motivation would interact on attitudes toward the candidates such that participants with high motivation would have more positive attitudes toward the candidates in the high satire condition than in the low satire condition. The regression data of the Block 4 (interaction terms) showed that the interaction between the satire condition and intensity of political ideology (IPI, representing motivation) was positively associated with attitudes toward the candidates (\( \beta = .633, p = .077 \)). Participants with high intensity political ideology (IPI) in the high satire condition had more favorable attitudes toward the candidates than participants in the low satire condition. Because the satire x IPI interaction was in the same direction predicted by H1b, H1b was supported. Block 4 explained an additional 2.9% variance in attitudes toward the presidential candidates, \( p = .252 \). The total regression model explained 14.9% of the variance in attitudes toward the presidential candidates, \( p = .030 \).

**Memory.** Block 4 tested H1c, which predicted that satire and motivation would interact on memory such that participants with high motivation would have better memory in the high satire condition than in the low satire condition. The regression data of the Block 4 (interaction terms) found that the interaction between the satire condition and attention to government and politics (representing motivation) was negatively associated with memory (\( \beta = -.485, p = .091 \)). Participants with low attention to government and politics in the high satire condition had better memory. And
participants with high attention to government and politics in the high satire condition had poorer memory.

The interaction between the satire condition and intensity of political ideology (IPI, representing motivation) was negatively associated with memory ($\beta = -0.634$, $p = .061$). Participants with low intensity of political ideology (IPI) in the high satire condition had better memory. And participants with high intensity of political ideology (IPI) in high satire condition had poorer memory.

Because satire x attention to government and politics and satire x IPI interaction were in the opposite direction predicted by H1c, H1c was not supported. Block 4 explained an additional 4.7% variance in memory, $p = .047$. The total regression model explained 23.6% variance in memory, $p < .001$.

**Interaction Results of the Ability Variable**

*Engagement.* Block 4 tested H2a, which predicted that satire and ability would interact on engagement with the videos such that participants with high ability would experience greater engagement with the video in the high satire condition than in the low satire condition. The regression data of the Block 4 (interaction terms) did not show any significant association between the satire condition and prior political knowledge (representing ability) and engagement with the humor videos. H2a was not supported. Block 4 explained an additional 2.6% variance in ability, $p = .336$. Total regression model explained 9.3% variance in engagement, $p = .361$.

*Attitudes toward the presidential candidates.* Block 4 tested H2b, which predicted that satire and ability would interact on attitudes toward the candidates such that participants with high ability would have more positive attitudes toward the
candidates in the high satire condition than in the low satire condition. The regression data of Block 4 (interaction terms) did not find any association between the satire condition and prior political knowledge (representing ability) with attitudes toward the candidates. H2b was not supported. Block 4 explained an additional 2.9% variance in attitudes toward the presidential candidates, $p=.252$. Total regression model explained 14.9% variance in attitudes toward the presidential candidates, $p=.030$.

**Memory.** Block 4 tested H2c, which predicted that satire and ability would interact on memory such that participants with high ability would have better memory in the high satire condition than in the low satire condition. The regression data of the Block 4 (interaction terms) found that the interaction between the satire condition and prior political knowledge (representing ability) was negatively associated with memory ($\beta = -.635, p=.032$). Participants with low political knowledge in high satire condition had better memory. And participants with high political knowledge in high satire condition had poor memory. Because the satire x prior political knowledge was in the opposite direction predicted by H2c, H2c was not supported. Block 4 explained an additional 4.7% variance in memory, $p=.047$. Total regression model explained 23.6% variance in memory, $p<.001$. 


Chapter 5: Discussion

Most of the significant results on satire x motivation interaction and satire x ability interaction was in the opposite direction of the hypothesis. Satire x intensity of political ideology (IPI- representing motivation) with engagement has gone in the opposite direction of the hypothesis. Satire x intensity of political ideology (IPI – representing motivation) with memory has also gone in the opposite direction of the hypothesis. Satire x attention to government and politics (representing motivation) with memory, too, has gone in the opposite direction of the hypothesis. Finally, satire x prior political knowledge (representing ability) with memory has gone in the opposite direction of the hypothesis.

Only one significant finding went in the direction of the hypothesis proposed. The interaction between satire x intensity of political ideology (IPI – representing motivation) was positively associated with attitudes toward the candidates, which supports the hypothesis.

