

CARRYING FORWARD THE USES AND GRATS 2.0 AGENDA: DEVELOPING AN  
AFFORDANCE-BASED MEASURE OF SOCIAL MEDIA USES AND  
GRATIFICATIONS, AND APPLYING IT ACROSS POLITICAL ACTORS AND  
ATTRIBUTES

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By  
Chamil Rathnayake

Dissertation Committee:  
Jenifer Sunrise Winter, Chairperson  
Scott Robertson  
Wayne Buente  
Francis Dalisay  
Ronald Heck, University Representative

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## **Abstract**

Despite its theoretical relevance, the notion of social media affordances has not permeated social media uses and gratifications studies. This has resulted in a need for research that focuses on developing affordance-based measures and testing them across user populations. Recognizing this need, Sundar (2008) and Sundar and Limperos (2013) suggested an affordance-based conceptual framework, known as the MAIN model, which can help develop potential measures of new media uses and gratifications. This study used the MAIN framework to develop an affordance-based scale for social media uses and gratifications and used it to characterize political actors, particularly dissidents and allegiants, and individuals with different levels of political tolerance and dogmatism. The first phase of the study focused on developing the social media uses and gratifications scale, using a convenience sample of 393 university students. The results of the first phase supported the conceptual accuracy of the MAIN model, indicating that conceptualizing social media uses and gratifications as a second-order factor structure that classifies social media uses and gratifications constructs into four different types of affordances (Modality, Agency, Interactivity, and Navigability) does not jeopardize the statistical validity of measures. The scale developed in the first phase was applied in the second phase to examine social media uses and gratifications that can characterize political actor types and levels of political dogmatism and tolerance. A sample of 313 American citizens above the age of 18, collected through a professional data collection service, was used to test five discriminant models to achieve this goal. The first three discriminant models showed that social media uses and gratifications can be used to

classify political actor types with nearly 70% accuracy. However, the results painted a nuanced picture, indicating that social media uses and gratifications can describe differences as well as similarities between potential political dissidents and allegiants. While Realism, Coolness, and Agency-enhancement gratifications were common among dissidents and allegiants, dissidents showed significantly lower Filtering than allegiants. The fourth and fifth discriminant models also had more than 70% classification accuracy. According the last two models, uses and gratifications, such as Realism and Play, can characterize dogmatism, and Coolness, Filtering, and Browsing can indicate high political tolerance. The contribution of this dissertation research is two-fold. First, it suggests a potential affordance-based social media uses and gratifications scale that can be used in future research. Second, it suggests that, as opposed to the utopian perspective that social media are ideal platforms for alternative politics, they can cater to individuals engaged in both anti- and pro-system politics as well as politically dogmatic users.

## Table of Contents

CHAPTER 1 .....	1
1.1. Introduction .....	1
CHAPTER 2 .....	7
2.1. Introduction .....	7
2.2. Uses and Gratifications Approach.....	7
2.3. The Internet and Uses and Gratifications .....	10
2.4. The Need for Platform-Oriented Measures .....	16
2.5. Political Actors, Attributes, and Uses and Gratifications .....	25
2.6. “Potential Dissidents” rather than Dissidents .....	30
2.7. Tolerance versus Dogmatism.....	39
CHAPTER 3 .....	47
3.1. Introduction .....	47
3.2. Measures.....	47
3.2.1. Phase 1: Uses and Gratifications.....	47
3.2.1.1. Item Development .....	51
3.2.2. Phase 2: Trust, Efficacy, Dogmatism, and Tolerance.....	56
3.3. Data Collection.....	59
3.3.1. Phase 1: Survey.....	59
3.3.2. Phase 2: Survey.....	61
3.4. Data Analysis .....	63
3.4.1. Phase 1 .....	63
3.4.1.1. Identification and Assessment of the Latent Factor Structure .....	63
3.4.2. Phase 2 .....	64
3.4.2.1. Identification of Political Actors and Attributes .....	64
3.5. Analysis .....	66
CHAPTER 4 .....	67
4.1. Introduction .....	67
4.2. Identification of Latent Constructs.....	67

4.3. Assessment of the Latent Factor Structure.....	75
CHAPTER 5 .....	84
5.1. Introduction .....	84
5.2. Confirmatory Factor Analysis .....	84
5.3. Political Actors and Uses and Gratifications.....	87
5.3.1. Step 1: All Actor Categories .....	93
5.3.2. Step 2: Dissidents, Allegiants, and Subordinates.....	96
5.3.3. Step 3: Dissidents, Allegiants, and Moderates.....	99
5.4. Political Dogmatism and Tolerance .....	102
CHAPTER 6 .....	109
6.1. Introduction .....	109
6.2. Carrying Forward the Uses and Grats 2.0 Agenda.....	110
6.3. Social Media, a Level Field or Dissidents' Utopia?.....	115
CHAPTER 7 .....	123
7.1. Introduction .....	123
7.2. An Affordance-based Measure of Social Media Uses and Gratifications .....	123
7.2.1. Points of Departure from the Original Conceptualization .....	125
7.2.2. Future Applications of the Measure.....	126
7.3. Political Actors, Attributes, and Social Media Uses and Gratifications .....	126
7.3.1. Recommendations for Platform Designers and Policy Makers .....	127
7.4. Limitations .....	130
7.4.1. Phase 1: Social Media Uses and Gratifications Scale.....	130
7.4.2. Phase 2: Political Actors, Attributes, and Social Media Uses and Gratifications .....	130
Appendix A.....	132
Appendix B.....	148
Appendix C.....	166
Appendix D.....	173
Appendix E.....	179
Appendix F.....	182
References.....	185

## List of Tables

1. Measures Used in the Internet/Social Media Uses and Gratifications Studies.....	19
2. New Gratifications from Media Technology Suggested by Sundar and Limperos.....	24
3. MAIN Dimensions and Measures Suggested by Sundar and Limperos (2013).....	48
4. Items Used in the First Survey.....	51
5. Trust and Efficacy Measures.....	56
6. Dogmatism and Tolerance Measures.....	58
7. Frequencies and Percentages- Sample I.....	60
8. Frequencies and Percentages- Sample II.....	62
9. Factor Loadings: Modality.....	68
10. Factor Loadings: Agency.....	70
11. Factor Loadings: Interactivity.....	71
12. Factor Loadings: Navigability.....	72
13. Correlations among Constructs.....	74
14. Standardized Regression Weights.....	79
15. Descriptive Statistics and Internal Consistency.....	81
16. Results of the Multivariate Tests(c).....	82
17. Means and Standard Deviations by Political Actor Category.....	88
18. Results of MANOVA based on Actor Category.....	89

19. Waller-Duncan Test Results for Filtering.....	89
20. Waller-Duncan Test Results for Responsiveness.....	90
21. Waller-Duncan Test Results for Realism.....	90
22. Waller-Duncan Test Results for Coolness.....	91
23. Waller-Duncan Test Results for Agency.....	91
24. Waller-Duncan Test Results for Community Building.....	91
25. Waller-Duncan Test Results for Activity.....	91
26. Waller-Duncan Test Results for Play.....	92
27. Eigenvalues and Wilks' Lambda Test Results- Step 1.....	93
28. Standardized Canonical Discriminant Function Coefficients.....	94
29. Classification Results(a)- All Political Actor Categories.....	95
30. Eigenvalues and Wilks' Lambda Test Results of Model 2.....	96
31. Standardized Canonical Discriminant Function Coefficients.....	97
32. Classification Results(a), Dissidents, Allegiants, and Subordinates.....	99
33. Eigenvalues and Wilks' Lambda Test Results- Model 3.....	100
34. Standardized Canonical Discriminant Function Coefficients.....	100
35. Means and Standard Deviations by Dogmatism Category.....	102
36. Classification Results(a)- Moderates, Dissidents, and Allegiants.....	103
37. Results of the MANOVA based on Dogmatism Category.....	104
38. Eigenvalues and Wilks' Lambda Test Results- Political Dogmatism.....	105
39. Classification Results(a)- Dogmatism Categories.....	105
40. Means and Standard Deviations by Tolerance Category.....	106
41. Results of the MANOVA based on Tolerance Category.....	107

42. Eigenvalues and Wilks' Lambda Test Results- Political Tolerance.....	108
43. Classification Results(a)- Tolerance Categories.....	108
44. Revised MAIN Framework for Social Media Uses and Gratifications.....	114

## List of Figures

1. Relationship of Trust and Efficacy to Political Orientation, Behavior of Regime, and Nature of Political System.....	38
2. Model 1: First-order Factor Structure.....	77
3. Model II: Social Media Uses and Gratifications Scale as a Second-order Structure.....	78
4. Confirmatory Factor Analysis of Uses and Gratifications Constructs.....	86
5. Confirmatory Factor Analysis of Political Trust, Efficacy, Tolerance, and Dogmatism Constructs.....	87
6. Canonical Discriminant Functions for All Actor Categories.....	95
7. Canonical Discriminant Functions for Dissidents, Allegiants, and Subordinates.....	98
8. Canonical Discriminant Functions- Dissidents, Allegiants, and Moderates.....	101

## List of Appendix Tables

1. CMIN.....	166
2. RMR, GFI.....	166
3. Baseline Comparisons.....	166
4. Parsimony-adjusted Measures.....	166
5. NCP.....	166
6. FMIN.....	166
7. RMSEA.....	166
8. AIC.....	167
9. ECVI.....	167
10. HOELTER.....	167
11. Regression Weights: (Group number 1 - Default model).....	167
12. Standardized Regression Weights: (Group number 1 - Default model).....	168
13. Covariances: (Group number 1 - Default model).....	169
14. Correlations: (Group number 1 - Default model).....	170
15. Variances: (Group number 1 - Default model).....	171
16. CMIN.....	173
17. RMR, GFI.....	173
18. Baseline Comparisons.....	173
19. Parsimony-adjusted Measures.....	173
20. NCP.....	173
21. FMIN.....	173
22. RMSEA.....	173

23. AIC.....	174
24. ECVI.....	174
25. HOELTER.....	174
26. Regression Weights: (Group number 1 - Default model).....	174
27. Standardized Regression Weights: (Group number 1 - Default model).....	175
28. Covariances: (Group number 1 - Default model).....	176
29. Correlations: (Group number 1 - Default model).....	176
30. Variances: (Group number 1 - Default model).....	177
31. Waller-Duncan Test Results- Realism.....	179
32. Waller-Duncan Test Results- Coolness.....	179
33. Waller-Duncan Test Results- Being There.....	179
34. Waller-Duncan Test Results- Agency.....	179
35. Waller-Duncan Test Results- Community Building.....	180
36. Waller-Duncan Test Results- Filtering.....	180
37. Waller-Duncan Test Results- Activity.....	180
38. Waller-Duncan Test Results- Responsiveness.....	181
39. Waller-Duncan Test Results- Browsing.....	181
40. Waller-Duncan Test Results- Play.....	181
41. Waller-Duncan Test Results- Realism.....	182
42. Waller-Duncan Test Results- Coolness.....	182
43. Waller-Duncan Test Results- Being There.....	182
44. Waller-Duncan Test Results- Agency.....	182
45. Waller-Duncan Test Results- Community Building.....	183

46. Waller-Duncan Test Results- Filtering.....	183
47. Waller-Duncan Test Results- Activity.....	183
48. Waller-Duncan Test Results- Responsiveness.....	184
49. Waller-Duncan Test Results- Browsing.....	184
50. Waller-Duncan Test Results- Play.....	184

# CHAPTER 1

## INTRODUCTION

### 1.1. Introduction

The rise of social media has resulted in dramatic changes in the way media audience is conceptualized. Social media platforms, such as social network sites, blogs, video-sharing sites, and picture-sharing sites, have offered new affordances for users to interact, publish content, and access and share information. Compared to the relatively passive traditional media audience, social media users are more active and engaged. As Sundar and Limperos (2013) put it, “[t]hanks to the Internet, the concept of ‘active audience’ has now reached a pinnacle” (p. 504). This transformation of the notion of “passive audience” into the “active user” demands academic work on social media consumption. Social media are diverse. Social network sites, such as Facebook, offer interactivity while blogs offer content production. While Twitter facilitates having or being part of an audience that receives short “tweets,” YouTube promotes video production and sharing. Each of these sites caters to different needs provides uses and gratifications. Accordingly, examining uses and gratifications of social media users help researchers to understand how social media have changed media consumption.

The Uses and Gratifications approach (U&G approach) is a much-debated theoretical approach that has its origins in media effects studies (Ruggiero, 2000). This approach has direct implications for understanding dynamics of social media consumption. Examining the U&G approach in the context of social media requires identifying unique uses and gratifications, developing and validating measures, and testing them across different user groups and platforms. Scholars have highlighted the importance of examining uses and gratifications in the context of computer-mediated communication even before the rise of social media (e.g., Ruggiero, 2000).

The body of social media uses and gratifications literature has expanded ever since, focusing on different platforms, such as social network sites (e.g., Alhabash, Chiang, & Huang, 2014; Apaolaza, He, & Hartmann, 2014; Chen & Kim, 2013; Lan-Ying, Hsieh, & Wu, 2014; Pai & Arnott, 2013; Smock, Ellison, Lampe, & Wohn, 2011), online games (e.g., Wu, Wang, & Tsai, 2010), micro-blogs (e.g., Chen, 2011), crowd-sourced business review sites (e.g., Hicks et al., 2012), social recommendation systems (e.g., Kim, 2014), web-based information services (e.g., Luo & Remus, 2014), and social media in general (e.g., Leung, 2013; Wang, Tchernev, & Solloway, 2012).

According to Ruggiero (2000), scholars have acknowledged that the U&G approach is flawed as it had become too individualistic with its focus on audience and compartmentalized with different typologies, resulting in inconsistencies and a lack of synthesis. Studies that focus on social media uses and gratifications should avoid this flaw. Although literature on social media uses and gratifications is diverse in terms of measures used, and platforms and populations examined, many studies tend to use more user-centered measures such as socializing, entertainment, information sharing, escapism, need to connect, and convenience (e.g., Apaolaza et al., 2014; Chen, 2011; Hicks et al., 2012; Lan-Ying et al., 2014; Smock et al., 2011). This indicates that relatively less attention has been paid to platform or affordance-based uses and gratifications, leading to the issue of social media uses and gratifications studies also being too individualistic. Social media researchers should address this issue as social media uses and gratifications depend on users as well as the design of the platforms. Moreover, the measures used in recent social media uses and gratifications studies are also varied, leading to the issue of inconsistency. Social media researchers need to acknowledge this issue, and develop and test measures that consider different audiences as well as the design of the platforms. Sundar and

Limperos (2013) identify this issue and claim that new media studies tend to be biased towards social and psychological factors rather than medium-related factors. They suggest that researchers need to focus on the technology itself and the new uses and gratifications they create. Sundar and Limperos, as discussed in Chapter 2, suggest sixteen types of gratifications based on four classes of social media affordances (Modality, Agency, Interactivity, and Navigability) and items<sup>1</sup> that can be used to measure those gratifications.

The Uses and Grats 2.0 framework, also known as the MAIN model, suggested by Sundar and Limperos (2013) provides an affordance-based perspective to understand social media uses and gratifications. Therefore, developing a scale to measure social media uses and gratifications using Sundar and Limperos's framework and testing it across different actors and attributes help strengthen the body of uses and gratifications literature. In addition to the conceptualization, Sundar and Limperos suggest a pool of items to operationalize U&G constructs. This pool of items needs refinement as it includes general statements targeted at new media and items focused on devices. New media is a nebulous concept, and items suggested by Sundar and Limperos to measure new media uses and gratifications should be situated in a more strictly defined social media context.

Social media users are diverse and their uses and gratifications might reflect those differences. Accordingly, a second step to contribute to social media uses and gratifications literature is to use the validated Uses and Grats 2.0 framework to examine how social media uses and gratifications differ across different actors and/or attributes. This study argues that social media uses and gratifications can differ between potential political dissidents and assureds (or those who trust the existing political system). Moreover, the study argues that some social media uses

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<sup>1</sup> This set of items is called the Uses and Grats 2.0 framework in this study.

and gratifications can characterize individuals with different levels of political dogmatism and tolerance.

Social media have become attractive venues for politics as they offer new affordances that can promote political engagement. This is particularly the case among groups that seek alternative platforms for political expression and activism. Many recent studies show that social media help citizens engage in alternative politics and build counter-power (e.g., Al-Ani, Mark, Chung, & Jones, 2012; Lim, 2012; Marzouki, Skandrani-Marzouki, Béjaoui, Hammoudi, & Bellaj, 2012).

The fact that these studies provide compelling evidence on effective use of social media by political dissidents helps support the argument that some social media uses and gratifications may relate to different types of political actors. For instance, a political dissident may expect a different set of gratifications than a person who supports the existing political system. Moreover, given the ability of social media to provide easy-to-access platforms for expression and interaction, those who have high potential to be dissidents on social media (“potential dissidents”) might seek specific uses and gratifications. Similarly, types of gratifications people seek on social media may depend on their political attributes. For instance, those who are politically dogmatic may seek different gratifications than others. Although several researchers have examined social media use among dissidents, there is a need for studies that examine uses and gratifications sought by potential dissidents and the individuals characterized by different political attributes, such as dogmatism and tolerance.

Accordingly, this dissertation research is organized as a two-phase study to contribute to the social media uses and gratifications literature:

Phase 1: Develop a scale to measure social media uses and gratifications based on the MAIN model suggested by Sundar and Limperos (2013).

Phase 2: Applying the scale developed in the first phase to examine uses and gratifications that can characterize political actor types (potential dissidents, allegiants, subordinates, and moderates) and two types of attributes (dogmatism vs. tolerance).

Although recent literature examines Internet uses and gratifications across different platforms, the attention paid on examining this phenomenon across different user categories is inadequate. Moreover, while there is a few studies have examined uses and gratification across different groups (e.g., Stafford, 2003), there is a dearth of studies that examine differences in uses and gratifications across political actors. As argued above, different uses and gratifications can characterize political actors (e.g., potential political dissidents) and attributes (e.g., political dogmatism). This phenomenon has not been subject to academic investigation and this study seeks to fill this gap. This work is significant as it can provide important insight towards understanding the connection between political dissidence, tolerance, and social media uses and gratifications. Aside from its theoretical significance, this study provides guidelines for platform designers and policy makers to make better decisions to improve online political engagement. This dissertation includes seven chapters. The first chapter provides an overview of the study. The second chapter discusses related literature in detail, focusing on uses and gratifications approach, and asks six research questions connecting social media uses and gratifications with potential political dissidence, and political dogmatism and tolerance. The method used in the study is discussed in detail in the third chapter. This includes data collection, measures and analytical techniques used and the composition of the samples. The results of the study are presented in two chapters. The fourth chapter presents the results of the factor analyses used to test the validity of the suggested measure. The fifth chapter is an application of the scale that connects political actor types and attributes with social media uses and gratifications. The results

reported in fourth and fifth chapters are discussed in the sixth chapter, connecting the results with previous. The final chapter presents conclusions and recommendations, and discusses the limitations of the study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1. Introduction

Studying social media uses and gratifications across political actors and attributes requires examining the current state of Internet uses and gratifications literature, searching for possible gaps or weaknesses, identifying constructs that can be used to differentiate between political dissidents and allegiants, and searching for constructs to operationalize political attributes, such as dogmatism and tolerance. This requires drawing on literature from the fields of media studies, communication, and political science. The following literature review discusses why developing a measure of affordance-based social media uses and gratifications is important and identifies the need for applying it across political actors and attributes. This review leads to six research questions that the study expects to answer.