The results of satire x interaction terms suggests low elaboration likelihood of the participants. That means participants chose peripheral route, not the central route, to process information. Peripheral route is likely to occur “as a result of some simple cue in the persuasion context that induced change without necessitating scrutiny of the central merits of the issue-relevant information presented” (Petty & Cacioppo, 1986, p. 7).

As a result of low elaboration likelihood and peripheral processing, participants’ information scrutiny was reduced and they relied on the cues in the humor content to get engaged with the humor videos and to remember information.
For the same reason (reduced information scrutiny), participants showed positive attitudes toward the candidates. The results of attitudes toward the presidential candidates support the finding of LaMarre et al. (2014) that found that viewers who take political messages in satire shows less seriously tend to have positive attitudes towards the subjects. According to LaMarre et al. (2014), humor acts as “discounting cue,” a process wherein individuals are cued by the humor to discount political arguments embedded in satirical humor as ‘just a joke’ and ‘not serious’ (LaMarre et al., 2014). Message discounting reduces one’s motivation to consider the merits of the political arguments within the satire (e.g., “because it’s just a joke, it isn’t relevant or worth consideration”) (LaMarre et al., 2014; Nabi et al., 2007). The model has a significant predictive value ($\beta=14.9\%, p=.030$)

The second findings of the current study is that participants with high intensity of political ideology (IPI) in the high satire condition had low engagement with the humor videos, whereas participants with low intensity of political ideology (IPI) in the high satire condition had higher engagement with the humor videos. In addition of supporting the peripheral processing of Elaboration Likelihood Model (ELM), the engagement finding also supports the existing literature that satire has an effect on information processing of the audience (Baumgartner & Morris, 2006; Lee & Kwak, 2014 and LaMarre et al, 2014). The findings of the satire x intensity of political ideology (IPI- representing motivation) with engagement in this study suggest that humor in the high satire condition can be deleterious to the audience who are highly motivated. The satire interaction with the other two motivation variables (attention to government and politics and strength of party identification) was not significantly
associated with engagement. The predictive value of the engagement model was not significant though the reliability of the engagement items were high ($\omega=.826, N=24$).

The third findings of the study is that participants who had high motivation (attention to government and politics, intensity of political ideology – IPI) and ability (prior political knowledge) in the high satire condition had poor memory. In addition to considering the peripheral processing explanation of the Elaboration Likelihood Model (ELM), the study looked for alternative explanation on why participants high in motivation and ability performed poorly on the memory test. In the high satire condition, more participants identified them as Democrats ($N=45$) than the participants who identified them as Republicans ($N=20$). Among the twelve (12) memory questions, six (6) questions were about Democratic presidential debates and six (6) were about Republican presidential debates. Though most of the videos in the high satire condition talked about Democratic presidential debates ($N=6$), there is a possibility that participants who were strong democrat did not pay attention to the Republican videos, as the participants was not interested on the topic or the Republican presidential candidates. Based on the Elaboration Likelihood Model (ELM), the findings indicate that Democrats in the high satire condition did not process the messages of Republican presidential debates carefully or the participants did process the message superficially. There is a possibility that Democratic participants with high motivation and ability were able to answer only half of the questions. As a result, the participants in the high satire condition did poorly on the memory test than the participants in the low satire condition.
The memory findings also suggest that participants in the low satire condition did better on the memory test. Majority of the participants identified them as Democrats (N=69). About one fourth of the participants (N=25) identified them as Republicans in the low satire condition. Among the thirteen (13) memory questions, nine (9) questions were about Democratic presidential debates and four (4) were about Republican presidential debates. As most of the videos in the low satire condition talked about Democratic presidential debates and most of the memory questions were from the video clips of Democratic presidential debates, there is a possibility that Democratic participants were able to answer almost 70% of the questions correctly. As a result, the participants in the low satire condition did better on the memory test than the participants in the high satire condition.

Limitations

There were limits that merit mention. First, there appeared to be an issue with randomization to the satire experimental condition. In the high satire condition, majority of the participants were female (69.33%). Only 30.67% participants were male. In the low satire condition, a majority of the participants was male (56.88% male, 43.12% female). For the successful randomization, the ratio of male and female needed to be roughly the same in both conditions. There is a possibility that male participants in the low satire condition with high motivation and ability did better on the memory test.

Literature suggests that gender gap in political knowledge is quite large (Mondak & Anderson, 2004). Men have been found to exceed women in political interest, attentiveness to politics, and efficacy and this gender gap in political engagement have consequences for political participation (Mondak & Anderson, 2004;
Verba, Burns, and Schlozman, 1997). Scholars of political science emphasized that knowing political facts is an indicator of political expertise, awareness, political engagement, and media exposure (Carpini & Keeter, 1993).