#### 2.2. Uses and Gratifications Approach

The U&G approach has its origins in media effects studies. It suggests that there are media uses and gratifications that attract audiences and satisfy their social and cognitive needs (Ruggiero, 2000). As Katz, Blumler, and Gurevitch (1973) noted, origins of interest in media gratifications date back to the beginning of empirical mass communication research, and U&G studies were represented in early media studies research conducted in the 1940s. According to Katz, Blumler, and Gurevitch, while the early U&G studies focused on open-ended responses and had a qualitative approach, they failed to examine links between gratifications and the psychological or sociological origins of the needs and the relationships among different media functions. They note, however, that the field expanded rapidly, resulting in a press toward systematization of research work in the area.

In general, U&G holds that people choose media that they think can satisfy their needs. Katz, Blumler, and Gurevitch highlight seven areas that empirical approaches in uses and gratifications studies have addressed:

- (1) the social and psychological origins of
- (2) needs, which generate
- (3) expectations of
- (4) the mass media or other sources, which lead to
- (5) differential patterns of media exposure (or engagement in other activities), resulting in
- (6) need gratifications and
- (7) other consequences, perhaps mostly unintended ones. (p.510)

These seven areas can be considered the core of the idea of media uses and gratifications.

According to Katz, Blumler, and Gurevitch, the uses and gratifications approach “simply represents an attempt to explain something of the way in which individuals use communications, among other resources in their environment, to satisfy their needs and to achieve their goals, and to do so by simply asking them” (p. 510).

According to Rubin (1994), contemporary uses and gratifications theory is based on five assumptions:

- (a) “communication behavior, including media selection and use, is goal-directed, purposive, and motivated,”
- (b) “people take the initiative in selecting and using communication vehicles to satisfy felt needs or desires,”
- (c) “a host of social and psychological factors mediate people’s communication behavior,”
- (d) “media compete with other forms of communication (i.e., functional alternatives) for selection, attention, and use to gratify our needs or wants,”
- and (e) “people are typically more influential than the media in the relationship, but not always.” (p. 420)

Although early studies examined the U&G approach from different perspectives, they were subject to heavy critique. Scholars argued that it presented a more general approach, the concepts

lacked adequate definition, and it was too individualistic and lacked consideration of micro or macro factors related to power, media ownership and ideology (Papacharissi, 2009). According to Katz (1987), early U&G studies had issues of relying too heavily on self-reports, being unsophisticated in terms of the social origins of the needs, being uncritical of possible dysfunctions of audience satisfactions, and being captivated by the inventive diversity of audience uses. Despite the heavy criticism it has received, the U&G approach is still a widely-discussed theoretical approach in media effects research. The approach also has its strengths. According to Papacharissi (2009), the strength of this approach lies in its applicability across a variety of media contexts. Haridakis (2013) notes that the strength of U&G is its focus on the individual, which results in the theory being adaptable to changes in the media landscape. A large volume of studies has been conducted examining different aspects of uses and gratifications in the context of traditional media. Uses and gratifications have been examined in the context of different media such as newspapers (e.g., Elliot & Rosenberg, 1987), radio (e.g., Towers, 1987), television (e.g., Rubin, 1983), telephone (e.g., O'Keefe & Sulanowski, 1995), and cell phones (e.g., Leung & Wei, 2000). Researchers have also looked at uses and gratifications across different types of programs and content, such as reality TV (e.g., Barton, 2009, 2013; Papacharissi & Mendelson, 2007), reality-based and fictional TV programs (e.g., Nabi, Stitt, Halford, & Finnerty, 2006), television home shopping (e.g., Cortese & Rubin, 2010), and music (e.g., Lonsdale & North, 2011).

The contemporary uses and gratifications literature covers a broad range. According to Papacharissi (2009), a typical U&G study can look at a specific medium, compare it with another medium, and study different aspects, such as motives, social and psychological antecedents, and effects of media consumption. Haridakis (2013) notes that typical U&G studies look at aspects

such as the relevance of audience characteristics to the subject of interest (e.g., relationships between audience characteristics and factors such as motives for using, preference for, and effects of media violence). The wide range covered by uses and gratifications studies makes the body of literature rich in terms of its depth, diversity, and methodological rigor.

The rapid expansion of the Internet and social media has resulted in dramatic changes in the media landscape. This requires examining uses and gratification in the context of the Internet and social media. A considerable number of studies has already been published on uses and gratifications in the context of the Internet and social media. The following section discusses the nature of the studies that examine social media uses and gratifications, measures used, and issues and weaknesses.

### **2.3. The Internet and Uses and Gratifications**

The Internet is different from traditional media. According to Flanagin and Metzger (2001), three functions (information retrieval, information giving, and conversation capabilities) characterize the use of the Internet, and these functions include aspects of mediated interpersonal technologies (e.g., telephone) and mass media (e.g., television). The Internet is more engaging and interactive, and the differences between mainstream media and the Internet raise the need for U&G studies that focus on its unique characteristics. Ruggiero (2000) noted, “if the Internet is a new dominion of human activity, it is also a new dominion for U&G researchers” (p. 28).

The Internet has affected interpersonal, as well as, mass communication. The rise of social media, in particular, has resulted in changes in the way media audiences are perceived. As opposed to the relatively passive audience of traditional media, social media users are considered active and engaged. For example, work of Hargittai and Shaw (2013) shows that Internet skills and use of social network sites lead to high levels of engagement among young adults. The notion of a

social media user, however, is a dynamic phenomenon, as there is a range of different social media users. As Papacharissi (2009) notes, the rise of personalized publishing has given an opportunity for researchers to look at users as producers. For instance, a blogger or a “YouTuber” can be considered a producer. Moreover, there are many other roles users play on different social media platforms. A social media user that uses the platforms to organize activity is different from a producer. A less-active user could be just a reader or a “commenter.” There are many other roles that users play on social media. Accordingly, the transformation of the passive viewer, listener, or reader to the active social media user requires studies that examine the dynamics of social media uses and gratifications. Studies that focus on social media uses and gratifications need to understand the nature of the users, platforms, and how different platforms satisfy uses and gratifications of different users.

Although social media have provided a new domain of study for uses and gratifications researchers, the fundamental questions U&G scholars ask remain the same, as the theory is applicable across a broad range of media. Ruggiero (2000) highlights that, theoretically and practically, the question remains unchanged, i.e., “[w]hy do people become involved in one particular type of mediated communication or another, and what gratifications do they receive from it?” (p. 29). As social media platforms are diverse and they continue to evolve, U&G studies need to conceptualize new uses and gratifications resulting from social media, develop measures to operationalize them, and measure them across different populations. Researchers identified this need even before the rise of social media. Ruggiero, for instance, claimed that that while using the traditional tools and typologies, U&G studies should include concepts such as interactivity, demassification, hypertextuality, and asynchronicity to accommodate the changes related to computer-mediated communication.

Many scholars have examined different aspects of uses and gratifications in the context of the Internet and social media. Some of these studies were conducted even before the massive expansion of social media platforms (e.g., Chou & Hsiao, 2000; Ferguson & Perse, 2000; Flanagin & Metzger, 2001; Papacharissi & Rubin, 2000; Parker & Plank, 2000; Stafford & Stafford, 2001). However, some early studies tend to argue that the uses and gratifications related to the Internet are similar to those of traditional media. For instance, Flanagin and Metzger (2001) argue that, “the Internet is a multidimensional communication technology used to fulfill well-understood needs in novel ways” (p. 175). Parker and Plank (2000) also argue that motivations for using different media are not media dependent, and the Internet serves social, surveillance, and relaxation needs, which other media are also capable of serving. According to Parker and Plank, relaxation and escapism are the primary motives of using the Internet. However, this can depend on factors such as education, social circle, and users’ experience in using online platforms. For instance, young Internet users might seek more entertainment, as opposed to older citizens who seek activities such as political discussions. Ferguson and Perse (2000) answer the question whether, from a U&G perspective, the World Wide Web (WWW) is a functional alternative to the television. They claim that motives such as entertainment, passing time, relaxation, and seeking social information are similar between TV and the WWW. Ferguson and Perse, however, argue that the WWW is different from TV, as it is less relaxing. This happens due to the fact that, although activities such as playing games can provide relaxation to the user, some activities (e.g., web surfing) demand more effort. According to Ferguson and Perse, even clicking links demands more attention and involvement. In contrast to the above arguments, some previous work shows that the Internet might serve unique needs and that Internet users expect unique uses and gratifications. Papacharissi and

Rubin (2000), for example, highlight the informative and interactive capabilities of the Internet, and claim that the relationships between Internet motives and social and psychological antecedents help support that the Internet can be a functional alternative when other channels are not available or rewarding. Their study revealed that information seeking is the most prominent use of the Internet. However, the uniqueness of the Internet relates to the interactive nature of online communication and its effects on interpersonal and group relationships. Several U&G studies highlight that social gratifications are more prominent on the Internet. For instance, Papacharissi and Rubin (2000) explain that the Internet can fulfill interpersonal needs of those who avoid face-to-face communication or find it less rewarding. Stafford and Stafford (2001) argue that, as opposed to two general types of gratifications on traditional media (i.e., process-related motivations such as channel surfing and content-related motivations such as entertainment), socialization is a third type of gratification unique to the Internet.

Social media is a broad concept that includes a wide range of online platforms. Uses and gratifications might depend on the nature of each social media platform, and this calls for academic work that focuses on different platforms. A considerable number of researchers have already examined uses and gratifications in the context of social media and other online platforms. While some of those studies examine platforms such as blogs (e.g., Kaye, 2010), microblogs (e.g., Chen, 2011), and online games (e.g., Wu et al., 2010), many of them examine uses and gratifications in the context of social network sites. These studies also represent a diverse range of scholarly investigation. Some studies provide guidelines to operationalize U&G in unique settings. For instance, Kaye (2010) suggests a scale to measure motivation to use blogs, and this study shows that measures of uses and gratifications of blogs should include unique constructs, such as blog ambience and political debate. Moreover, some studies examine causes

and effects of U&G. Chen (2011), for example, suggests that gratifications, such as sense of camaraderie, are positively moderated by the extent of Twitter use. In addition, some studies examine U&G in the context of practices such as online gaming. A study conducted by Wu et al. (2010) suggests that gratifications (e.g., achievement, enjoyment, and social interaction) as well as service mechanisms (e.g., incentive and security) affect motivation to continue playing, which results in proactive stickiness (i.e., intention to prolong one's stay and playing the game frequently).

The rise of social network sites is a significant change in social media. Ellison and boyd (2013) describe that participation on social network sites has evolved from the traversing of connections between people to a level in which nearly everything is traversable and a stream of content is provided with links to other content. According to Ellison and boyd, social network sites offer space for users to consume, produce, and interact with streams of content produced by other users. Many previous studies examine uses and gratifications unique to social network sites. For instance, Pai and Arnott (2013) highlight the need to differentiate social network sites from other online communities and claim that users adopt social network sites to attain four values (belonging, hedonism, self-esteem, and reciprocity). Ancu and Cozma (2009) claim that social interaction is the primary motive for accessing MySpace profiles of political candidates, while entertainment and information-seeking are secondary motives. Quan-Haase and Young (2010) compare uses and gratifications between Facebook and instant messaging and argue that Facebook users tend to seek enjoyment and knowledge about the social activities within their networks, while instant messaging is focused more on relationship building and maintenance. Some scholars argue that social network sites such as Facebook should be considered as a collection of features, and the uses and gratifications of the platforms may depend on the types of

those features. Smock et al., (2011), for example, suggest understanding Facebook as a toolkit with a collection of features. They argue that there are differences between general Facebook use and the use of specific features on Facebook. According to the results of their study, while only three motivations predict general Facebook use, a relatively higher number of variables can predict motivations for using specific features, such as status updates, wall posts, comments, chat, and groups. Krause, North, and Heritage (2014) examine the motives for listening to music on Facebook and identify three gratifications: entertainment, communication (e.g., promoting a band), and habitual diversion. The common feature of the above studies is that they focus more on explaining uses and gratifications unique to the Internet and social media. This is an important stage for the development of the body of literature as identifying social media uses and gratifications is a necessary first step towards examining more complex aspects along this line. Although recent U&G literature tends to pay more attention to exploring uses and gratifications in social media, some studies attempt to examine causes and effects of social media uses and gratifications. For instance, Chen and Kim (2013) examine the relationships between uses and gratifications and problematic uses of social network sites. Their study shows that entertainment or pleasure gratifications can lead to problematic use of social network sites, as they can override privacy concerns. Chen and Kim claim that social network site users develop a gain-risk ratio to decide whether to seek more gratifications and ignore privacy risks, or vice versa. Chen and Kim consider uses and gratifications constructs as independent variables. Apaolaza et al., (2014) also treat uses and gratifications constructs as independent variables. They examine the effects of uses and gratifications on the positive mood of Chinese adolescents. The findings of this study indicate that socializing, entertainment, and information-seeking gratifications of using social network sites can positively affect the mood of adolescents. Huang et al. (2014) examine the

mediating effect of users' experiences of interaction and arousal on the relationship between uses and gratifications and behavioral outcomes. The results reveal that while arousal is a full mediator of the effect of social gratifications on problematic social network use, arousal and interaction partially mediate the effect of uses and gratifications on intention to revisit those sites. The authors argue that the arousal level of the user determines his or her problematic social network use.

#### **2.4. The Need for Platform-Oriented Measures**

As discussed above, the body of social media uses and gratification literature, in general, pays more attention to identifying uses and gratifications, and examining gratifications that play a primary role in use of social media. This, however, does not necessarily include attempts to identify unique gratifications of social media. Differences between social media and traditional media may result in new media being able to generate new uses and gratifications. Accordingly, social media uses and gratifications studies need to focus on at least two aspects. On one hand, it is necessary to evaluate the recent social media uses and gratifications literature in terms of its coverage of unique uses and gratifications. On the other hand, those measures need to be evaluated in terms of their coverage of user-based and platform-based gratifications.

The notion of social media affordances has recently gained the attention of social media scholars. Generally defined, affordances relate to the mutuality between social media users and features of the platforms that enable or constrain behavior. Majchrzak, Faraj, Kane, and Azad (2013) identify technology affordances as "the mutuality of actor intentions and technology capabilities that provide the potential for a particular action" (p. 39). According to boyd (2011), affordances can destabilize core assumptions related to engaging in social life and reshape publics directly and indirectly. boyd notes that affordances such as persistence, replicability, scalability, and

searchability of online content can play a significant role and help scholars understand why people engage the way they do. This concept is important for social media studies, as affordances can structure user actions. As affordances can enable or constrain actions of the user, they can have an effect on social media uses and gratifications. However, there is a lack of studies that take an affordance perspective to examine uses and gratifications.

Sundar and Limperos (2013) discuss new media uses and gratifications and stress the importance of conceptualizing affordance-based uses and gratifications. They highlight that new media uses and gratifications studies have only slightly modified older media gratifications to suit new media, and use 20 studies published between 1940 and 2011 to reveal overlaps in measures across different types of new media. They argue that nuanced, and perhaps new, gratifications have not been fully specified. Sundar and Limperos note:

Beyond these three broad classifications of process, content, and social gratifications, the literature on U&G studies does not offer specific insight into the changing nature of media-related gratifications. In order to capture the increasing volume and diversity of gratifications being obtained by such heavily used media products as Twitter, Facebook, and mobile games, it is time that we broaden our focus beyond social and psychological origins of needs, and also consider potential influences of the perceived capabilities of the media technology upon our gratifications. (p. 510)

The collection of studies used by Sundar and Limperos covers a broad range of technologies or media, such as radio talk show, telephone, newspaper, TV, VCR, political blogs, video games, cell phones, MP3, YouTube, social networks, and Twitter. While these studies help the authors to argue that affordance-based measures are necessary, they do not necessarily represent what is commonly known as social media. Therefore, their argument should be supported by a more

thorough examination of recent measures used in uses and gratifications studies that focus on social media platforms. Such a review is necessary as social media are different from media such as radio, telephone, and TV, and a reasonable number of social media U&G studies has been conducted within the last five years. Moreover, a review of measures used in recent social media uses and gratifications literature is important to argue that social media uses and gratifications studies have not yet identified gratifications that can characterize social media.

Social media studies should take into consideration aspects such as the interactive nature of social media platforms, ability of users to create and manage content, and the wide variety of features available. Table 1 shows measures used in twenty-five studies conducted from 2009 to 2014 that examine uses and gratifications on the Internet (these measures are listed in the table in their original form without changing the word choice of the authors). According to these measures, previous studies have used a considerably diverse set of measures that capture the uniqueness of social media. Measures such as socializing (Apaolaza et al., 2014), virtual community (Chen & Kim, 2013), socialization-seeking (Kim, 2014), interpersonal utility (Luo & Remus, 2014), reciprocity (Pai & Arnott, 2013), expressive information sharing, companionship, professional advancement, social interaction, meeting new people (Smock et al., 2011), career opportunities, global exchange (Roy, 2009), surveillance (Zhang & Zhang, 2013), self-status seeking (Park, Kee, & Valenzuela, 2009), spiritual support, psychological support, and networking (Anderson, 2011) cover a broad range of unique gratifications that social media users seek.

Table 1: Measures Used in the Internet/Social Media Uses and Gratifications Studies

Author(s)	U&G Constructs Used/Identified
Alhabash et al., (2014)	Information sharing, self-documentation, social interaction, entertainment, passing time, self-expression, and medium appeal
Apaolaza et al., (2014)	Socializing, information seeking, and entertainment
Chen (2011)	Gratification of the need to connect
Chen & Kim (2013)	Virtual community, diversion, self-presentation, relationship maintenance, relationship building, and information seeking,
Hicks et al., (2012)	Internet motives scale (Papacharissi & Rubin, 2000)
Lan-Ying et al., (2014)	Social gratifications
Kim (2014)	Expression-seeking, information-seeking, socialization-seeking, entertainment-seeking
Leung (2013)	Social and affection needs, venting negative feeling, recognition needs, cognitive needs
Luo & Remus (2014)	Information seeking, interpersonal utility, entertainment, pass time, convenience
Pai and Arnott (2013)	Belonging, hedonism, self-esteem, reciprocity
Smock et al., (2011)	Relaxing entertainment, expressive information sharing, escapism, cool and new trend, companionship, professional advancement, social interaction, habitual pass time, to meet new people
Wang et al., (2012)	Emotional gratification, cognitive gratification, social gratification, habitual gratification
Luo, Chea, and Chen (2011)	Interpersonal utility, convenience, pass time, entertainment, information seeking, behavioral usage
Roy (2009)	Self-development, wide exposure, user friendly, relaxation, career opportunities, global exchange

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Ku, Chu, and Tseng (2013)	Relationship maintenance, information seeking, amusement, style, sociability, killing time
Zhang and Zhang (2013)	Surveillance, status, opinion, social utility, involvement, freedom, spontaneity, mastery, intrinsic
Lin (2014)	Surveillance, pass time, entertainment, relaxation, escape, local news
Krause, North, and Heritage (2014)	Communication, entertainment, habitual diversion
Raacke and Bonds-Raacke (2008)	To keep in touch with old friends, to keep in touch with current Friends, to post/look at pictures, to make new friends, to locate old friends, to learn about events, to post social functions, to feel connected, to share information about yourself, for academic purposes, for dating purposes
Quan-Haase and Young (2010)	Pastime, affection, fashion, share problems, sociability, social information
Park, Kee, and Valenzuela (2009)	Socializing, entertainment, self-status seeking, information seeking
Anderson (2011)	Network, convenience, spiritual support, psychological support
Ancu and Cozma (2009)	Social utility, information and guidance, entertainment
Kaye (2010)	Convenient information seeking, anti-traditional media sentiment, expression/affiliation, guidance/opinion seeking, blog ambiance, personal fulfillment, political debate, variety of opinion, specific inquiry
Ko, Cho, and Roberts (2013)	Information, convenience, entertainment, social interaction

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Arguably, uses and gratifications can be classified as either user-oriented or platform-oriented.

User-oriented uses and gratifications focus on gratifications with less emphasis on the features or affordances of the platform. For instance, socializing, spiritual support, and community-building gratifications focus only on the user. Platform-oriented uses and gratifications take into

consideration the features of the platform. For instance, blog ambiance gratification (Kaye, 2010) acknowledges that the users enjoy the overall atmosphere of a blog, and they identify and enjoy the distinct properties of blogs.

Although the measures summarized in Table 1 adequately cover user-oriented uses and gratifications (e.g., socializing, expressive information sharing, companionship, psychological support, spiritual support, and surveillance) that have social and psychological origins, they lack coverage of social media/platform-oriented measures. Therefore, the argument made by Sundar and Limperos (2013) that there is a lack of emphasis on new media affordances is valid in particular for contemporary social media studies. Arguably, social media may result in platform-oriented gratifications, as there is a range of social media platforms with many features and functionality. Therefore, users may be motivated by the nature of the platform itself. Factors such as the design of the platform may provide gratifications for the users. For instance, navigating a site itself can be psychologically rewarding. The responsiveness of the platform itself may fulfill the need of the user. This argument highlights the need for affordance-based measures for social media uses and gratifications.

The MAIN Model (Sundar, 2008) provides a solid conceptual foundation to examine social media uses and gratifications, considering the effects of affordances. This model suggests that four affordances (Modality, Agency, Interactivity, and Navigability) are prevalent in contemporary digital media, and they are able to cue cognitive heuristics (i.e., judgment rules) that can lead to credibility assessments related to media. These credibility judgments are related to design features and characteristics that affect user impression of the media. Sundar argues that each user is different in terms of the meanings he or she makes from affordances. The MAIN Model suggests that modality cues, agency cues, interactivity cues, and navigability cues

embedded in affordances are significant in shaping user assessment of the medium. Sundar argues that the sheer presence of these affordances results in users experiencing media content in a certain way. Sundar and Limperos (2013) suggest 16 gratifications that relate to four broad classes of affordances (Table 2). In general, the MAIN Model rejects the idea that all gratifications relate to innate needs and argues that new and distinctive gratifications can emerge from new media affordances. The MAIN Model identifies modality, agency, interactivity, and navigability as four types of affordances that can lead to different gratifications. The model emphasizes the capability of a medium to facilitate certain actions and suggests that the user is an integral element as he or she interprets the affordance.

Modality, defined by Sundar and Limperos as “different methods of presentation (e.g., audio or pictures) of media content, appealing to different aspects of the human perceptual system (e.g., hearing, seeing),” acknowledges that the Internet can provide users with content in multiple modalities (e.g., text, video) and some of them can be considered unique (e.g., pop-up ads) (p. 512). Modality can be considered as the most structural affordance in the MAIN Model and it is the most apparent aspect on the interface (Sundar, 2008). Sundar also explains that individual modalities (e.g., text, aural), modalities unique to digital media, and combinations of modalities may cue heuristics. Sundar and Limperos (2013) argue that the visual modality can be more trusted than text (“realism heuristic”), and modalities such as virtual reality can provide a sense of being there (“being-there heuristic”). They also argue that new modalities can cue the “coolness heuristic” and “novelty heuristic.” Accordingly, the modality affordance results in four gratifications (realism, coolness, novelty, and being there).

The agency affordance of the MAIN Model suggests that the Internet allows users to be agents or sources of information, and this view acknowledges the ability of users to be gatekeepers of

content, build communities, and contribute content. As Sundar (2008) explains, the agency affordance acknowledges that in digital media the source can be attributed to a computer, a location (e.g., a website), or even other users. This affordance shows that cognitive heuristics depend on the user's perception of the source. Sundar and Limperos also claim that a bandwagon heuristic can be identified with agency. The bandwagon heuristic occurs when users' agreement or acceptance of something follows the common agreement of others. The agency affordance can also result in filtering and "ownness." According to the MAIN Model, the agency affordance can lead to agency-enhancement, community building, bandwagon, filtering/tailoring, and ownness gratifications.

Interactivity, according to Sundar (2008), is the most distinctive affordance of digital media and it relates to interaction and activity on a given medium. Sundar and Limperos (2013) define interactivity as "the affordance that allows the user to make real-time changes to the content in the medium" (p. 515). Interaction and activity heuristics can be identified with the interactivity affordance, and these heuristics indicate a departure from passivity and the increased availability of options for the users to specify their preferences on an ongoing basis. The interactivity affordance acknowledges that news content is no longer static and the consumer can dynamically manage it. The interactivity affordance includes four gratifications (Interaction, Activity, Responsiveness, and Dynamic Control) (Sundar and Limperos, 2013).

Sundar and Limperos define navigability as "the affordance that allows user movement through the medium" (p. 516). Sundar (2008) notes that metaphors like "site" and "cyberspace" and the availability of navigational aids generated can trigger heuristics. He claims that the sheer presence of navigational aids, such as hyperlinks can trigger certain heuristics. According to Sundar and Limperos (2013), the ability to freely navigate can trigger a "browsing heuristic,"

and interwoven content can trigger an “elaboration heuristic” that demands elaborative processing of relationships between the content in a link and its connection to the main content. Moreover, Sundar and Limperos (2013) argue that navigability can include the expectation that users are scaffolded through certain processes (e.g., online transactions) and will encounter some fun elements. Accordingly, the navigability affordance can result in three gratifications (browsing/variety-seeking, scaffolds/navigation aids, and play/fun).

Table 2: New Gratifications from Media Technology Suggested by Sundar and Limperos (2013)

Modality	Agency	Interactivity	Navigability
Realism	Agency-enhancement	Interaction	Browsing/Variety-seeking
Coolness	Community building	Activity	Scaffolds/Navigation aids
Novelty	Bandwagon	Responsiveness	Play/Fun
Being there	Filtering/Tailoring	Dynamic control	
	Ownness		

Sundar and Limperos argue that the MAIN Model captures the uniqueness of new media, and they suggest a set of potential items to measure each gratification in the model.<sup>2</sup> This model is suitable to examine social media uses and gratifications due to several reasons. First, it focuses on the capacity of the Internet-based platforms to provide a range of usage or engagement options. Second, it suggests platform-oriented gratifications that have not been discussed in previous studies. Moreover, the model is comprehensive and it provides a conceptually rich approach to understanding new media uses and gratifications. However, the MAIN Model has not been subject to adequate academic inquiry, and it has not been validated and tested across different populations. Therefore, the next step to examining social media uses and gratifications using the MAIN Model is to build on the MAIN framework and find the best-fitting constructs and items that can operationalize the constructs suggested. Sundar and Limperos suggest a pool

<sup>2</sup> These constructs and items are explained in Chapter 3

of items that can be used as a starting point to develop a measure of social media uses and gratifications. A scale developed based on these items can help support the conceptual accuracy of the MAIN model and provide a foundation to measure uses and gratifications across different social media users.

## **2.5. Political Actors, Attributes, and Uses and Gratifications**

Social media users are diverse in terms of the platforms they prefer, features they expect, and the social and psychological needs they expect to satisfy. They are also diverse in terms of factors such as the countries and ethnicities they represent, politics they support or oppose, and beliefs and attitudes they have. Therefore, it is possible that some aspects of social media usage characterize certain types of users. This study suggests that differences between social media users in terms of their political actions and attributes may relate to differences in the uses and gratifications they seek.

Some previous work highlights the relationships between social media use and user characteristics. On an explicit level, users who aim to achieve certain outcomes may choose features that help them to achieve them (e.g., having a specific number of likes for a Facebook page). However, selection and use of certain features indicate relationships between users' motives and social media. Therefore, on a more implicit level, user motivations can be connected to the social media features they use. For instance, Smock et al. (2011) argue that the use of different features on social media (e.g., status updates, wall posts) can be predicted based on users' motivations. The results of their study show that expressive information sharing can predict the use of status updates and groups on Facebook, while it has a negative effect on general use. Moreover, user motivations can be linked to the gratifications they seek on social media. Alhabash et al., (2014), for example, argue that users differ in terms of uses and

gratifications based on their motivational reactivity. They argue that risk avoiders tend to indicate higher information sharing than inactives, risk takers, and coactives.<sup>3</sup> Moreover, coactives tend to indicate a desire for higher levels of entertainment value and escapism than inactives, risk takers, and risk avoiders. As Shao (2009) notes, “different uses are driven by different motivations: people consume the content for information and entertainment, participate for social interaction and community development, and produce their own content for self-expression and self-actualization” (p. 9). This argument indicates that consumption of content characterizes a more general entertainment-oriented user while participation and production of content characterizes a socially and politically-oriented user.

Although the above studies (Alhabash et al., 2014; Shao, 2009) provide interesting insight into understanding how social media use relates to different user categories, there is a lack of attention to connections between social media uses and gratifications and different types of political actors and attributes. This is particularly the case with regard to affordance-based uses and gratifications, the gap this study addresses. In general, a few studies have looked at social media uses and gratifications in the context of politics. Ancu and Cozma's (2009) work, for example, focuses on explaining the uses and gratifications of accessing candidate profiles on MySpace. The results of their study indicate that the primary motive for accessing candidate profiles on social network sites is to interact with other supporters. Although the results of this study identify entertainment and information-seeking as motives for accessing political content, those are secondary, compared to the need for interaction with like-minded supporters. Park et al. (2009) also claim that informational uses of social networks relate to civic and political action,

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<sup>3</sup> Alhabash et al. (2014) identify inactives, risk takers, risk avoiders, and coactives based on Appetitive System Activation (ASA) and defensive system activation (DSA). Inactives indicate low ASA and DSA, and coactives show high ASA and DSA. Risk takers have high ASA and low DSA while risk avoiders indicate low ASA and high DSA.

and entertainment does not explain the extent of political participation. These studies indicate that different uses and gratifications can relate to differences in political action.

The need to examine social media uses and gratifications and political attributes arises due to the fact that these platforms are used heavily for political action. Social media platforms such as Facebook, Twitter, YouTube, and blogs are commonly identified as venues suitable for political engagement and activism. Due to high accessibility, wide-spread user populations, and ease of use, they have become venues where people can voice alternative opinions. For instance, social media are said to have played a crucial role in recent uprisings, commonly referred to as the “Arab Spring,” which happened in several countries, primarily in the Middle East. Therefore, the role of social media in political dissent has been discussed in particular. Al-Ani, Mark, Chung, and Jones (2012), for instance, argue that social media help enact counter-power in contexts where counter-narratives are controlled by the government. Al-Ani, Mark, Chung, and Jones discuss how blogs helped create a consistent counter-narrative to the stories published by government media and delegitimize the authority of the Mubarak regime in Egypt.

Some scholars examine the functions of social media platforms during protests. For instance, Marzouki, Skandrani-Marzouki, Béjaoui, Hammoudi, and Bellaj (2012) identify three functions performed by Facebook in the Tunisian revolution: 1) political function, 2) informational function, and 3) media platform function. Similarly, Lim (2012) discusses the role social media played during the Egyptian revolt and notes that social media provided spaces and tools for dissidents to form and expand their networks. Lim identifies the advantages of social media, such as the ability to help build and sustain networks of opposition, connect with other groups, spread stories, and globalize the movement. What these studies have in common is the idea that social media can be helpful for political dissidents. While it is important to understand how social

media can enable political dissidence, it is crucial that researchers avoid being “techno-utopian,” as it is possible that social media can constrain behavior. Therefore, social media researchers should ask questions that can also help examine nuances in the interactions between users and social media sites.

The question of whether social media help political dissidents is overly broad. Social media can be helpful for both dissidents and those who support the existing political systems as well. If social media perform political, informational, and media platform functions for dissidents<sup>4</sup>, these functions may also be helpful for supporters of existing political systems. In a different context, those who support the system may use those functions for their politics. Therefore, researchers need to ask different questions to understand the nuances of social media use among political dissidents. This study suggests that the use of social media by political dissidents should be understood in comparison to other political groups, taking into consideration social media affordances, uses, and gratifications. This view acknowledges that the needs of dissidents may differ from other political groups. This view also acknowledges that there can be certain social media affordances that may be more appealing to dissidents. For instance, the Facebook group feature can help dissidents to form issue-based political groups. Ability to comment on social media can also be attractive for them as they can use it to suggest a counter-narrative, discuss, and debate. Moreover, the ability to edit their posts (on Facebook, for instance) can help them to filter and censor content. Similarly, administrators of groups have the ability to block/unfriend those that cause problems on the platform. Depending on the context, dissidents might prefer some features more than others. While dissidents are an important group of political actors, there are other groups, such as allegiants, subordinates, and the alienated, that are relevant for the study of political dissent. Scholars have examined these actor types in the context of media use

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<sup>4</sup> As suggested by Marzouki, Skandrani-Marzouki, Béjaoui, Hammoudi, and Bellaj (2012).

(e.g., Johnson, Kaye, and Kim, 2010; Johnson & Kaye, 2013). Arguably, these other actors may also seek features that help them to enjoy, relax, and escape. However, there may be differences in features sought by these groups as they have distinct characteristics.

Possible differences in the features preferred by dissidents and other groups indicate connections between gratifications sought by dissidents and social media affordances. Therefore, questions about social media and political engagement/activism should be extended to the affordance level. Although both dissidents and other groups use the same platform, dissidents may seek different gratifications than other groups. Those gratifications can depend on social media affordances to a large extent. For instance, Community Building, which represents the agency class of affordances according to the MAIN model, might characterize dissidents in the context of politics. Community building is necessary for dissidents, as it increases their ability to make an impact. According to Shklovski and Valtysson (2012), even in oppressive contexts, types of publics such as mundane-publics, issue-publics, and counter-publics can form and play a political role in an online discussion forum. Shklovski and Valtysson note that “they are networked by the very nature of how [the platform] is constructed as an online discussion forum, but they are also networked because they facilitate communication in complex societies” (p. 431). Their study shows that a combination of affordances and user motivations can give rise to “secretly political” communities.

Similarly, Agency Enhancement can also characterize dissidents. According to Sundar and Limperos (2013), the agency affordance of the Internet allows users to be agents of information, providing them the opportunity to be gatekeepers. This affordance can be of immense importance for dissidents as it helps them to build counter-narratives. Marzouki et al., (2012) describe the role Facebook played in the Tunisian revolution and claim that “efficient and

successful use of communication makes Facebook a potentially modern revolutionary arm of freedom and dignity” (p. 243). As mentioned before, Al-Ani, Mark, Chung, and Jones (2012) also show how social media help enact counter-power in oppressive contexts.

Building communities of dissidents and developing counter-narratives require activists to have control over social media platforms. The ability to control the membership, activities of members, and ways in which information is presented is important to build counter-narratives. This indicates that the filtering and dynamic control affordances of social media can be helpful for dissidents. Moreover, other interactivity-based affordances, such as interaction and activity, can help dissidents. On the other hand, modality-based affordances such as novelty and coolness, and navigability-based affordances such as variety seeking and play/fun, may not be of particular help for political dissidents. However, those who trust the political system may have less tension and find those affordances more attractive. This possible phenomenon leads to the theoretical question of whether dissidents differ from other actors in terms of the new media gratifications they seek.

## **2.6. “Potential Dissidents” rather than Dissidents**

Political dissidence is a dynamic phenomenon. Acts considered dissidence and people considered as dissidents depend on political context. Defining the meaning of dissidence, therefore, is necessary to study the connections between social media uses and gratifications and political dissidents. Sparks (1997) conceptualizes dissident citizenship as “the practices of marginalized citizens who publicly contest prevailing arrangements of power by means of oppositional democratic practices that augment or replace institutionalized channels of democratic opposition when those channels are inadequate or unavailable” (p. 75). She explains that dissidents often choose alternative forms of engagement, such as marches, protests, speeches and strikes, as

opposed to more conventional participatory practices such as voting, lobbying, or petitioning. She also notes that dissident citizenship “encompasses the often creative oppositional practices of citizens who, either by choice or...by forced exclusion from the institutionalized means of opposition, contest current arrangements of power from the margins of the polity” (p. 75). Sparks explains that dissident citizens can represent people who belong to categories such as progressives or conservatives, civil rights activists or segregationists, environmentalists or smokers’ rights advocates, and yet they are committed to alternative forms of engagement. Dissidents are an important group for any society as they can be tough critics of existing power structures. Allowing dissident activity, therefore, helps create a more balanced political structure. As Sparks notes, “marginalized dissident citizens who address the wider polity in order to change minds, challenging practices, or even reconstitute the very boundaries of the political itself engage in a form of democratic citizenship that is essential for the continuing revitalization of democratic life” (p. 75).