There is a possibility that male participants in the low satire condition had better political knowledge. There is also a possibility that participants in the low satire condition had better political interest, attentiveness to politics, political expertise, and political engagement. And for this reason, there was a negative association between satire x motivation and satire x ability interaction terms with memory and engagement. As the ratio of male and female participants are not equal in each condition, it is hard to tell that the interaction between satire x motivation or satire x ability results in lower engagement with the humor videos and worse memory.

Second, the current study has a small sample size. It can be a limitation because a study with low statistical power has the limitation of detecting true effect. In this case, small sample size (or statistical power) has limitation to conclude that satire had an impact on the audience.

Third, participants were reimbursed for their participation in the experiment. This incentive could influence the task performance, such as payment could be one of the motivations for the participants to participate in the study and it could improve task performance of the participants. Therefore, payment could be a possible confounding variable in the current study.

Future Research

The findings of the current study indicated a good predictive value of the memory model ($\beta=23.6\%, p<.001$). The problems with randomization and possible
effect of party identification make this study to consider alternative explanation of the memory results. Future studies can extend the findings of the current study by considering more control variables in order to minimize the effect of the variables other than the independent variables.

The current study found a good reliability of the engagement items and, thus, revealed a good overall consistency of the engagement measure. Future studies can use the same scale to further investigate that high satire actually results less engagement with the videos.

Finally, a different theoretical explanation can be used to explain the effect of satire humor on information processing of the audience.

**Contribution**

Existing study on late-night humor considered Juvenalian satire and Horatian satire as two forms of satire humor technique, whereas, Juvenalian considers ‘harsh’ form of satire and Horatian considers as ‘lighter’ form of satire. The current study did not follow these conceptualizations completely and considered pretest result in order to properly separate videos in the high satire and low satire condition. Though the concept of high satire is similar to Juvenalian satire and the concept of low satire is similar to Horatian satire. Thus, the current study extends the existing late-night humor research by drawing comparison between two levels of satire humor techniques.

Second, two new dependent variables were included in this study. This inclusion will extend the existing political humor study.
Conclusions

The purpose of this thesis was to examine if high and low satire have effects on engagement, attitudes toward the presidential candidates, and memory. The thesis sought to examine if viewers can process different humor techniques presented in the late night shows in the same way. To examine the effect, two research questions were proposed: Does satire (as a humor technique) have an effect on engagement, attitudes, and memory? Do motivation and ability have affect the strength of the relationship between satire humor and engagement, attitudes toward the presidential candidates, and memory?

The findings of the study suggest that satire have an effect on engagement, attitudes, and memory of the participants. High satire hurt participants, especially those who were highly motivated. As a result, it reduces participants’ engagement with the videos and memory. On the other hand, low satire has positive effect on the participants who were highly motivated. Low satire resulted in increased engagement of the audience with the video and better memory.

The satire x interaction term indicates that motivation and ability may have affected the strength of relationship between satire humor and memory most followed by positive attitudes toward the candidates and engagement.

The findings of the study suggested peripheral processing of the Elaboration Likelihood Model (ELM). Participants did not pay careful attention to the humor show; therefore, their information processing was largely superficial. The reason of superficial processing was may be due to the entertainment setting. As earlier studies suggested, entertainment setting of the humor show did not allow audience to consider the message.
seriously. Or participants who were high in motivation (operationalized by attention to
government and politics, strength of party identification – SPID, and intensity of
ideology – IPI) did not pay attention to the videos that did not support their political
identification and ideology. As a result, participants in the high satire condition showed
positive attitudes toward the candidates but at the same time, could not engaged with
the videos well and did poor on the memory test. The findings of superficial processing
did support the finding of LaMarre and Walther (2013) who suggested that humor show
viewers did process a message superficially while audiences of the mainstream news
media did process the same message carefully.

The current study took a different approach than the existing humor studies by
separating satire in two levels: high satire and low satire. One of the findings supported
the findings of the earlier humor research, e.g., superficial processing of the humor
show result in positive evaluation of the satirized character (LaMarre & Walther, 2013).
Two other findings: engagement with the humor videos and memory are new findings.
Following the suggestion of LaMarre et al. (2009), the current study explored these two
new areas, thus, extends the existing late-night humor studies. The findings of the
engagement and memory suggest that motivation, for example, intensity of political
ideology (IPI) did effect on engagement, such that, high satire hurts the highly
motivated participants and did not let them to get engaged with the humor videos. High
satire also hurts the memory of the highly motivated participants.

Literature suggest that satire had negative effect on the audience. The current
study found that satire effects negatively only the highly motivated participants. In
addition, participants did not pay careful attention to the late-night shows. The study
concludes that the impact of satire on viewers’ engagement, attitudes, and memory are limited to the audience with highly motivation and ability.
References


Young, D. G. (2003, November). The counterargument-disruption model of political humor in the context of late-night programming. Paper presented at the annual meeting of the National Communication Association, Miami Beach, FL.


Appendix: Questionnaire

Satire scale:

1. How would you describe your political ideology?
   Extremely liberal                                      Extremely conservative
   1  2  3  4  5  6  7

2. How would you describe your party identification?
   Strong democrat                                       Strong republican
   1  2  3  4  5  6  7

3. How often would you say you watch political humor on Television?
   Never                                                   Always
   1  2  3  4  5  6  7

4. How often would you say you watch political humor online?
   Never                                                   Always
   1  2  3  4  5  6  7

5. What is your gender?
   Male
   Female

6. What is your age?
7. Please specify your nationality

U.S. Citizen

Non U.S. Citizen

8. Did you vote in the last US presidential election (2012)?

Yes

No

9. Watch the following video:

This video clip:

Is funny is not funny

1  2  3  4  5  6  7

Is not humorous is humorous

1  2  3  4  5  6  7

Made me laugh Did not make me laugh

1  2  3  4  5  6  7

10. Please answer the following questions:

This video ridiculed the candidate

Strongly disagree Strongly agree

1  2  3  4  5  6  7

This video mocked the candidate

Strongly disagree Strongly agree

1  2  3  4  5  6  7

This video was sarcastic toward the candidate

Strongly disagree Strongly agree
This video was derogatory toward the candidate

Strongly disagree  Strongly agree

1  2  3  4  5  6  7

This video spoofed the candidate

Strongly disagree  Strongly agree

1  2  3  4  5  6  7

This video showed an impersonation of the candidate

Strongly disagree  Strongly agree

1  2  3  4  5  6  7

The video was mean toward the candidate

Strongly disagree  Strongly agree

1  2  3  4  5  6  7

The video attacked the candidate

Strongly disagree  Strongly agree

1  2  3  4  5  6  7

The video made the candidate look stupid

Strongly disagree  Strongly agree

1  2  3  4  5  6  7
Recruitment Script

I am Nafida A Banu, Graduate Student in the Gaylord College of Journalism and Mass Communication at the University of Oklahoma Norman Campus. I invite you to participate in a research study being conducted under the auspices of the University of Oklahoma-Norman Campus.

Your participation will involve completing a survey to measure impact of television humor on attitude, memory and engagement. You will complete the survey online. This should take approximately 20 minutes of your time. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time. Your responses to this study will be anonymous. All information you provide will remain strictly confidential.

If you have any questions about this research project, please feel free to email me at nafida@ou.edu or 405-318-8442.

Survey link: https://ousurvey.qualtrics.com/SE/?SID=SV_81H0gVfSLW0fetL
Consent form for the high satire condition

University of Oklahoma Institutional Review Board Informed Consent to Participate in a Research study

Project Title
Impact of television humor on viewers’ attitudes, memory and engagement

Principal Investigator
Nafida A Banu

Department
Journalism and Mass Communication

Would you like to be involved in research at the University of Oklahoma?
I am Nafida A Banu from the Gaylord College of Journalism and Mass Communication and I invite you to participate in my research project entitled “Impact of television humor on viewers’ attitudes, memory and engagement”. Participation in this study will involve completion of an online survey. You must be at least 18 years of age to participate in this study.

Please read this form and consider asking any questions you may have BEFORE agreeing to take part in this study. You may contact me by emailing me at nafida@ou.edu.

What is the purpose of this research? The purpose of this research is to investigate impact of television humor on viewers’ attitudes, memory and engagement.

How many participants will be in this research? About 180 people will take part in this study.
What will I be asked to do? If you agree to be in this research, you will be asked to do the following: watch humorous video clips based on democratic and republican presidential debates of 2016 and answer the questionnaire after that.

How long will this take? Your participation will take no longer than 20 minutes. The video clip will be approximately 3 minutes and 57 seconds long. Once you begin, it is not anticipated that your participation will be terminated without your consent.