Dissidents represent critical, yet important, values that can strengthen institutions in their societies. Renwick (2011) examines the role of dissident values based on evidence mainly from East-Central Europe. He stresses the importance of dissident values in institutional choices made during democratization and claims that dissident values such as inclusiveness and deconcentration of power are important for shaping socio-political values. Accordingly, this study views dissidents as an important type of citizens, and dissident activity as positive acts that can strengthen society. However, this may vary depending on the context. For instance, dissidents living in oppressive contexts might behave differently than others. In some contexts, groups that fight for a cause and use extremely violent means that are unacceptable in a different context might be accepted as dissidents. Therefore, framing the notion of dissidence based on

activity is difficult. Accordingly, this study does not frame dissidence based on activities. While examining uses and gratifications of individuals that engage in commonly accepted activities (e.g., protests) is important, it is also important to study the motivations of individuals that might be mobilized with the help of social media affordances. Accordingly, this study focuses only on individuals that have the potential to emerge as dissidents on social media within the boundaries set by democracy. This group is called “potential dissidents” in this study, and it is argued that this group is important for a democratic society. The importance of examining the social media uses and gratifications of this population is discussed below.

Conceptualizing dissidents within the scope of a number of activities considered unconventional (e.g., marches, protests, and strikes) captures only one side of dissident citizenship. There are other layers of dissidence. On the one hand, there can be more institutionalized approaches for dissident activity. For instance, Warner (2007) argues that the *The Daily Show with Jon Stewart* can be identified as dissident political activity where dominant political branding practices are critiqued. On the other hand, there are groups of people that gathered for a different purpose but transform into more organized dissident activity. For example, Zhang (2013) contrasts between the website [www.anti-CNN.com](http://www.anti-CNN.com), started by an engineering graduate of Qinghua University that has contributed to cyber-nationalism in China, and the e’gao (“e”-evil, and “gao”- work) subculture created by Chinese netizens to discuss how dissident activity emerged online could potentially play a role in national politics.<sup>5</sup> As a specific example, Zhang shows how OGAW (Online Gaming Addicts’ War), a 64-minute ‘machinima’ produced by the Oil Tiger Machinima Team (OTMT) created by a collaboration of more than one hundred World of Warcraft players, was critical of the system. According to Zhang:

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<sup>5</sup> Zhang describes the e’gao culture as characterized by humor, revelry, subversion, grass-roots spontaneity, defiance of authority, mass participation, and multimedia high-tech.

the narrative of OGAW goes beyond the preoccupations of the gaming community to demonstrate a wider awareness of issues of social injustice and political corruption. The narrative is replete with popular references and allusions, creatively integrated to satirize instances of rampant commercialism, social inequality and the abuse of political power. (pp. 86-87)

The form of political dissidence discussed by Warner (2007) and Zhang (2013) shows that dissidence has spread across a wide range of activities, from a nationally-televised TV show to online activities of young citizens. However, the previous literature on online dissidence tends to pay more attention to explicitly dissident activities, such as protests and marches (e.g., Al-Ani, Mark, Chung, & Jones, 2012; Marzouki, Skandrani-Marzouki, Béjaoui, Hammoudi, & Bellaj, 2012; Lim, 2012). There are a few studies that examine situations that could be considered political dissidence in unique circumstances. For instance, work done by Shklovski and Valtysson (2012) on “secretly political” online communities in Kazakhstan (mundane, issue, and counter-publics), although not discussed using the terminology and conceptual background of political dissidence, indicate subtle forms of political dissidence. What is missing in the social media literature are the dynamics of populations that have the highest potential for mobilization, the group that this study calls “potential dissidents.” Potential dissidents are a layer of political dissidents that might remain inactive but may eventually become more active. This layer of dissidence requires scholarly investigation as there is a lack of related work in this area. Studying potential dissidents in the context of social media is important. Social media offer easily accessible platforms and easy forms of political engagement for the general public. This could result in potential dissidents eventually becoming more active. Some studies provide evidence that could indirectly support this argument. For instance, secretly political publics

(Shklovski & Valtysson, 2012) may have been enabled by the ability of discussion forums to bring people on to one virtual platform and allow them to interact. According to Marzouki et al. (2012), the Tunisian uprising can be identified as a leaderless revolution made possible by the spontaneity, homogeneity, and the synchronicity of the Tunisian Facebook cyberactivism network. On one hand, an uprising like the Tunisian revolution happens because there are broad social and political issues that rouse political activism. On the other hand, social media's ability to help potential dissidents gather around a political cause might enhance the possibility of such a leaderless revolution. An uprising without prominent leadership happens among members of the public rather than via activists that play a leading role in dissident communities. Arguably, social media has become an important component in some uprisings of this nature. As Zhang (2013) notes, based on the dissident behavior of Chinese young netizens:

broader issues of social injustice find representation in the creative contentious discourses that are specific to online culture. The main challenge of the internet to the Party-state lies not ... in the small spaces in which dissident intellectuals directly confront it on political grounds. Rather, it lies in the vast spaces of mundane online discourse that extend across the fields of cultural expression, consumption, and the constitution of cultural and personal identity. (p. 88)

Examining the aspects of dissidence among more general populations, as opposed to “activists,” helps uncover the potential of social media to help build democratic dissidence. Such a citizenry is important for a healthy democracy. It is also important to study potential dissidents, as they constitute a much larger population than the active dissidents that are more commonly identified. Moreover, subtle forms of dissidence, such as satire, are more prevalent among potential dissidents online. The connection between potential political dissidence and social media

supports the assumption that social media could offer affordances that help potential dissidents to engage in politics. Therefore, this study examines the theoretical gap highlighted in the above literature review (i.e., possible connections between social media uses and gratifications and different types political actors and attributes) based on potential dissidents.

Political mobilization has been a very popular topic in politics, and a large number of studies has been conducted on dissident behavior. However, conceptualizing potential dissidents is challenging. As this study focuses on potential dissidents, an implicit layer of political dissidence, activity-based conceptualization is not directly relevant. Therefore, an alternative approach is required to conceptualize dissidents. As “potential dissidence” has a direct connection with potential mobilization, this study focuses on constructs that identify groups with the highest potential for mobilization. Mobilization and dissidence require at least two conditions. First, people must not be completely satisfied with the current political system, as indicated by a lack of trust. Second, they need to believe that their actions matter in politics. In other words, discontent (lack of trust in the system) and political efficacy (belief that individual actions matter) can lead to dissidence and mobilization. As Denmark and Niemi (2012) note,

because political trust, efficacy and participation serve to link individuals with the political institutions that represent them, the erosion of this linkage has significant implications for the legitimacy of government and the stability of political institutions and processes more generally. (p. 2)

Early work done by Gamson (1968) that highlighted the role discontent, trust, and efficacy play in influence laid a solid foundation to conceptualize potential dissidents. Gamson noted that the optimum combination for mobilization is high political efficacy and low political trust, and this

combination indicates a belief that influence is possible and necessary. In his discussion on trust as the “creator of collective power,” Gamson notes the following:

The effectiveness of political leadership... depends on the ability of authorities to claim the loyal cooperation of members of the system without having to specify in advance what such cooperation will entail. ... the loss of trust is the loss of system power, the loss of a generalized capacity for authorities to commit resources to attain collective goals.

Gamson (p. 43)

Gamson’s proposition, sometimes referred to as the “Gamson Hypothesis,” has received considerable attention during the past several decades. For instance, Craig and Maggiotto (1981) hypothesize that discontent is related to unconventional political behavior among those who are dissatisfied with government policy and believe that they should be influential political actors. Their study shows that discontent is strongly associated with those that are dissatisfied with policy and are internally efficacious. Craig and Maggiotto conclude that the context has mobilized political discontent in the form of “benign” activities such as single-issue advocacy and tax revolt. They also note, stressing the importance of democratic dissidence, that although those acts may not be revolutionary, they may have significant political consequences. Similarly, Shingles (1981) examined black consciousness, and argued that policy-related participation is encouraged by political mistrust and internal efficacy. Shingles stressed the importance of understanding different types of political activity (e.g., allegiance to regime and country and influence on government and policy) and argued that efficacy can be conducive to high-initiative behavior (i.e., activities that need active participation and high levels of effort), while mistrust is related to policy-related behavior (i.e., efforts to influence government and policy). Shingles argued that a combination of mistrust and efficacy can encourage high-initiative policy behavior,

an aspect which was common among African Americans during his study (e.g., active participation in political campaigns, active lobbying efforts, and violent protest against policy).

As Shingles noted, “The strong sense of self-confidence and a deep suspicion regarding the willingness and ability of government to respond to their needs has proved to be an important catalyst, mobilizing blacks to seek to influence the policy process” (p. 89).

Paige (1971) examined the relationship between trust and efficacy considering four types of political systems (democratic, traditional, totalitarian, and unstable) (Figure 1). He claims that democratic, traditional, and totalitarian societies have been politically stable due to the nature of their constituency or the way they respond to interest groups. The stability of democratic systems comes from their ability to respond to interest groups, while totalitarian and traditional societies have loyal internal support and implicit faith in the ruling class, respectively. Paige argues that societies with dissidents, unlike the other three types, are highly unstable as the mistrust and high efficacy can result in radical actions. Paige calls this situation “revolutionary,” and he claims that riot participants might be overrepresented among dissidents if participation in riots is considered revolutionary. Paige also stresses the importance of dissidents and claims that a society might move toward a democracy or an authoritarian regime based on the way the government responds to dissident orientation. The intricate connection between trust and efficacy, as explained by Gamson (1968) and the researchers that followed his work, provides a solid conceptual foundation to examine the dynamics of dissidence. This work needs to be replicated in the context of social media, as social media platforms, as discussed before, have resulted in dramatic changes in political engagement, and political dissidence in particular.

Figure 1: Relationship of Trust and Efficacy to Political Orientation, Behavior of Regime, and Nature of Political System

		Trust	
		High	Low
Efficacy	High	<i>Allegiant</i> Responsive/ Non-coersive Democratic	<i>Dissident</i> Unresponsive/ Non-coersive Unstable
	Low	<i>Subordinate</i> Unresponsive/ Non-coersive Traditional	<i>Alienated</i> Unresponsive/ Coersive Totalitarian

Source: (Paige, 1971, p.812)

Several researchers have used political efficacy and measures of political disaffection, such as political cynicism, to examine online political activity. For instance, Lee (2006) argues that the use of online news and interaction with public agencies can increase internal political efficacy, while visiting websites of public agencies can positively affect internal efficacy. Chan and Guo (2013) argue that the effect of Facebook use on political participation is moderated by political efficacy.

An effort to directly apply Gamson’s proposition in the context of the Internet was made by Johnson, Kaye, and Kim (2010), who test the hypothesis considering different web platforms (web, bulletin boards, chat rooms, portals, and blogs) and effects of relying on these platforms. Their work shows that Internet users are equally divided into dissidents and assureds. They claim that the results do not strongly support using the two categories (dissidents or assureds) as predictors of reliance on different platforms. However, a recent study done by Johnson and Kaye (2013) shows that dissidents tend to use more polarizing media sources, such as radio talk shows and political blogs, while assureds avoid those sources. Johnson and Kaye claim that the use of

online broadcast TV news (online content of mainstream media) predicts being an assured, while dissidence can be predicted by the use of alternative sources. These findings show that dissidents and assureds can be different in terms of their use of online sources. However, arguably, any online platform may have uses for both these parties. For instance, dissidents may be interested in what is reported in mainstream news media. Therefore, connecting social media affordances, rather than platforms, with political dissidence will help reveal the relationships between social media and these two types of political actors.

Based on the theoretical problem discussed above, this study raises the following questions:

RQ<sub>1</sub>- Do potential dissidents seek different social media uses and gratifications than allegiants?

RQ<sub>2</sub>- What uses and gratifications, if any, characterize potential dissidents as opposed to allegiants?

## **2.7. Tolerance versus Dogmatism**

While it is possible that different political actors (dissidents and assureds, in this case) can seek different uses and gratifications on social media, it is also possible that uses and gratifications differ between actors with different political attributes or traits. For instance, a more politically tolerant actor might seek gratifications such as community building and interaction, while less-tolerant actors might seek gratifications such as dynamic control. The Internet is a discursive space where the ability to engage in a political conversation matters. Social media are mainly characterized by their interactivity, and a social media user needs social skills to create and maintain politically important ties. However, Internet users bring in many attributes that affect the way they behave online. As Bimber (1998) notes, “the anticipated effects of expanded communication are limited by the willingness and capacity of humans to engage in a complex

political life” (p. 136). These attributes or limitations should be taken into consideration in order to understand the causes and effects of online political engagement.

User attributes can range from personality traits, such as extraversion to attributes such as tolerance. Several scholars have explained effects of user traits on online political behavior. For instance, Quintelier and Theocharis (2012) claim that the extraversion and openness to experience can predict online political engagement although traits such as agreeableness, conscientiousness, and emotional stability do not strongly affect political engagement. Similarly, Kim, Hsu, and Gil De Zúñiga (2013) examine civic participation while considering the effects of personality traits. They argue that the same two constructs (extraversion and openness to experience) moderate the effect of social media use on civic participation. Work done by Kim, Hsu, and Gil De Zúñiga (2013) and Quintelier and Theocharis (2012) show that internal attributes of social media users can affect their online political behavior. While this is an important dimension of political behavior, it is also important to consider the effects of internal attributes on people’s choice of the numerous affordances of social media. In other words, on a more hidden layer, there can be a connection between political attributes and uses and gratifications sought by political actors. However, there is a lack of studies that focus on political attributes and gratifications in the social media uses and gratifications literature. The constructs suggested above (political efficacy and trust) provide the theoretical foundation to categorize political actors. This study suggests that political tolerance and dogmatism should also be examined to understand affordance-based social media uses and gratifications. Despite their significance in the political science literature, these two constructs remain largely unexplored in the social media uses and gratifications literature.

Altemeyer (2002) defines dogmatism as “relatively unchangeable, unjustified certainty” (p.713). As Shearman and Levine (2006) note, dogmatism is a cognitive style that indicates close-mindedness. This is an important construct to study online politics, as online political behavior can be directly affected by close-mindedness. Starting from the work of Rokeach (1960), who conceptualized the concept and suggested a measure of the construct, dogmatism has been subject to considerable academic investigation. He explains that every individual has a belief system (beliefs, expectancies, or a hypothesis an individual accepts as true) and disbelief system (beliefs, expectancies, and a hypothesis that he or she rejects). Rokeach (1960) explained that dogmatism can be characterized by high degree of isolation (i.e., reluctance to see interrelations between divergent belief systems), low differentiation within belief systems (i.e., lack of articulation and richness of information within a belief system), and high comprehensiveness among disbelief subsystems (i.e., high range of disbelief systems). Based, on this conceptual foundation, Shearman and Levine (2006) note that those who have high dogmatism tend to compartmentalize and isolate their beliefs and disbeliefs, while individuals with low dogmatism are open and willing to link divergent beliefs.

Political dogmatism has been discussed widely in the political science literature, and this construct is directly relevant to political behavior. Some researchers connect dogmatism with political self-identification. For instance, according to White-Ajmani and Bursik (2011), conservatives are more dogmatic than liberals and moderates. White-Ajmani and Bursik also note that those that are not ready to compromise their viewpoints tend to be intolerant towards those who have opposing viewpoints. While dogmatism is a well-discussed concept, it is also an empirically validated construct. Altemeyer (2002) suggests a 20-item measure of dogmatism, which he calls the DOG Scale. Crowson (2009) examines the construct validity of this measure

and claims that it is unidimensional and has convergent validity. Shearman and Levine (2006) suggest a revised 23-item scale to measure dogmatism. Scales suggested by Altemeyer (2002) and Shearman and Levine (2006) are appropriate for measuring dogmatism as they are comprehensive and have been empirically tested.

Despite its academic importance, dogmatism has not been subject to adequate academic investigation in social media studies. In general, only a very few scholars have discussed dogmatism in the context of the Internet. Reisenwitz and Cutler (1998), for example, attempt to connect dogmatism with Internet adoption. They hypothesize that customers with low dogmatism might prefer innovative products as opposed to customers with high dogmatism who might prefer traditional products. However, they fail to support this argument in the context of Internet adoption. Dogmatism should be examined in the context of contemporary social media as openness or close-mindedness, the underlying criteria of dogmatism, can be crucial for online political engagement. This can be the case in particular with regard to online social networks, as political engagement on social media involves interacting with others.

The failure of Reisenwitz and Cutler's (1998) attempt to connect dogmatism with Internet adoption might have resulted from their perspective, i.e., considering the Internet as a single platform (a product) that less-dogmatic innovators might embrace. This view could have been valid for the pre-social media atmosphere. However, social media are multifaceted phenomena, characterized by diverse platforms, functions, and usage. Therefore, connecting dogmatism with the Internet in general is not an easy argument to support. Moreover, finding relationships between specific social media platforms and dogmatism can also be difficult, as individuals with different levels of dogmatism might use social media for different purposes. Moreover, people with different levels of dogmatism might seek different uses and gratifications on social media.

Therefore, dogmatism may be connected with social media affordances, uses, and gratifications. This study suggests that the connection between social media and dogmatism can be uncovered by examining the gratifications of those who have different levels of dogmatism. This view assumes that those who have high-levels of dogmatism might find certain affordances appealing, while those who have low- levels of dogmatism might prefer different affordances. If the MAIN framework is considered, it is possible that uses and gratifications such as community building, bandwagon, interaction, and filtering/tailoring can be more appealing to politically open-minded (therefore, less dogmatic) users. Community building and interaction requires social media users to be open to different types of people and accept them as part of their social circles. Moreover, bandwagon and filtering require users to be open to others' opinions, and to alter the opinions they have accordingly. However, this does not mean that those who have high dogmatism avoid social media. There can be uses and gratifications that attract dogmatic users. For instance, gratifications such as fun, novelty, and "being there" may help dogmatic users to remain attached to a social media platform.

This theoretical problem leads to the following questions:

RQ<sub>3</sub>- Are there differences in perceived social media uses and gratifications between individuals with high and low levels of political dogmatism?

RQ<sub>4</sub>- What uses and gratifications, if any, characterize individuals with high levels of dogmatism, as opposed to those who indicate low levels of dogmatism?

Dogmatism represents one important factor that can affect online political behavior, i.e., the extent of openness for diverse opinions. Political tolerance is another factor that affects online political engagement. Starting from the work of Stouffer (1955) who initiated the study of political tolerance, this construct has been subject to extensive research. Political tolerance,

according to Robinson (2010), is “citizens’ willingness to respect the rights and liberties of others whose opinions and practices differ from their own” (p. 494). Tolerance is an important factor to examine along with dogmatism, as it could help describe the extent to which a person is willing to interact with politically diverse people. Political tolerance has been studied in different contexts, exposing interesting aspects of tolerance. According to White-Ajmani and Bursik (2011), liberals, conservatives, and moderates differ in terms of their tolerance levels. Their study shows that liberals tend to be the most tolerant, while conservatives indicate the least tolerance among the three categories. White-Ajmani and Bursik use dogmatism and tolerance to argue that political ideology is a motivated choice. Marcus, Sullivan, Theiss-Morse, and Stevens (2005) show the impact of affective processes on the formation of political judgments, and they note that, “[p]olitical tolerance is one of the most important values among those that make up the panoply of characteristics of liberal democratic regimes” (p. 950). Their study indicates that tolerance is affected by the predispositions of individuals. Robinson (2010) examines political tolerance in the context of religion, and claims that the exposure to different viewpoints produces political tolerance only when those views are attributed to a leader from within a particular group (e.g., a religious group).