What are the risks and/or benefits if I participate? There are no risks and no benefits associated with being in this research. All videos were previously broadcast on the television.

Will I be compensated for participating? You will be reimbursed for your time and participation in this research. You will get $1 as compensation for participating in this research.

Who will see my information? In research reports, there will be no information that will make it possible to identify you. Research records will be stored securely and only approved researchers and the OU Institution Review Board will have access to the records.

Do I have to participate? Participant in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time. If you choose to stop at any time during the study, you will still maintain the benefits and rights you had before volunteering.
Who do I contact with questions, concerns or complaints? If you have questions, concerns or complaints about the research or have experienced a research-related injury, contact me at nafida@ou.edu or (405)-318-8442. You may contact with my advisor/faculty sponsor Dr. Glenn Leshner at leshnerg@ou.edu or (405) 325-4143.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu if you have questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than the researcher(s) or if you cannot reach the researcher(s). Please print this document for your records. By providing information to the researcher(s), I am agreeing to participate in this research.

Please Click below if you agree to participate.

YES: I wish to participate (By clicking yes, I confirm that I am 18 years old).

NO: I do not wish to participate

This research has been approved by the University of Oklahoma, Norman Campus IRB.

IRB Number: 6686________ Approval date: 05/23/2016
Consent form for the low satire condition

University of Oklahoma Institutional Review Board Informed Consent to Participate in a Research study

Project Title
Impact of television humor on viewers’ attitudes, memory and engagement

Principal Investigator
Nafida A Banu

Department
Journalism and Mass Communication

Would you like to be involved in research at the University of Oklahoma?
I am Nafida A Banu from the Gaylord College of Journalism and Mass Communication and I invite you to participate in my research project entitled “Impact of television humor on viewers’ attitudes, memory and engagement”. Participation in this study will involve completion of an online survey. You must be at least 18 years of age to participate in this study.

Please read this form and consider asking any questions you may have BEFORE agreeing to take part in this study. You may contact me by emailing me at nafida@ou.edu.

What is the purpose of this research? The purpose of this research is to investigate impact of television humor on viewers’ attitudes, memory and engagement.

How many participants will be in this research? About 180 people will take part in this study.
What will I be asked to do? If you agree to be in this research, you will be asked to do the following: watch humorous video clips based on democratic and republican presidential debates of 2016 and answer the questionnaire after that.

How long will this take? Your participation will take no longer than 20 minutes. The video clip will be approximately 4 minutes and 2 seconds long. Once you begin, it is not anticipated that your participation will be terminated without your consent.

What are the risks and/or benefits if I participate? There are no risks and no benefits associated with being in this research. All videos were previously broadcast on the television.

Will I be compensated for participating? You will be reimbursed for your time and participation in this research. You will get $1 as compensation for participating in this research.

Who will see my information? In research reports, there will be no information that will make it possible to identify you. Research records will be stored securely and only approved researchers and the OU Institution Review Board will have access to the records.

Do I have to participate? Participant in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time. If you choose to stop at any time during the study, you will still maintain the benefits and rights you had before volunteering.

Who do I contact with questions, concerns or complaints? If you have questions, concerns or complaints about the research or have experienced a research-related injury,
contact me at nafida@ou.edu or (405)-318-8442. You may contact with my advisor/faculty sponsor Dr. Glenn Leshner at leshnerg@ou.edu or (405) 325-4143.

You can also contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu if you have questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than the researcher(s) or if you cannot reach the researcher(s). Please print this document for your records. By providing information to the researcher(s), I am agreeing to participate in this research.

Please Click below if you agree to participate.

YES: I wish to participate (By clicking yes, I confirm that I am 18 years old).

NO: I do not wish to participate

This research has been approved by the University of Oklahoma, Norman Campus IRB.

IRB Number: 6686 Approval date: 05/23/2016
**IRB approval letter:**

**Institutional Review Board for the Protection of Human Subjects**

**Approval of Study Modification – Expedited Review – AP0**

**Date:** May 23, 2016

**IRB#:** 6686

**Principal Investigator:** Nafida Adib Banu

**Reference No:** 652627

**Study Title:** Impacts of television humor on viewers’ knowledge and attitude towards 2016 presidential candidates: An extended elaboration likelihood approach

**Approval Date:** 05/23/2016

**Modification Description:**
This is the modified application of a previously submitted study (IRB no: 6686). The previous application was for pretest and this modification is for actual study.

The review and approval of this submission is based on the determination that the study, as amended, will continue to be conducted in a manner consistent with the requirements of 45 CFR 46.
To view the approved documents for this submission, open this study from the My Studies option, go to Submission History, go to Completed Submissions tab and then click the Details icon.

If the consent form(s) were revised as a part of this modification, discontinue use of all previous versions of the consent form.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or irb@ou.edu. The HRPP Administrator assigned for this submission: Nicole A Cunningham. Cordially,

E. Laurette Taylor, Ph.D.

Chair, Institutional Review Board
Survey questions:

Moderating variables:

Political Ideology:
1. How would you describe your political ideology?

<table>
<thead>
<tr>
<th>Very liberal</th>
<th>Very conservative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Party Identification:
2. Generally speaking, do you usually think of yourself as a Democrat or a Republican.

<table>
<thead>
<tr>
<th>Democrat</th>
<th>Republican</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Attention to government and politics
3. How often do you pay attention to what’s going on in government and politics?

<table>
<thead>
<tr>
<th>Not at all</th>
<th>A lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Prior political knowledge (correct answer in bold)
4. Is the U.S. federal budget deficit – the amount by which the government’s spending exceeds the amount of money it collects – now bigger, about the same, or smaller?

**Bigger**

About the same

Smaller

5. For how many years is a United States Senator elected – that is, how many years are there in one full term of office of a U.S. senator?

5 years
6 years

7 years

6. On which of the following does the U.S. federal government currently spend the least?

Foreign aid
Medicare
National defense
Social security

Engagement questions:

7. I found my mind wandering while the video was on.

8. While the video was on I found myself thinking about other things.

9. I had a hard time keeping my mind on the video.

Attitude questions:

High satire:

10. How would you rate candidate Jim Webb after watching this video? (same question asked three times).

Negative       Positive
1  2  3  4  5  6  7

11. How would you rate candidate Carly Fiorina after watching the video?

Negative       Positive
1  2  3  4  5  6  7

12. How would you rate candidate Marco Rubio after watching the video?

Negative       Positive
13. How would you rate candidate Martin O’Malley after watching the video?

Negative
Positive

14. How would you rate candidate Lincoln Chafee after watching the video?

Negative
Positive

15. How would you rate candidate Donald Trump after watching the video?

Negative
Positive

Low satire:

16. How would you rate candidate Bernie Sanders after watching the video?

Negative
Positive

17. How would you rate candidate Donald Trump after watching the video?

Negative
Positive

18. How would you rate candidate Ben Carson after watching the video?

Negative
Positive

19. How would you rate candidate Marco Rubio after watching the video?

Negative
Positive
20. How would you rate candidate Jim Webb after watching the video?

<table>
<thead>
<tr>
<th>Negative</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

21. How would you rate candidate(s) Hilary Clinton and Jim Webb after watching the video?

<table>
<thead>
<tr>
<th>Negative</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

22. How would you rate candidate Hilary Clinton after watching the video?

<table>
<thead>
<tr>
<th>Negative</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

23. How would you rate candidate(s) Bernie Sanders and Hilary Clinton after watching the video?

<table>
<thead>
<tr>
<th>Negative</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Memory questions: (correct answer in bold)

**High satire:**

24. Who was the former Hewlett-Packard CEO?

- **Carly Fiorina**
- Jim Webb
- Lincoln Chafee
- Martin O’ Malley

25. Who was former US senator from Virginia?

- Lincoln Chafee
26. Who fought in the Vietnam War?
- Lincoln Chafee
- Jim Webb
- Martin O’ Malley
- Donald Trump

27. To whom this question was directed: “You are the only democrat up here with an A rating from the NRA, wanna tell us why?”
- Lincoln Chafee
- Martin O’ Malley
- Jim Webb
- Marco Rubio

28. To whom was this question directed: “You once said that affirmative action is racist against whites, explain?”
- Martin O’ Malley
- Lincoln Chafee
- Marco Rubio
- Jim Webb

29. Who was former Rhode Island Governor?
- Jim Webb
- Lincoln Chafee
30. Who was former Mayor of Baltimore?

- Martin O’Malley
- Jim Webb
- Lincoln Chafee
- Marco Rubio

31. Who made this statement: “I am only one up here who swipe right off”?

- Jim Webb
- Marco Rubio
- Lincoln Chafee
- Martin O’ Malley

32. To whom was this question directed: “Senator, a few weeks ago, you were many participants’s pick as the most electable candidate. Tonight you are in the fourth place. Are you resonating with the voters?”