As with dogmatism, tolerance has also been subject to considerable empirical investigation. However, the measures of political tolerance are diverse across different studies. For instance, some studies use the “least-liked paradigm” to measure tolerance. In this technique, respondents are asked to identify the groups they dislike and express the extent to which they would allow those groups to engage in certain activities (e.g., protests). For example, Gibson (2005) measures respondents’ tolerance of groups like nationalists, supporters of military dictatorships, and Stalinists. Similarly, Golebiowska (1999) examines tolerance of groups like communists, atheists,

members of the radical right, homosexuals, and abortion rights groups. While the “least-liked” group approach is popular among researchers, a few researchers use a more general approach to operationalize tolerance. For instance, Pattie and Johnston (2008) discuss, based on the British Election Study, a different approach where respondents are given a set of statements that measure tolerance in general.

Although political tolerance is a well-examined topic in the political science literature, it has not, like dogmatism, adequately permeated social media studies. However, there are studies that help argue that tolerance can be directly relevant for social media studies. Harell (2010), for instance, argues that young whites in Canada express a multicultural form of tolerance if they have more diverse networks. However, the results of their study show that it is unlikely that they tolerate racist speech. Harell claims that diversity increases tolerance for certain types of speech. This study indicates that the diversity of one’s social network can affect one’s tolerance. This argument can be equally valid for online social networks. Social media expand people’s ability to connect with diverse groups of people. Therefore, it is possible that those who interact with people from different ethnic, religious, and socio-economic backgrounds might be politically more tolerant. On the other hand, less tolerant individuals may not tend to interact frequently with people from different backgrounds and different perspectives. However, a lack of tolerance may not mean that those who have low tolerance keep from using social media. They may seek different uses and gratifications. Therefore, arguably, there can be a connection between certain uses and gratifications and political tolerance. The MAIN model has some uses and gratifications that might be more appealing to more politically tolerant users than others. For instance, more politically tolerant users might find interaction and community building on social media more appealing than other affordances. On the other hand, uses and gratifications such as dynamic

control could be more appealing to less-tolerant users. However, this connection has not yet been examined in the social media literature. Accordingly, this possible connection between political tolerance and uses and gratifications leads to the following questions:

RQ<sub>5</sub>: Are there differences in perceived social media uses and gratifications between individuals with high and low levels of political tolerance?

RQ<sub>6</sub>: What uses and gratifications, if any, characterize individuals with high levels of political tolerance, as opposed to those who indicate low levels of political tolerance?

The above literature review and problems posed stress the importance of studying uses and gratifications from the perspective of social media affordances and raise the need to examine connections between uses and gratifications, dogmatism, and tolerance. This study sheds light on this area. Accordingly, the study has the following objectives:

1. Develop a scale to measure social media uses and gratifications based on the MAIN model suggested by Sundar and Limperos (2013).
2. Apply the scale developed in the first phase to examine uses and gratifications that can characterize political actor types (potential dissidents, allegiants, subordinates, and moderates) and two types of attributes (dogmatism vs. tolerance).

The first objective above hypothesizes that the constructs and items that represent each class of affordance in the MAIN model constitute a second-order factor structure that captures social media uses and gratifications. The second objective takes an exploratory approach where combinations of social media uses and gratifications are identified to characterize political actor types and attributes, rather than testing a set of previously developed hypotheses.

## **CHAPTER 3**

### **METHOD**

#### **3.1. Introduction**

This study, as discussed in the literature review, aims to achieve two main objectives: 1) develop a scale to measure social media uses and gratifications based on the MAIN model suggested by Sundar and Limperos (2013), and 2) apply the scale to examine uses and gratifications that can characterize political actor types and two types of attributes (dogmatism vs. tolerance). Two surveys were used to achieve these objectives: 1) a survey among a convenience sample of university students to develop the social media uses and gratifications scale, and 2) a survey among American citizens above the age 18 to examine uses and gratifications of political actors and individuals with different levels of political dogmatism and tolerance. This chapter discusses the design of the survey instruments, composition of the samples, and the analytical techniques used to answer the research questions.

#### **3.2. Measures**

##### **3.2.1. Phase 1: Uses and Gratifications**

Sundar and Limperos (2013) suggested a pool of items to measure the uses and gratifications suggested in the MAIN model (Table 3). The MAIN model, as discussed in the literature review, includes four affordances: modality, agency, interactivity, and navigability. Modality, according to Sundar (2008), assumes that individual modalities (e.g., text or audiovisual) and the combinations of modalities cue certain heuristics, and modalities unique to digital media might cue their own heuristics. Sundar also notes that the agency affordance of digital media acknowledges the multiplicity of sources on digital media. For instance, the sources could range from a computer or a television, to an online location such as a news website, to a group of other

people such as a Facebook group. Interactivity, which Sundar claims is the most distinctive feature of social media, includes both interaction and activity. Interactivity, therefore, acknowledges the departure of passivity and the availability of options for the users to specify their needs and preferences. Sundar explains that the navigability affordance, i.e., the ability of the interface to help transport one to different locations, includes the ability to trigger heuristics with navigational aids and transmit cues through the content generated. The items suggested by Sundar and Limperos (2013) (Table 3) are expected to capture the essence of uses and gratifications considering the role of the above four types of affordances.

Table 3: MAIN Dimensions and Measures Suggested by Sundar and Limperos (2013)

MAIN	
Dimension	<i>Affordance Class/ Item</i>
Modality	<p><i>Realism</i></p> <p>I know the content is real and not made up</p> <p>It is like communicating face-to-face</p> <p>The experience is very much like real life</p> <p>It lets me to see it for myself</p> <p><i>Coolness</i></p> <p>It is unique</p> <p>It is distinctive</p> <p>It is stylish</p> <p><i>Novelty</i></p> <p>It is new</p> <p>The technology is innovative</p> <p>The interface is different</p> <p>The experience is unusual</p> <p><i>Being There</i></p> <p>It helps me immerse myself in places that I cannot physically experience</p>

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	It creates the experience of being present in distant environments
	I feel like I am able to experience things without actually being there
Agency	<i>Agency-Enhancement</i>
	It allows me to have my say
	It allows me to assert my identity
	It allows me to send my thoughts to many
	It gives me the power to broadcast to my followers
	<i>Community-Building</i>
	I can connect with others
	It allows me to expand my social network
	It makes me realize that I am part of a community
	It allows me to build social capital
	<i>Bandwagon</i>
	It allows me to review opinions of others before I make decisions
	It comforts me to know the thoughts and opinions of others
	It allows me to compare my opinions with those of others
	<i>Filtering/Tailoring</i>
	It allows me to set my preferences
	I can avoid viewing things that I do not want to see
	It allows me to sort through information and share it with others
	<i>Ownness</i>
	Once I use it, I feel like it is mine
	It features content that is a true reflection of myself
	It allows me to customize so that I can make it my own
Interactivity	<i>Interaction</i>
	I expect to interact with the system
	I can perform a number of tasks
	I can specify my needs and preferences on an ongoing basis
	<i>Activity</i>

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I feel active when I use it

It is not a passive interaction

I get to do a lot of things on it

*Responsiveness*

It is responsive to my commands

It responds well to my requests

It can anticipate my needs

*Dynamic Control*

It gives me control

It allows me to be in charge

I am able to control my interaction with the interface

I am able to influence how it looks

I am able to influence how it works

Navigability *Browsing/Variety-Seeking*

It allows me to obtain a wide variety of information

It helps me to skim and check out various links

It allows me to surf for things that I am interested in

It allows me to browse freely

*Scaffolding/Navigation Aids*

The interface helps me every step of the way

The device is easy to use and explore

It allows me to link to other pieces of information

It offers a number of visual aids for more effective use

It will double-check with me before performing a risky transaction

*Play/Fun*

It is fun to explore

It lets me play

I enjoy escaping into a different world

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### 3.2.1.1. Item Development

The set of 57 items suggested by Sundar and Limperos (2013) was used as the initial pool of items for the social media uses and gratifications scale. As these items were not targeted towards a particular technology, and contain general statements (e.g. “it is stylish”) and items focused on devices (e.g., “the device is easy to use and explore”), they were re-written specifically focusing on social media. For instance, the item “I feel like I am able to experience things without actually being there” was re-written as “social media provide quality information that makes me feel like I am able to experience things as they are without actually being there.” In addition, 15 new items were introduced. For instance, items such as “social media help me to have real interactions with people although I am not in physical proximity,” “social media allow me to actively contribute to communities that make an impact on society,” and “reading others’ comments on social media before I make comments helps me to avoid potential conflict with those with whom I might disagree” were added to capture the uniqueness of social media. The final set of items included 72 statements tailored to measure the constructs in the context of social media. The items were checked by three independent readers to evaluate the clarity and meaning. Table 4 shows the items used for the first survey (please see Appendix A for the first survey instrument).

Table 4: Items Used in the First Survey

MAIN Dimension	Affordance Class/ Item
Modality  (MOD)	<i>Realism (REAL)</i>  REAL 1- I know that information available on social media is real and not made up  REAL 2- Communicating using social media is not that different from face-to-face communication  REAL 3- The experience in social media is very much like real life

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REAL 4- I can experience the real world through social media

REAL 5- Social media allow me to see content for myself rather than through the experience of another party

Coolness (COOL)

COOL 1- Social media platforms are unique compared to other media

COOL 2- Social media platforms are distinctive compared to other media

COOL 3- Social media platforms are more stylish than other media

COOL 4- Social media platforms are more attractive than other media

COOL 5: There is something special about social media that makes users stand apart from the crowd

Novelty (NOVL)

NOVL 1- Social media platforms are new compared to other media

NOVL 2- Social media platforms have innovative features

NOVL 3- Social media interfaces are different than traditional websites

NOVL 4- The experience I gain by using social media is out of the ordinary

Being There (BEIN)

BEIN 1- Social media help me immerse myself in places that I cannot physically experience

BEIN 2- Social media create the experience of being present in distant environments

BEIN 3- Social media provide quality information that makes me feel like I am able to experience things as they are without actually being there

BEIN 4- Social media bring me information about different incidents so quickly that it does not make a big difference that I am not physically there to experience them

BEIN 5- Social media help me to have real interactions with people although I am not in physical proximity

Agency

*Agency-enhancement (AGNC)*

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(AGN)

AGNC 1- Social media allow me to freely express my opinions

AGNC 2- Social media allow me to freely assert my identity

AGNC 3- I can build an audience for myself on social media

AGNC 4- Social media give me the power to provide different types of information to my followers

AGNC 5- Social media allow me to have my say

*Community-building (CMNB)*

CMNB 1- I can use social media to easily connect with people living in different parts of the world

CMNB 2- Social media help me to be part of a community that I would not otherwise have been part of

CMNB 3- Social media allow me to build a network that could bring me social support

CMNB 4- Social media allow me to actively contribute to communities that make an impact on society

*Bandwagon (BAND)*

BAND 1- Social media allow me to review the opinions of others before I make decisions

BAND 2- Social media comfort me by letting me know the thoughts and opinions of others

BAND 3- Social media allow me to compare my opinions with those of others

BAND 4- Reading others' comments on social media before I make comments helps me to avoid potential conflict with those with whom I might disagree

BAND 5- I try to adjust my reactions to social media posts based on comments made by others

*Filtering/Tailoring (FILT)*

FILT 1- Social media allow me to set my preferences

FILT 2- On social media, I can avoid viewing things that I do not want to see

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	FILT 3- Social media allow me to sort through information before I share it with others
	FILT 4- Social media allow me to limit the visibility of information I post to a small group
	<i>Ownness (OWNN)</i>
	OWNN 1- I feel like I have some ownership over the social media platforms I use
	OWNN 2- Social media platforms help me to publish content that is a true reflection of myself
	OWNN 3- My friends have their own ways of using social media
	OWNN 4- Social media platforms allow me to customize so that I can make them my own
Interactivity (INT)	<i>Interaction (INTR)</i>
	INTR 1- Social media rely on user interaction
	INTR 2- When I use social media, I frequently interact with the platform
	INTR 3- On social media, I can specify my needs and preferences on an ongoing basis
	INTR 4- I expect my friends to interact with social media.
	<i>Activity (ACTV)</i>
	ACTV 1- I can perform a number of tasks on social media
	ACTV 2- I feel active when I use social media
	ACTV 3- My Interaction on social media is not passive
	ACTV 4- I get to do a lot of things on social media
	<i>Responsiveness (RESP)</i>
	RESP 1- Social media are more responsive than other media
	RESP 2: Social media are responsive to my commands
	RESP 3- Social media respond well to my requests
	RESP 4- Social media can anticipate my needs
	<i>Dynamic Control (DYNM)</i>
	DYNM 1- Social media allow me to be in charge
	DYNM 2: Social media give me more control over information I post

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Navigability  
(NAV)

DYNM 3- I am able to control my interaction with the interfaces of the social media platforms I use

DYNM 4- I am able to influence how social media platforms look

DYNM 5- I am able to influence how social media platforms work

*Browsing/Variety-seeking (BROW)*

BROW 1- Social media allow me to obtain a wide variety of information

BROW 2- Social media can link me to sites that have different types of information

BROW 3- Social media allow me to surf for things that I am interested in

BROW 4- Social media allow me to browse freely

BROW 5- I enjoy information shared on social media more than that shared on other media because it comes in different forms

*Scaffolding/Navigation Aids (SCAF)*

SCAF 1- The interfaces of social media platforms help me every step of the way as I use them

SCAF 2- Social media allow me to link to other pieces of information

SCAF 3- Social media offer a number of visual aids for more effective use

SCAF 4- Social media will double-check with me before performing a risky transaction

*Play/Fun (PLAY)*

PLAY 1- Social media are fun to explore

PLAY 2- Social media let me play

PLAY 3- I enjoy escaping into a different world through social media

PLAY 4- Social media provide more entertaining information than other media

PLAY 5- Social media offer more entertaining features than other media

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### 3.2.2. Phase 2: Trust, Efficacy, Dogmatism, and Tolerance

The second phase of the study examined relationships between uses and gratifications and the four main constructs suggested (trust, efficacy, dogmatism, and tolerance). As discussed in the literature review, Gamson Hypothesis (Gamson, 1968) suggests two important constructs to conceptualize potential dissidents: 1) trust in government and 2) political efficacy (defined as the belief that individual actions matter in politics). This study used this framework to conceptualize potential dissidents for this study. Trust and efficacy have been measured using a range of measures in previous studies. However, for this study, it was important to select trust and efficacy measures used to test the Gamson Hypothesis, as they have been applied to operationalize the hypothesis. Accordingly, the items used by Johnson and Kaye (2013) to measure trust and efficacy were used to identify dissidents. These items were appropriate for the study, as Johnson and Kaye used these items to identify four types of users (assureds, dissidents, subordinates, and alienated). Allegiants (or assureds) and dissidents have high efficacy, and these two groups differ in terms of their trust in government. Dissidents are characterized by low trust while assureds have high trust in government (Johnson & Kaye, 2013). Table 5 shows the trust and efficacy measures used for the study.

Table 5: Trust and Efficacy Measures

Construct	Items
Efficacy (EFC)	EFC1- I consider myself well qualified to participate in politics
	EFC2- I feel I could do as good of a job in public office as most other people
	EFC3- I think that I am better informed about politics and government than most people
Trust in the government	EFC4- I feel that I have a pretty good understanding of the important political issues facing our country

- (TRS) TRS1- Most of our leaders are devoted to the service of our country  
TRS2- Politicians never tell us what they really think  
TRS3- I don't think public officials care much about what people like me think
- 

Dogmatism and tolerance have also been measured using a range of different approaches.

Dogmatism, as defined in the literature review, is a state of mind characterized by close-mindedness. Altemeyer (1996) suggested a measure of dogmatism called the DOG scale that includes 20 items. Altemeyer (2002) noted that DOG measures correlate with “rightist” authoritarian personality. Moreover, he noted that Republicans indicate higher levels of dogmatism than Democrats. Altemeyer argued that dogmatism can be exposed by bringing up religion. For instance, his work showed that those who believe that the Bible is free of errors and inconsistencies tend to express higher levels of dogmatism than others. Crowson (2009) validated the measure of dogmatism suggested by Altemeyer (1996) using four different samples. His work showed that the measure is unidimensional and the goodness-of-fit statistics were at reasonable levels. Moreover, Shearman and Levine (2006) validated a scale to measure dogmatism. This measure had 23 items (including reverse-coded items). The results of their study also indicated that the items are suitable to operationalize dogmatism. Accordingly, items suggested by Crowson (2009) and Shearman and Levine (2006) provided a solid basis to measure dogmatism.

As mentioned in the second chapter, the measures of political tolerance are diverse across different studies. Some studies (e.g., Gibson, 2005; Golebiowska, 1999) use the “least-liked paradigm” where respondents are asked to identify the groups they dislike and express the extent to which they would allow those groups to engage in certain activities (e.g., protests). However, Pattie and Johnston (2008) discussed, based on the British Election Study, a different approach

where respondents were given a set of statements that measure tolerance in general. Rather than identifying specific groups, these items identify their tolerance towards who they perceive to be minorities and people that they disagree with. This approach was more appropriate as defining a specific group or several groups as least-liked groups may include biases where some respondents do not dislike those groups. Therefore, three political tolerance items were selected from the items discussed by Pattie and Johnston (2008). One more item (“every citizen has the right to support his/her political views even if I don’t agree with them”) was added to these items to measure tolerance towards the right of others to have different political opinions. Table 6 shows dogmatism and tolerance items used for the study. Accordingly, the second survey (Appendix B) included the social media uses and gratifications scale developed in the first phase, as well as the trust, efficacy, political dogmatism, and tolerance measures.