- Martin O’ Malley
- Lincoln Chafee
- Marco Rubio
- Jim Webb

33. Who made this statement: “I never attack him on his look and believe me there’s plenty of subject matter right there”.

- Donald Trump
- Paul Rand
34. Who made this statement: “I think his response, his visceral response to attack participants on their appearance, short, tall, fat, ugly….my goodness, that happens in Junior High and we are not way above that.”

- Donald Trump

35. Who had asked a question about Vladimir Putin?

- Lincoln Chafee
- Jim Webb
- Carly Fiorina
- Martin O’Malley

Low satire:

36. Who answered this question: “Did you lie about your email server?”

Bernie Sanders

Hilary Clinton

Ben Carson

Jimmy Fallon

37. To whom was this statement directed: “Who are you? Can we see some ID?”

Ben Carson

Jim Webb
Bernie Sanders

Hilary Clinton

38. Who ask a question to Hilary Clinton about the controversial Keystone pipeline?

Bernie Sanders

Matin O’ Malley

Jim Webb

Seth Meyers

39. Who made this statement: “Secretary Clinton’s campaign put out a lot of reversals on positions on Keystone and many other things?”

Martin O’ Malley

Bernie Sanders

Seth Meyers

Jim Webb

40. Who made this statement: “I never took a position on Keystone until I took a position on Keystone?”

Hilary Clinton

Seth Meyers

Bernie Sanders

Martin O’ Malley

41. Who made this statement: “Leadership for a brighter hold on a minute, I thought I had more space, this isn’t fair, the other candidates all had much bigger yard sign”.

Hilary Clinton

Jim Webb
Stephen Colbert

Martin O’ Malley

42. Who made this statement: “Welders make more money than philosophers. We need more welders and less philosophers.”

Stephen Colbert
Jim Webb
Bernie Sanders

Marco Rubio

43. Who made this statement: “I think, therefore I make it rain up in this bee-atch.”

Marco Rubio
Jim Webb

Stephen Colbert

44. Who made this statement: “Bernie Sanders received the support of Democratic Nae Nae.”

Jimmy Fallon

Jimmy Kimmel
Stephen Colbert
Seth Meyers

45. Who made this statement: “Hilary Clinton has received the support of the Democratic Whip.”

Jimmy Kimmel
Stephen Colbert
Seth Meyers
Jimmy Fallon

46. Which candidate was identified as “Jamie Scott?”

Donald Trump

Bernie Sanders

Marco Rubio

Paul Rand

47. Which candidate was identified as “George Clooney?”

Bernie Sanders

Ben Carson

Martin O’ Malley

Donald Trump

48. Who was referred to as “Top Tometrist?”

Ben Carson

Jimmy Kimmel

Donald Trump

Bernie Sanders

Demographic questions:

Humor show viewing frequency

49. How often would you say you watch political humor on Television?

Never

1

2

3

4

5

6

7

Always

50. How often would you say you watch political humor Online?

Never

Always
51. What is your gender?
Male
Female
52. What is your age? ______
53. Please specify your nationality:
U.S. citizen
Non U.S. citizen
54. Are you registered to vote?
Yes, registered to vote
No, not registered
If yes, what political party are you registered with, if any?
Democratic party
Republican party
Independent
Other, please specify ____
55. Please define your race:
White/ Caucasian
Black/ African American
Native American
Hispanic/ Latino
Asian
Other, please specify _____
56. What is the highest level of education you have completed?

High school graduate
Associate degree
Bachelor’s degree
Master’s degree
Professional degree
Doctorate degree
Table 1: Summary of Hierarchical Regression Analysis of Late-Night Humor Show Predicting Engagement, Attitudes, and Memory