Table 6: Dogmatism and Tolerance Measures

Construct	Items
Dogmatism (DOG)	DOG 1- When I make a decision, I stick with it DOG 2- I am so sure I am right about the important things in life, there is no evidence that could convince me otherwise DOG 3- There is a clear line between what is right and what is wrong DOG 4- My opinions and beliefs fit together perfectly to make a crystal-clear “picture” of things DOG 5- People who disagree with me are usually wrong DOG 6- There is a single correct way to do most things DOG 7- I am a “my way or the highway” type of person DOG 8- I will not compromise on the things that are really important to me
Tolerance (TOL)	TOL 1- People should be allowed to organize public meetings to protest against the government

TOL 2- In a true democracy, the majority has a responsibility to protect the rights of all minorities

TOL 3- I usually take the opinions of people who support other parties seriously even if I don't agree with them

TOL 4- Every citizen has the right to support his/her political views even if I don't agree with them

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### **3.3. Data Collection**

#### **3.3.1. Phase 1: Survey**

An online survey was conducted among students in 15 classes in three campuses in Hawaii. Fifteen instructors were contacted and requested to forward the survey to their students. A total of 462 students initiated the survey and 12 subjects indicated that they do not use social media. Surveys with missing entries were excluded from the analysis. The sample used for analysis consisted of 393 students who answered all the questions. The sample (Table 7) included 227 (57.8%) females, 158 (40.2%) males, and 8 subjects (2%) who did not disclose their gender. Of the 393 usable responses, 297 (75.6%) were completed by students between 18 and 25 years. However, the sample included 16 respondents above 41 years and 6 subjects who did not disclose their age. The sample had a fair ethnic balance as 150 (38.2%) subjects were Asian and 123 (31.3%) was Caucasian. The sample also included 27 (6.9%) native Hawaiians and 24 (6.1%) Pacific Islanders. This distribution is somewhat similar to the ethnic composition in the State of Hawaii. The sample was diverse in terms of education as it was not dominated by a specific level of education and a reasonable number (55 or 14%) of graduate students were included. The sample was appropriate for examining social media uses and gratifications as 329 respondents (83.7%) indicated that they use social media several times a day. Moreover, 31 participants (7.9%) indicated that they use social media about once a day. This shows that more than 90% of

the subjects in the sample use social media at least once a day. The sample included only five subjects who mentioned that they use social media less often.

Table 7: Frequencies and Percentages- Sample I

		<i>n</i>	%
Gender	Male	158	40.2
	Female	227	57.8
	Not Reported	8	2
Age	Between 18-25 years	297	75.6
	Between 26-32 years	45	11.5
	Between 33- 40 years	29	7.4
	Between 41-47 years	10	2.5
	Above 47 years	6	1.5
	Not Reported	6	1.5
Ethnicity	Caucasian	123	31.3
	African American	9	2.3
	Native Hawaiian	27	6.9
	Native American	7	1.8
	Asian	150	38.2
	Pacific Islander	24	6.1
	Other	45	11.5
	Not Reported	8	2
Education	College Freshman	65	16.5
	Sophomore	63	16
	Junior	92	23.4
	Senior	104	26.5
	Graduate Student	55	14
	Other	8	2
	Not Reported	6	1.5

### **3.3.2. Phase 2: Survey**

The second survey needed a more systematic approach than the first survey as the results should be generalizable to a larger population. Many studies focus on student samples to examine aspects related to social media uses and gratifications, and online political engagement (e.g., Chou & Hsiao, 2000; Lee, 2006; Quan-Haase & Young, 2010; Wang et al., 2012). However, it is possible that students might be less-engaged politically than other groups of people. Therefore, it is important to gather data from other groups. On the other hand, trust, or lack of trust, towards government and political efficacy might evolve as citizens get more experience in politics and civic life. Therefore, it is possible that potential dissidents represent a broad range of citizens, including students and other groups, such as professionals. As the study needs representation of dissidents and assureds, it is important to move beyond student populations. Accordingly, a mix of respondents representing students and professionals (private and public sector) is appropriate for the study. Therefore, a professional data collection agency was contacted to conduct the survey among a group of randomly selected respondents in the United States.

A pretest was conducted with 30 subjects prior to the launch of the survey and the results showed that the instrument was suitable for the full survey. Although it was possible to collect data based on demographic characteristics of the population, the data collection team was advised not to stratify the sample on any basis to ensure the randomness. The final sample (Table 8) included 313 subjects (41.9% males and 58.1% females). The sample was also diverse in terms of age and education. The sample included 236 (75.4%) Caucasians, 33 (10.5%) African Americans, 15 (4.8%) Asians, one Native American, and two Pacific Islanders. The sample had representation from different political viewpoints (80 liberals: 25.6%, 63 conservatives: 20.1%, 32 conservative democrats: 10.2%, 12 social conservatives: 3.8%, 68 moderates: 21.7%, 58 independent subjects:

18.5%) and individuals who identify themselves with the main political parties (155 democrats: 49.5%, 85 republicans: 27.2%, and 73 others: 23.3%).

Table 8: Frequencies and Percentages-Sample II

		<i>n</i>	%
Gender	Male	131	41.9
	Female	182	58.1
Age	Between 18-25 years	23	7.3
	Between 26-32 years	53	16.9
	Between 33- 40 years	64	20.4
	Between 41-47 years	48	15.3
	Above 47 years	125	39.9
Ethnicity	Caucasian	236	75.4
	African American	33	10.5
	Asian	15	4.8
	Native American	1	0.3
	Pacific Islander	2	0.6
	Hispanic	19	6.1
	Other	7	2.2
Education	College Freshman	17	5.4
	Sophomore	20	6.4
	Junior	12	3.8
	Senior	26	8.3
	Graduate Student	95	30.4
	Other	143	45.7
Political Self-identification	Liberal	80	25.6
	Conservative	63	20.1
	Conservative Democrat	32	10.2
	Social Conservative	12	3.8
	Moderate	68	21.7

	Independent	58	18.5
Political party affiliation	Democratic	155	49.5
	Republican	85	27.2
	Other	73	23.3
Social media use	Several times a day	193	61.7
	About once a day	50	16
	3-5 days a week	33	10.5
	1-2 days a week	21	6.7
	Every few weeks	12	3.8
	Less often	4	1.3

### 3.4. Data Analysis

#### 3.4.1. Phase 1

##### 3.4.1.1. Identification and Assessment of the Latent Factor Structure

Four exploratory factor analyses (maximum likelihood with Varimax rotation) were conducted to identify the best items to measure constructs that represent each class of affordance. Items that had low factor loadings ( $\leq .50$ ), high cross-loadings, and low anti-image correlations ( $\leq .50$ ) were removed. Factor analysis was repeated until an acceptable solution was reached. This analysis resulted in a reduced pool of 42 items that had high correlations (at least  $.5$ , except for a few items) with the factors that they were hypothesized to operationalize. Items with loadings below  $.50$  were retained as they had loadings close to  $.50$  and at least three items were used to operationalize each construct. Several items that loaded on to a different factor and had low cross-loadings were identified as new items that could operationalize the latter, rather than the original, factor. The final solutions had eigenvalues greater than 1 and accounted for much of the variance (Modality: 60.32%, Agency: 66.02%, Interactivity: 61.44%, and Navigability: 67.10%).

The items used for EFA were hypothesized to exhibit a latent factor structure that corresponds to Sundar and Limperos' conceptualization of affordance-based uses and gratifications. The EFA provides a preliminary test to determine the items that could best reveal latent factor structure for each MAIN dimension. These results were confirmed by conducting a Confirmatory Factor Analysis (CFA) ensuring that a factor structure that includes all constructs shows reasonable fit. The theoretical foundation provided by the MAIN model, however, extends beyond a first-order factor structure as the constructs represent four different classes of affordances. Therefore, model fit of a second-order factor structure was tested to examine whether the constructs suggested by initial analysis correspond with the MAIN model. Accordingly, two CFAs were conducted: 1) social media uses and gratifications as a first-order factor structure that examines the goodness-of-fit of the operationalization of constructs, and 2) social media uses and gratifications as a second-order factor structure that examines the goodness-of-fit of classifying constructs tested in the first model under the four classes of affordances suggested in the MAIN model. This two-step analysis allowed examination of the suitability of individual items to operationalize each construct as well as constructs to represent each class of affordance.

### **3.4.2. Phase 2**

#### **3.4.2.1. Identification of Political Actors and Attributes**

For constructs that included three five-point Likert Scale items (political trust and tolerance), totals less than nine were considered low and totals greater than 12 were labeled high. For constructs that had four items (political efficacy and dogmatism), totals less than 12 and greater than 16 were categorized as low and high respectively. On a five-point Likert Scale, any subject who selects an option below three indicates disagreement with the statement. Therefore, total scores less than nine for a construct with three items were identified as low. Totals greater than

or equal to 12 for a three-item construct with a five-point Likert Scale indicate high perception, as options above 4 indicate agreement. Similarly, 12 and 16 were used as cut-off criteria for constructs with four items. Taking a different approach than Johnson and Kaye (2013), who excluded subjects that had moderate scores, a separate category was created for moderates to aid comparison of high and low categories with subjects that have moderate scores. Accordingly, the sample included 151 subjects (48.2%) with high trust, 66 (21.1%) with low trust, 96 subjects (30.7%) with moderate trust, 60 (19.2%) with high efficacy, 125 (39.9%) with low efficacy, and 128 (40.9%) with moderate efficacy. Moreover, there were 165 (52.7%) subjects with high tolerance, 48 (15.3%) with low tolerance, 100 (31.9%) with moderate tolerance, 74 subjects (23.6%) with high dogmatism, 108 (34.5%) with low dogmatism, and 131 subjects (41.9%) who indicated moderate dogmatism in the sample.

Political actors were classified based on the Gamson Hypothesis (Gamson, 1968) and related recent work (e.g., Johnson, Kaye, & Kim, 2010; Johnson & Kaye, 2013) that used political trust and efficacy to identify dissidents, allegiants, subordinates, and alienated. While political allegiants indicate high trust and high efficacy, dissidents show low trust and low efficacy. Accordingly, political efficacy differentiates between allegiants and dissidents. However, allegiants and dissidents share a sense of capability in political engagement. Those who trust the government, but indicate low efficacy, can be identified as subordinates. Moreover, the alienated category shows low trust and low efficacy. Accordingly, the sample included 11 potential dissidents, 37 allegiants, 50 subordinates, and 32 alienated subjects. The sample also included 183 moderate subjects who did not fall into any of the main categories. This is a reasonable composition as dissidents are political minorities who attempt to change the system, and it is typical that there are reasonably large groups that trust and support the existing system

(allegiants). Moreover, it is possible that there are even larger groups that trust the system but politically inactive (subordinates), and perhaps smaller inactive groups that do not trust the system (alienated).

### **3.5. Analysis**

Marcoulides and Hershberger (1997) note that, most frequently, a descriptive discriminant analysis is conducted after detecting significant main effects from a MANOVA. Accordingly, a MANOVA was conducted to identify effects of political trust, efficacy, dogmatism, and tolerance. MANOVA was followed by a descriptive discriminant analysis. Descriptive discriminant analysis, an approach used to describe group differences based on a group of observed variables, was used to identify uses and gratifications that can characterize political actors (dissidents, allegiants, subordinates, and alienated) and attributes (political dogmatism and tolerance). Discriminant analysis was started with all the uses and gratifications constructs, and weak constructs (low standardized canonical discriminant function coefficients across all the functions) were removed to improve the model. This process was repeated until an acceptable solution was reached (i.e., high eigenvalues that explain a high percentage of variance, high canonical correlations, low Wilks' Lambda values, and significant Chi-square test results for at least one function).

## CHAPTER 4

### RESULTS- PHASE 1

#### 4.1. Introduction

Developing a social media uses and gratifications scale using the MAIN model (Sundar & Limperos, 2013; Sundar, 2008) requires moving beyond a conventional single-order factor analysis to developing a second-order factor analysis that examines the appropriateness of individual items to measure each construct as well as each construct to represent each class of affordance in the MAIN model. This chapter discusses the results of the factor analyses that lead to the development of the social media uses and gratifications scale. The discussion includes three main steps of analysis. The first step includes results of four EFAs used to identify the items that can represent uses and gratifications in each class of affordance. While the separate EFAs help identify factor structures for each affordance, they do not describe the quality of an all-inclusive factor solution. However, such a solution is necessary as it can help eliminate items that load into different affordances. Accordingly, the second step of the analysis reports the results of a first-order CFA model. The third step discusses the results of the second-order CFA, which was used to test the validity of a model that includes constructs as well as the four classes of affordances in the model.

#### 4.2. Identification of Latent Constructs

Factor loadings given in Tables 9 to 12 show that the factors identified in each solution suggest several distinct dimensions for each class of affordance. While these models support the original conceptualization, they indicate some deviations from the original factors and items suggested by Sundar and Limperos (2013). The factor structure in general and these deviations provide insight into understanding user perceptions of social media.

The first factor analysis (Table 9) shows factors that can conceptualize modality-related uses and gratifications. This solution includes two items that were newly introduced to measure the constructs (REAL 4 and BEIN 5). BEIN 5 (“Social media help me to have real interactions with people although I am not in physical proximity”) was retained despite low loading as it can allow more modifications in the CFA. The results also indicate that Coolness and Novelty items load into a single factor after weak items were excluded. The survey included five and four items to measure coolness and novelty respectively. However, the solution given in Table 4 includes two coolness items and three novelty items loaded into one factor.

Table 9: Factor Loadings: Modality

Item	Factor		
	1	2	3
REAL2- Communicating using social media is not that different from face-to-face communication.			0.58
REAL3- The experience in social media is very much like real life.			0.857
REAL4- I can experience the real world through social media.			0.556
COOL1- Social media platforms are unique compared to other media.	0.816		
COOL2- Social media platforms are distinctive compared to other media.		0.74	
NOVL1- Social media platforms are new compared to other media.	0.459		
NOVL2- Social media platforms have innovative features.		0.508	
NOVL3- Social media interfaces are different than traditional websites.		0.506	
BEIN1- Social media help me immerse myself in places that I cannot physically experience.	0.722		
BEIN2- Social media create the experience of being present in distant environments.		0.811	
BEIN3- Social media provide quality information that makes me feel like I am able to experience things as they are without actually being	0.723		

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there.

BEIN5- Social media help me to have real interactions with people

although I am not in physical proximity

0.423

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Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.

Operationalizing uses and gratifications related to agency-enhancement is important in the context of social media, as social media are often associated with engagement and participation. This is particularly the case with regards to political action. The survey provided a four-factor solution (Table 10), which is slightly different from the original five-factor conceptualization, to measure agency-based social media uses and gratifications. This solution builds on the work of Sundar and Limperos (2013) as the items retained include five items that were newly introduced to the scale (AGNC1, CMNB3, BAND4, BAND5, FILT4). These items were specifically written to capture the ability of social media to engage users and facilitate action. For instance, AGNC 1 (social media allow me to freely express my opinions) is targeted towards the ability of social media to create venues for opinion expression. Similarly, CMNB4 (social media allow me to actively contribute to communities that make an impact on society) was added to capture collective action, one of the most highlighted uses of social media. Moreover, several items in the original list were significantly changed to fit with social media. For example, the original community building item “it makes me realize that I am part of a community” was modified as “social media help me to be part of a community that I would not otherwise have been part of” to pinpoint one of the core features of social media, the ability to facilitate formation of social groups beyond geographic boundaries.

One of the main differences between the original conceptualization and this factor structure was that Filtering and Ownness did not load into distinct factors. Most of the Ownness items had high cross-loadings and were removed to improve the factor solution. However, OWNN 3 loaded into

filtering with a reasonable value and very low cross-loadings. This item was retained despite its low loading, as it helps operationalize the construct with at least three items and it had a higher loading than other filtering items. This is not a limitation, as it guides further discussion on differences between Filtering and Ownness.

Table 10: Factor Loadings: Agency

Item	Factor			
	1	2	3	4
AGNC1- Social media allow me to freely express my opinions.	0.839			
AGNC2- Social media allow me to freely assert my identity.	0.774			
AGNC5- Social media allow me to have my say.	0.612			
CMNB2- Social media help me to be part of a community that I would not otherwise have been part of.		0.715		
CMNB3- Social media allow me to build a network that could bring me social support.		0.793		
CMNB4- Social media allow me to actively contribute to communities that make an impact on society.		0.535		
BAND2- Social media comfort me by letting me know the thoughts and opinions of others.			0.495	
BAND4- Reading others comments on social media before I make comments helps me to avoid potential conflicts.			0.684	
BAND5- I try to adjust my reactions to social media posts based on comments made by others.			0.723	
FILT3- Social media allow me to sort through information before I share it with others.				0.56
FILT4- Social media allow me to limit the visibility of information I post to a small group.				0.709
OWNN3- My friends have their own ways of using social media.				0.484

Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.

Table 11 shows the factors and loadings for interactivity-based uses and gratifications. While most of the items in this model were the same as, or some variations of, the items suggested by Sundar and Limperos (2013), three new items (ACTV1, ACTV4, and DYNM2) had high loadings to support the factor structure. In contrast to the original four-factor conceptualization, this model suggests two latent factors to operationalize interactivity-related uses and gratifications of social media. As interaction items had high cross-loadings and low factor loadings, they were excluded from the final EFA. Activity had clear and reasonably high loadings that make it a distinct factor in the model. However, the model did not support identifying Responsiveness and Dynamic Control as two separate factors. This, however, does not undermine the validity of the model as it is reasonable to use both Responsiveness and Dynamic Control items to operationalize a single factor, as responsiveness is a necessary condition for dynamic control.

Table 11: Factor Loadings: Interactivity

Item	Factor	
	1	2
ACTV1- I can perform a number of tasks on social media.		0.58
ACTV2- I feel active when I use social media.		0.674
ACTV3- My Interaction on social media is not passive.		0.56
ACTV4- I get to do a lot of things on social media.		0.727
RESP2- Social media are responsive to my commands.	0.734	
RESP3- Social media respond well to my requests.	0.818	
DYNM1- Social media allow me to be in charge.	0.569	
DYNM2- Social media give me more control over information I post.	0.526	
DYNM3- I am able to control my interaction with the interfaces of the social media platforms I use.		0.587

Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.

Uses and gratifications related to navigability cover browsing, scaffolding/navigation aids, and play/fun aspects. While the first two aspects (browsing and scaffolding/navigation aids) are related, play shows a different dimension of navigation. Results given in Table 12 reflect those nuances, as browsing/variety seeking and scaffolding/navigation aids converged into one factor. This shows that participants' evaluation of browsing and scaffolding aids are not different. However, this is not conceptually counter-intuitive as scaffolding can be considered an element of browsing. Play, being a distinct dimension, loaded into a different factor. Consequently, the solution was a two-factor solution which was somewhat different from the hypothesized three-factor solution. Three out of nine items in the model (BROW2, PLAY4, and PLAY5) were newly introduced ones, and these items focus on accessibility of information, entertainment provided by information as well as features of social media.

Table 12: Factor Loadings: Navigability

Item	Factor	
	1	2
BROW1- Social media allow me to obtain a wide variety of information.	0.782	
BROW2- Social media can link me to sites that have different types of information.	0.758	
BROW3- Social media allow me to surf for things that I am interested in.	0.774	
BROW4- Social media allow me to browse freely.	0.59	
SCAF2- Social media allow me to link to other pieces of information.	0.663	
SCAF3- Social media offer a number of visual aids for more effective use.	0.682	
PLAY3- I enjoy escaping into a different world through social media.		0.525
PLAY4- Social media provide more entertaining information than other media.		0.865
PLAY5- Social media offer more entertaining features than other media.		0.857

Extraction Method: Maximum Likelihood. Rotation Method: Varimax with Kaiser Normalization.

The correlation matrix given in Table 13 shows that, except for three relationships (Realism and Agency, Realism and Filtering, and Realism and Browsing) latent constructs identified by the separate factor analyses significantly correlate with each other. These correlations, however, range from 0.120 and 0.568, indicating that the constructs have low to moderate correlations. This shows that the constructs have reasonable convergent validity in terms of representing the broad class of affordance they are hypothesized to measure. Low to moderate correlations between constructs also support discriminant validity, as they are not overly correlated. Significant correlations among constructs across classes of affordances also indicate that the constructs and items can represent a single scale that has multiple dimensions to measure social media uses and gratifications. This supports conducting an all-inclusive factor analysis to support the validity of the model.

Table 13: Correlations among Constructs

	Realism	Coolness	Being There	Agency	Community Building	Bandwagon	Filtering	Activity	Responsiveness	Browsing
Coolness	0.006									
Being There	0.909									
Agency	.364(**)	.336(**)								
Community Building	0	0								
Bandwagon	.120(*)	.178(**)	.305(**)							
Filtering	0.017	.000	.000							
Activity	.164(**)	.275(**)	.399(**)	.452(**)						
Responsiveness	0.001	.000	.000	.000						
Browsing	.201(**)	.128(*)	.382(**)	.279(**)	.400(**)					
Play	.000	0.011	.000	.000	.000					
Realism	0.022	.276(**)	.235(**)	.405(**)	.347(**)	.223(**)				
Coolness	0.669	.000	.000	.000	.000	.000				
Being There	.328(**)	.207(**)	.416(**)	.373(**)	.403(**)	.446(**)	.227(**)			
Agency	.000	.000	.000	.000	.000	.000	.000			
Community Building	.185(**)	.202(**)	.407(**)	.365(**)	.370(**)	.370(**)	.316(**)	.568(**)		
Bandwagon	.000	.000	.000	.000	.000	.000	.000	.000		
Filtering	0.066	.369(**)	.346(**)	.284(**)	.407(**)	.364(**)	.421(**)	.360(**)	.444(**)	
Activity	0.193	.000	.000	.000	.000	.000	.000	.000	.000	
Responsiveness	.207(**)	.233(**)	.378(**)	.378(**)	.344(**)	.469(**)	.246(**)	.455(**)	.372(**)	.442(**)
Browsing	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

\*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed).

### **4.3. Assessment of the Latent Factor Structure**

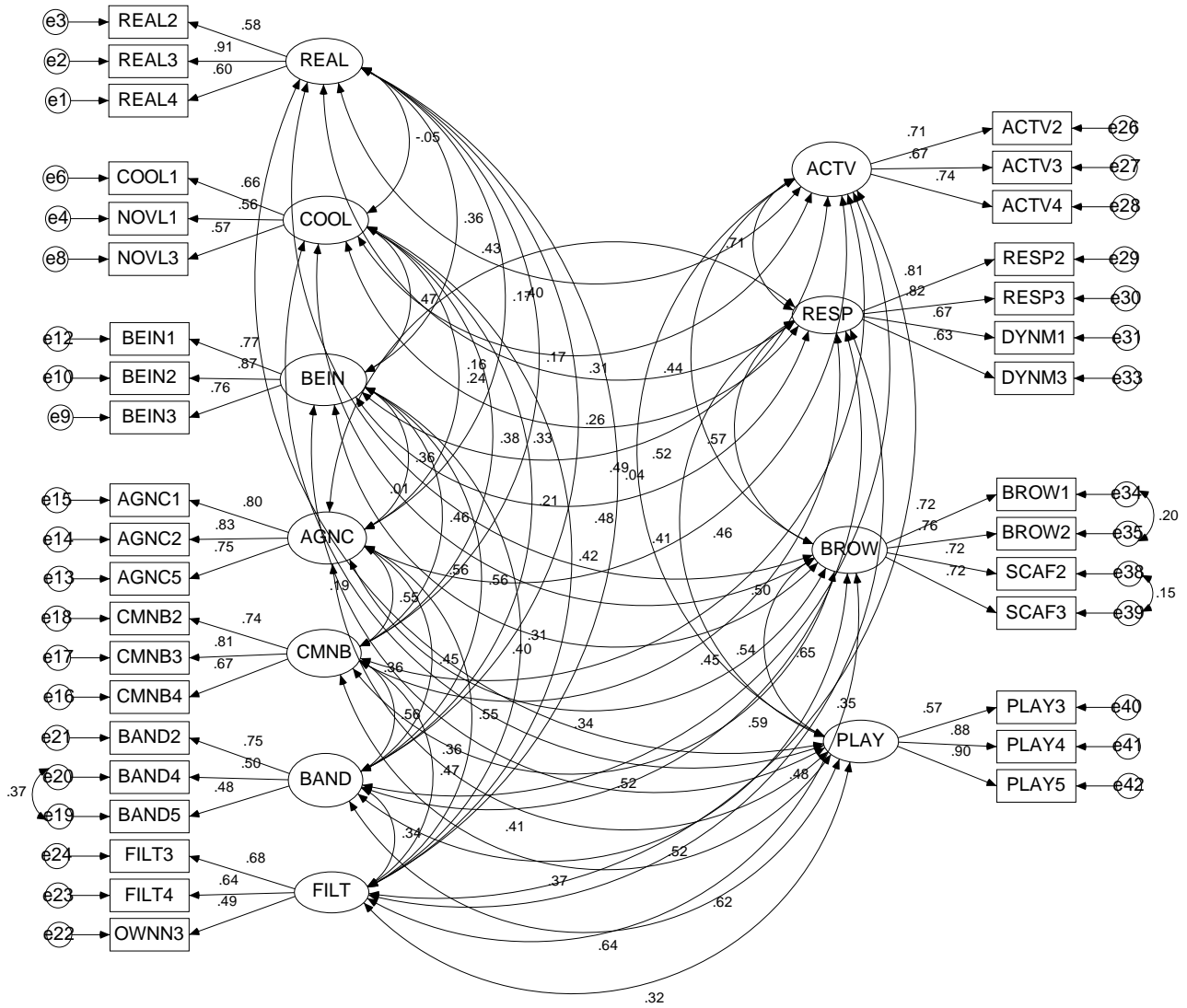
The latent factor structure displayed by the above EFAs was evaluated in two steps using two CFA models: 1) social media uses and gratifications constructs as a first order-factor structure, and 2) as a second-order factor structure that includes the MAIN dimension. The first model situates the results of the four separate EFAs discussed above in a single CFA model that can support the validity of an all-inclusive model. This is important as it shows the suitability of individual items to operationalize each construct regardless of the affordance they represent. The CFA is necessary as it tests perhaps the most important contribution made by the original model (i.e., that uses and gratifications can represent four main types of affordances). This shows the suitability of each construct to support broad affordances suggested by Sundar and Limperos (2013), supported by the EFAs as well as provide empirical evidence to distinguish between the four types of affordances. Results of EFAs were used to build an all-inclusive first order confirmatory factor model (Figure 2) and a second-order factor model (Figure 3). Three criteria were used to further improve the model fit: 1) standardized regression weights, 2) standardized residuals, and 3) modification indices. Several items with high standardized residuals and low standardized regression weights were dropped and covariances were drawn between three pairs of items to further improve the model fit.

As Byrne (2010) notes, assessing the model fit requires considering the adequacy of parameter estimates as well as the overall model. This requires examining the feasibility and statistical significance of parameter estimates, appropriateness of standard errors, and the overall model fit. Byrne further describes that estimates that fall within an acceptable range (e.g., estimates > 1.00), standard errors that are not excessively large or small, and estimates that are statistically significant ( $\leq 0.05$ ) can indicate the adequacy of parameter estimates. She also notes that the

model can be assessed as a whole by examining goodness-of-fit statistics. On individual parameter level, both CFA models showed acceptable results. Standardized regression weights for both models ranged between plus and minus one, standard errors were greater than zero and less than 0.20 for almost all parameters, and all parameters in both models were statistically significant ( $p \leq 0.05$ ).

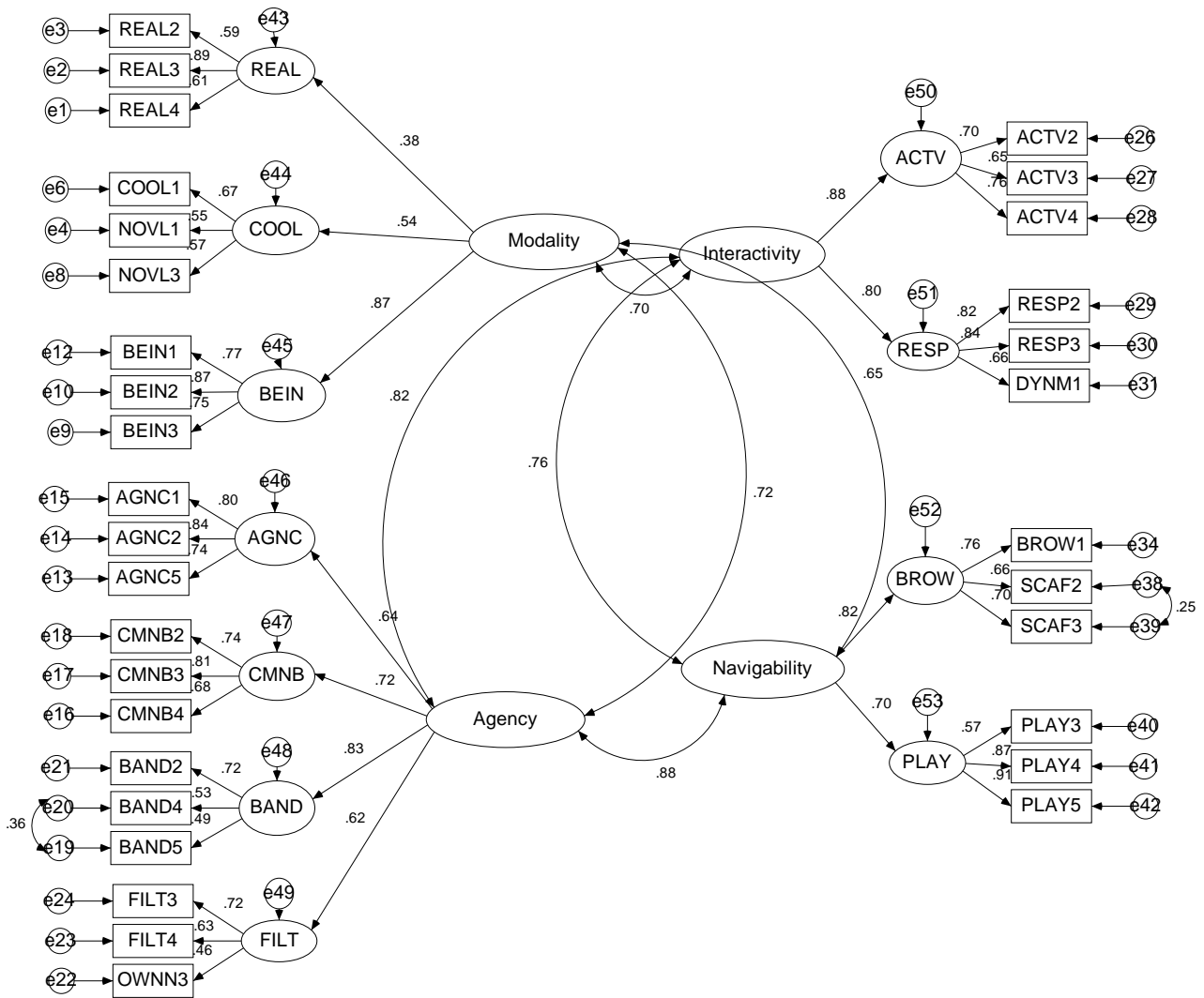
According to Hu and Bentler (1999), cut-off values close to .95 for TLI and CFI and .06 for RMSEA indicate reasonable fit. The first CFA model (first-order factor structure given in Figure 2) included 35 items and indicated reasonable fit: RMR: 0.046, Goodness-of-Fit Index (GFI): 0.891, Adjusted Goodness-of-Fit Index (AGFI): 0.863, Incremental Fit Index (IFI): 0.933, Tucker Lewis Index (TLI): 0.919, Comparative Fit Index (CFI): 0.931, Root Mean Square Error Approximation (RMSEA): 0.044. This model included 35 items (at least three items per construct) that had considerably high standardized regression weights (Table 14). These results support using the factors identified in four separate EFAs above as distinct constructs in an all-inclusive model. Given the acceptable fit of the first CFA model, the second CFA (Figure 3) was conducted to examine the suitability of the constructs to represent each affordance in the MAIN model. Items used in the first CFA were used to develop this model, and second-order items were introduced to operationalize the MAIN dimensions. A few items with high standardized residuals and low standardized regression weights were dropped to further improve the model fit. The final model consisted of 33 items (Figure 3) and showed reasonable fit (RMR: 0.052, GFI: 0.875, AGFI: 0.852, IFI: 0.914, TLI: 0.904, CFI: 0.913, RMSEA: .048). This indicates that Sundar and Limperos' (2013) conceptualization of affordance-based uses and gratifications is valid as a second-order factor structure.

Figure 2: Model 1: First-order Factor Structure



Model Fit:  $\chi^2$ : 881.70,  $df$ : 502,  $p \leq .001$ , RMR: 0.046, GFI: 0.891, AGFI: 0.863, IFI: 0.933, TLI: 0.919, CFI: 0.931, RMSEA: 0.044

Figure 3: Model II: Social Media Uses and Gratifications Scale as a Second-order Structure



Model Fit:  $\chi^2$ : 911.23, *df*: 476,  $p \leq .001$ , RMR: 0.052, GFI: 0.875, AGFI: 0.852, IFI: 0.914, TLI: 0.904, CFI: 0.913, RMSEA: 0.048

Table 14 compares standardized regression weights of the two models. It is notable that there are no major differences in regression weights between the two models. For each model, all but two relationships had regression weights lower than 0.50. Most of the effects in the models had regression weights higher than 0.60. In general, standardized regression weights and the model-fit indices show that conceptualizing social media uses and gratifications under the four types of affordances suggested by Sundar and Limperos (2013) does not jeopardize the statistical validity of the measure (please see appendices C and D for full model-fit statistics, co-variances, and regression weights).

Table 14: Standardized Regression Weights

Model 1: First-order Factor Structure			Model 2: Second-order Factor Structure		
REAL4	← REAL	0.595	REAL4	← REAL	0.609
REAL3	← REAL	0.908	REAL3	← REAL	0.886
REAL2	← REAL	0.577	REAL2	← REAL	0.586
NOVL1	← COOL	0.557	NOVL1	← COOL	0.549
COOL1	← COOL	0.662	COOL1	← COOL	0.671
NOVL3	← COOL	0.574	NOVL3	← COOL	0.571
BEIN3	← BEIN	0.758	BEIN3	← BEIN	0.753
BEIN2	← BEIN	0.866	BEIN2	← BEIN	0.867
BEIN1	← BEIN	0.77	BEIN1	← BEIN	0.773
AGNC5	← AGNC	0.745	AGNC5	← AGNC	0.736
AGNC2	← AGNC	0.831	AGNC2	← AGNC	0.837
AGNC1	← AGNC	0.8	AGNC1	← AGNC	0.804
CMNB4	← CMNB	0.673	CMNB4	← CMNB	0.675
CMNB3	← CMNB	0.812	CMNB3	← CMNB	0.809
CMNB2	← CMNB	0.742	CMNB2	← CMNB	0.742
BAND5	← BAND	0.483	BAND5	← BAND	0.489
BAND4	← BAND	0.504	BAND4	← BAND	0.53
BAND2	← BAND	0.747	BAND2	← BAND	0.719

OWNN3	←	FILT	0.493	OWNN3	←	FILT	0.456
FILT4	←	FILT	0.645	FILT4	←	FILT	0.626
FILT3	←	FILT	0.68	FILT3	←	FILT	0.724
ACTV2	←	ACTV	0.708	ACTV2	←	ACTV	0.699
ACTV3	←	ACTV	0.67	ACTV3	←	ACTV	0.653
ACTV4	←	ACTV	0.741	ACTV4	←	ACTV	0.762
RESP2	←	RESP	0.812	RESP2	←	RESP	0.817
RESP3	←	RESP	0.824	RESP3	←	RESP	0.843
DYNN1	←	RESP	0.668	DYNN1	←	RESP	0.665
DYNN3	←	RESP	0.628	BROW1	←	BROW	0.758
BROW1	←	BROW	0.722	SCAF2	←	BROW	0.659
BROW2	←	BROW	0.762	SCAF3	←	BROW	0.701
SCAF2	←	BROW	0.724	PLAY3	←	PLAY	0.566
SCAF3	←	BROW	0.724	PLAY4	←	PLAY	0.87
PLAY3	←	PLAY	0.57	PLAY5	←	PLAY	0.907
PLAY4	←	PLAY	0.878	REAL	←	Modality	0.381
PLAY5	←	PLAY	0.897	COOL	←	Modality	0.54
				BEIN	←	Modality	0.869
				AGNC	←	Agency	0.636
				CMNB	←	Agency	0.721
				BAND	←	Agency	0.829
				FILT	←	Agency	0.617
				ACTV	←	Interactivity	0.876
				RESP	←	Interactivity	0.8
				BROW	←	Navigability	0.821
				PLAY	←	Navigability	0.703

Table 15 shows means, standard deviations and Cronbach's alpha values for each construct. The results indicate that while respondents disagree that social media is similar to real life ( $\bar{x}$ : 2.03 on a five-item Likert scale), their perception of other uses and gratifications constructs range

between three (neither agree nor disagree) and four (agree). However, the fact that the mean values of these responses gravitate towards four (e.g., Coolness: 3.75, Community building: 3.68, Filtering: 3.83, and Browsing: 3.80) indicates the perception of uses and gratifications measured. The standard deviations are well below one, showing that there are no issues of normality in the sample. Moreover, the alpha values above 0.64 show that the items have reasonable internal consistency.