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Engagement</th>
<th>Attitude</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Race (white)</td>
<td>-.080</td>
<td>-.063</td>
<td>.041</td>
</tr>
<tr>
<td>Education</td>
<td>-.070</td>
<td>.044</td>
<td>.013</td>
</tr>
<tr>
<td>Humor show viewing-TV</td>
<td>.043</td>
<td>.175*</td>
<td>-.152*</td>
</tr>
<tr>
<td>Humor show viewing-Internet</td>
<td>-.069</td>
<td>-.014</td>
<td>.001</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>-.019</td>
<td>-.215*</td>
<td>-.088</td>
</tr>
<tr>
<td>Age</td>
<td>.176*</td>
<td>-.118</td>
<td>.174*</td>
</tr>
<tr>
<td>$R^2$ change</td>
<td>.037</td>
<td>.087*</td>
<td>.072*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 2</th>
<th>Engagement</th>
<th>Attitude</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Intensity of political ideology (IPI)</td>
<td>-.176*</td>
<td>.047</td>
<td>-.023</td>
</tr>
<tr>
<td>Prior political knowledge</td>
<td>.083</td>
<td>-.004</td>
<td>.276***</td>
</tr>
<tr>
<td>Attention to govt. and politics</td>
<td>.014</td>
<td>-.013</td>
<td>-.190*</td>
</tr>
<tr>
<td>Strength of party identification (SPID)</td>
<td>.174*</td>
<td>.105</td>
<td>-.010</td>
</tr>
<tr>
<td>$R^2$ change</td>
<td>.025</td>
<td>.020</td>
<td>.112***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 3</th>
<th>Engagement</th>
<th>Attitude</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Satire (high)</td>
<td>-.066</td>
<td>-.124*</td>
<td>-.078</td>
</tr>
<tr>
<td>$R^2$ change</td>
<td>.004</td>
<td>.014*</td>
<td>.006</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block 4</th>
<th>Engagement</th>
<th>Attitude</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$\beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Satire*SPID</td>
<td>.482</td>
<td>-.507</td>
<td>.187</td>
</tr>
<tr>
<td>Term</td>
<td>Coefficient 1</td>
<td>Coefficient 2</td>
<td>Coefficient 3</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Satire*attention to govt. and politics</td>
<td>-0.347</td>
<td>0.445</td>
<td>-0.485*</td>
</tr>
<tr>
<td>Satire*prior political knowledge</td>
<td>0.107</td>
<td>-0.005</td>
<td>-0.635*</td>
</tr>
<tr>
<td>Satire*IPI</td>
<td>-0.655*</td>
<td>0.633*</td>
<td>-0.634*</td>
</tr>
<tr>
<td>( R^2 ) change</td>
<td>0.026</td>
<td>0.029</td>
<td>0.047*</td>
</tr>
<tr>
<td>( Total \ R^2 )</td>
<td>0.093</td>
<td>0.149*</td>
<td>0.236***</td>
</tr>
</tbody>
</table>

\(+ p<.1; * p<.05; **p<.01; ***p<.001\)
Table 2: Summary of Demographic variables

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Satire Low (M=3.65, SD=1.66)</th>
<th>Satire High (M=3.71, SD=1.69)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humor show viewing frequency (Television)</td>
<td>37.19%</td>
<td>43.02%</td>
</tr>
<tr>
<td>Humor show viewing frequency (Online)</td>
<td>39.67% (M=3.72, SD=1.83)</td>
<td>40.70% (M=3.73, SD=1.52)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>M=35.3, SD=11.56</td>
<td>M=34.7, SD=12.78</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian (white)</td>
<td>67.89%</td>
<td>69.33%</td>
</tr>
<tr>
<td>Others (non-white)</td>
<td>32.1%</td>
<td>30.67%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>56.88% (N=62)</td>
<td>30.67% (N=23)</td>
</tr>
<tr>
<td>Female</td>
<td>43.12% (N=47)</td>
<td>69.33% (N=52)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>38.53%</td>
<td>42.67%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>29.36%</td>
<td>26.67%</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>11.01%</td>
<td>16%</td>
</tr>
<tr>
<td>Associate degree</td>
<td>13.76%</td>
<td>12%</td>
</tr>
<tr>
<td>Professional degree</td>
<td>3.67%</td>
<td>2.67%</td>
</tr>
<tr>
<td>Registered voter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>90.83%</td>
<td>88%</td>
</tr>
<tr>
<td>No</td>
<td>9.17%</td>
<td>12%</td>
</tr>
<tr>
<td>Nationality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>---------------</td>
<td>-------</td>
</tr>
<tr>
<td>U.S. citizen</td>
<td>97.25%</td>
<td>100%</td>
</tr>
<tr>
<td>Non U.S. citizen</td>
<td>2.75%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 3: Pretest table

*Independent sample t-test of the videos with highest mean from the low satire group and lowest mean from the high satire group*

<table>
<thead>
<tr>
<th></th>
<th>Video with highest mean (Low satire)</th>
<th>Video with lowest mean (High satire)</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Satire</td>
<td>4.44</td>
<td>.985</td>
<td>5.40</td>
</tr>
<tr>
<td>Funny</td>
<td>2.27</td>
<td>.802</td>
<td>2.12</td>
</tr>
</tbody>
</table>

*p<.01