Table 15: Descriptive Statistics and Internal Consistency

	$\bar{x}$	<i>SD</i>	$\alpha$
Realism	2.03	0.738	0.705
Coolness	3.75	0.589	0.762
Being There	3.25	0.886	0.802
Agency	3.58	0.759	0.832
Community Building	3.68	0.712	0.787
Bandwagon	3.36	0.749	0.684
Filtering	3.83	0.545	0.64
Activity	3.08	0.801	0.775
Responsiveness	3.12	0.744	0.835
Browsing	3.8	0.629	0.88
Play	3.5	0.778	0.805

A Multivariate Analysis of Variance (MANOVA) was conducted to provide a perspective on effects of demographic variables (Table 16). This test examined effects of gender, age, ethnicity, and education of respondents on their perception of uses and gratifications. The results show that, while gender, age, and ethnicity have no significant effect, the perception of social media uses and gratifications can be affected by the education level of respondents (Pillai's Trace: 0.223,  $F$ : 1.431,  $p \leq 0.05$ ). The between-subjects effects showed that perception of agency and filtering can

depend on the education level of respondents (Agency:  $F: 3.35, p \leq 0.05$ , and Filtering:  $F: 4.328, p \leq 0.05$ ). This is possible, as the sample included a reasonable number of graduate students.

The two interaction effects tested in the model (Age  $\times$  Education and Age  $\times$  Ethnicity) were significant, indicating that the impact of age on perception of social media uses and gratifications depends on the education level (Pillai's Trace: 0.603,  $F: 1.659, p \leq 0.05$ ) and ethnicity of respondents (Pillai's Trace: 0.386,  $F: 1.248, p \leq 0.05$ ). According to between-subjects effects, the impact of age on several uses and gratifications constructs (e.g., Being There:  $F: 2.30, p \leq 0.05$ , Agency:  $F: 3.43, p \leq 0.05$ , Filtering:  $F: 2.55, p \leq 0.05$ , Responsiveness:  $F: 2.13, p \leq 0.05$ , Play:  $F: 1.83, p \leq 0.05$ ) depends on the education level of respondents. Similarly, the results showed that the impact of age on two dependent variables (Realism:  $F: 2.07, p \leq 0.05$ , Agency:  $F: 2.54, p \leq 0.05$ ) depend on the ethnicity of participants.

Table 16: Results of the Multivariate Tests(c)

		Value	$F$	Hypothesis $df$	Error $df$	$p$
Gender	Pillai's Trace	0.031	.958(a)	11	333	0.485
	Wilks' Lambda	0.969	.958(a)	11	333	0.485
	Hotelling's Trace	0.032	.958(a)	11	333	0.485
	Roy's Largest Root	0.032	.958(a)	11	333	0.485
Age	Pillai's Trace	0.150	1.189	44	1344	0.187
	Wilks' Lambda	0.857	1.191	44	1275.929	0.185
	Hotelling's Trace	0.158	1.193	44	1326	0.183
	Roy's Largest Root	0.081	2.473(b)	11	336	0.005
Ethnicity	Pillai's Trace	0.187	0.987	66	2028	0.507
	Wilks' Lambda	0.826	0.986	66	1787.288	0.509
	Hotelling's Trace	0.196	0.985	66	1988	0.511
	Roy's Largest Root	0.078	2.383(b)	11	338	0.008
Education	Pillai's Trace	0.223	1.431	55	1685	0.022
	Wilks' Lambda	0.791	1.458	55	1544.968	0.017

	Hotelling's Trace	0.246	1.483	55	1657	0.013
	Roy's Largest Root	0.150	4.588(b)	11	337	0.000
	Pillai's Trace	0.603	1.659	132	3773	0.000
Age ×	Wilks' Lambda	0.521	1.725	132	2742.576	0.000
Education	Hotelling's Trace	0.710	1.782	132	3643	0.000
	Roy's Largest Root	0.32	9.140(b)	12	343	0.000
Age ×	Pillai's Trace	0.386	1.248	110	3420	0.043
Ethnicity	Wilks' Lambda	0.668	1.264	110	2505.294	0.036
	Hotelling's Trace	0.424	1.276	110	3312	0.029
	Roy's Largest Root	0.165	5.132(b)	11	342	0.000

a Exact statistic, b The statistic is an upper bound on F that yields a lower bound on the significance level. c Design: Gender+Age+Ethnicity+Education+Age × Education+Age × Ethnicity

## **CHAPTER 5**

### **RESULTS- PHASE 2**

#### **5.1. Introduction**

Political dissidence has been subject to extensive research in the context of social media. However, work that examines political dissent in oppressive contexts dominates the field. Accordingly, there is a need for studies that focus potential political dissidence in democratic contexts. This chapter sheds light on this topic by examining social media uses and gratifications that can characterize political actor types, dissidents and allegiants in particular, and individuals who indicate different levels of political dogmatism and tolerance. The chapter includes three main sections. The first section discusses the results of two CFA models that were used to examine the statistical validity of the constructs. The first CFA is a validation of the social media uses and gratifications scale developed in the first phase of the research using the second sample. The second CFA tests the quality of the items and constructs used to measure political dogmatism and tolerance. The second section discusses differences in uses and gratifications between political actor types and reports the results of three discriminant models that were used to identify uses and gratifications that can characterize different political actors. The third section examines differences in uses and gratifications between individuals with different levels of political dogmatism and tolerance. The third section also discusses two discriminant models that suggest uses and gratifications constructs that can characterize dogmatism and tolerance levels.

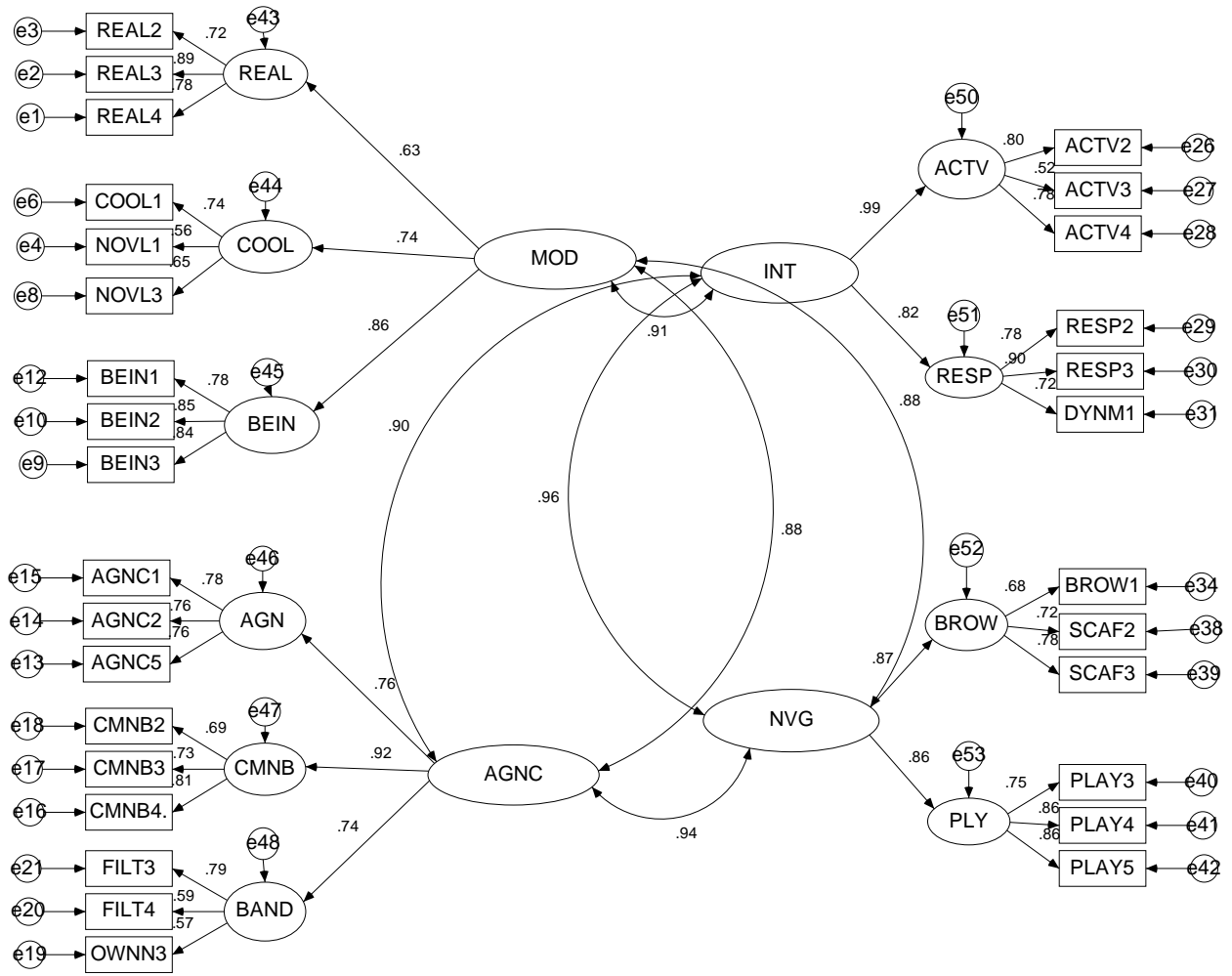
#### **5.2. Confirmatory Factor Analysis**

Two CFAs were conducted to establish the validity of measures prior to examining connections between uses and gratifications, and political actors and attributes. The first CFA (Figure 4) was conducted to test the goodness-of-fit of the factor structure for uses and gratifications identified

in the first study using the new sample. The same set of items was used to create a second-order factor model, and the goodness-of-fit of the new model was similar to the first study (goodness-of-fit: first study: RMR: 0.052, GFI: 0.875, AGFI: 0.852, IFI: 0.914, TLI: 0.904, CFI: 0.913, RMSEA: 0.048, and second sample: GFI: 0.850, AGFI: 0.821, IFI: 0.924, TLI: 0.914, CFI: 0.923, RMSEA: 0.056). This indicates that the measure developed in the first study can produce similar results when tested with a different and more diverse sample.

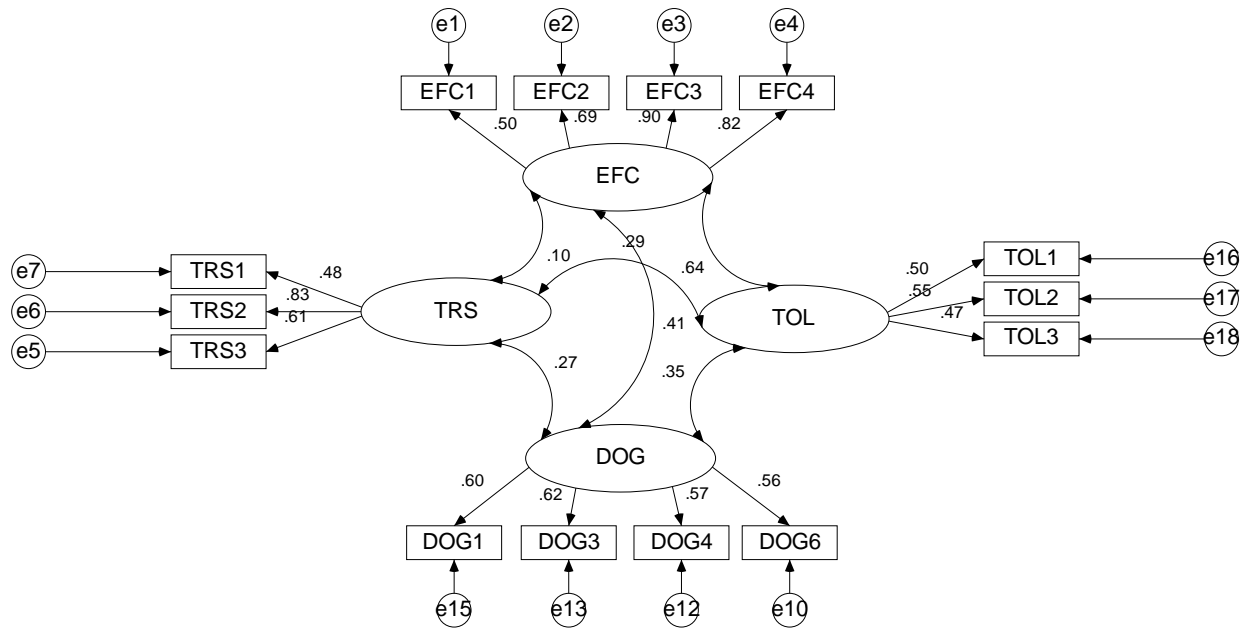
The second CFA (Figure 5) was used to establish the validity of political trust, efficacy, dogmatism, and tolerance measures. Items that had high standardized residuals and low standardized regression weights were dropped to improve model fit. The final factor structure indicated reasonable fit (GFI: 0.940, AGFI: 0.911, IFI: 0.931, TLI: 0.910, CFI: 0.929, RMSEA: 0.058). All the parameters of both CFA models were significant and each item had considerably high regression weights.

Figure 4: Confirmatory Factor Analysis of Uses and Gratifications Constructs



Model fit:  $\chi^2$ : 768.89, *df*: 389,  $p \leq .001$ , GFI: 0.850, AGFI: 0.821, IFI: 0.924, TLI: 0.914, CFI: 0.923, RMSEA: 0.056

Figure 5: Confirmatory Factor Analysis of Political Trust, Efficacy, Tolerance, and Dogmatism Constructs



Model fit:  $\chi^2$ : 144.315, *df*: 71,  $p \leq .001$ , GFI: 0.940, AGFI: 0.911, IFI: 0.931, TLI: 0.910, CFI: 0.929, RMSEA: 0.058

### 5.3. Political Actors and Uses and Gratifications

Table 17 shows means and standard deviations for uses and gratifications constructs for each actor category. Consequently, both dissidents and allegiants gravitate towards strong agreement (on a one-to-five scale) for some constructs (e.g., Coolness, Agency, Community Building, and Browsing), and they also appear to have slight differences in terms of filtering and trust. Mean values of these two groups differ from the other three groups that gravitate towards neutral responses for most of the constructs (e.g., Activity, Responsiveness, and Play) and disagreement for some constructs (e.g., Realism). The first research question asks whether dissidents and assureds differ in terms of new media gratifications they seek. An independent samples t-test, however, showed that there are significant differences between dissidents and allegiants only for

filtering ( $t: -2.405, p \leq 0.05$ ). However, both allegiants and dissidents had considerably different mean values than subordinates, moderates, and the alienated actors. Therefore, a more in-depth examination of group differences can reveal nuances in social media uses and gratifications of these actors.

Table 17: Means and Standard Deviations by Political Actor Category

	Moderates		Dissidents		Allegiants		Subordinates		Alienated	
	$\bar{x}$	$SD$	$\bar{x}$	$SD$	$\bar{x}$	$SD$	$\bar{x}$	$SD$	$\bar{x}$	$SD$
Realism	2.44	0.839	3.39	0.998	3.26	1.25	2.27	0.838	2.7	1.038
Coolness	3.66	0.6	4.27	0.389	4.26	0.782	3.65	0.617	3.51	0.568
Being There	3.32	0.888	3.58	1.044	3.7	1.146	3.11	0.98	3.27	0.759
Agency	3.77	0.65	4.36	0.526	4.35	0.603	3.85	0.697	3.69	0.829
Community										
Building	3.75	0.698	4.09	0.634	4.12	0.759	3.57	0.774	3.63	0.665
Filtering	3.92	0.486	3.7	0.752	4.26	0.663	3.89	0.596	3.64	0.551
Activity	3.23	0.815	3.64	0.567	3.77	0.916	3.04	0.727	2.99	0.76
Responsiveness	3.21	0.746	3.24	1.184	3.85	0.915	2.96	0.755	3.16	0.616
Browsing	3.82	0.644	4.03	0.505	4.12	0.63	3.75	0.699	3.63	0.615
Play	3.47	0.856	3.79	0.688	3.94	0.984	3.49	0.817	3.3	0.658
Trust	3.66	0.637	2.7	0.458	4.53	0.338	4.39	0.385	2.79	0.29
Tolerance	3.8	0.548	4.09	0.598	4.38	0.485	3.61	0.619	3.47	0.586
Dogmatism	3.42	0.636	3.3	0.954	3.91	0.825	3.27	0.637	3.27	0.459
Efficacy	3.24	0.758	4.36	0.205	4.41	0.214	2.35	0.591	2.48	0.54

The results of the MANOVA (Table 18) showed that all four tests were significant ( $p \leq 0.05$ ) for actor category. This indicates that there are differences between political actors in terms of their social media uses and gratifications. The Waller-Duncan test was used for post-hoc analysis showed that for all the constructs, except filtering and responsiveness, dissidents and allegiants fall into the same subset. Post-hoc test results also showed that dissidents and allegiants differ in

terms their filtering of social media content. Waller-Duncan test results (Table 19) show that dissidents are almost neutral ( $\bar{x}$ : 3.70) and fall in the same subsets as alienated ( $\bar{x}$ : 3.64), subordinates ( $\bar{x}$ : 3.89), and moderates ( $\bar{x}$ : 3.92) while allegiants tend to highly filter their content ( $\bar{x}$ : 4.26). However, in the first subset, dissidents indicated slightly higher mean for filtering than alienated, and in the second subset, they had lower filtering than subordinates and moderates. Moreover, dissidents and allegiants represented different subsets for responsiveness (Table 20). Although dissidents had the highest mean value (3.24) for responsiveness in the first subset for responsiveness they were included in the same category with subordinates, alienated, and moderates, while allegiants ( $\bar{x}$ : 3.85) were the only actor category in the second subset (please see Appendix C). This shows that filtering and responsiveness gratifications can help describe differences between dissidents and allegiants. However, as mentioned above, an independent samples t-test showed that that these two groups differ only in terms of their filtering of social media content.

Table 18: Results of MANOVA based on Actor Category

Effect	Value	<i>F</i>	Hypothesis			
			<i>df</i>	Error <i>df</i>	Sig.	
Actor	Pillai's Trace	1.239	9.986	50.000	1515.000	.000
Category	Wilks' Lambda	.010	47.329	50.000	1367.014	.000
	Hotelling's Trace	74.169	441.154	50.000	1487.000	.000
	Roy's Largest Root	73.888	2238.795	10.000	303.000	.000

Table 19: Waller-Duncan Test Results for Filtering

Actor Category	<i>n</i>	Subset		
		1	2	3
Alienated	32	3.64		
Dissidents	11	3.70	3.70	

Subordinates	50	3.89	
Moderates	183	3.92	
Allegiants	37		4.26

Table 20: Waller-Duncan Test Results for Responsiveness

Actor Category	<i>N</i>	Subset	
		1	2
Subordinates	50	2.96	
Alienated	32	3.16	
Moderates	183	3.21	
Dissidents	11	3.24	
Allegiants	37		3.85

Although dissidents and allegiants differed only in terms of their filtering, these two groups were different from other actors. For instance, they were the only two actor groups in the same subset for Realism, Coolness, Agency, Community Building, Activity, and Play (Tables 21 to 26). For these gratifications, these two groups had higher mean values than other actors. This signals that dissidents and allegiants are more different from other actors than from each other. This suggests that differences in social media uses and gratifications between dissidents and allegiants should be examined considering their deviations from other types of actors as well as from each other.

Table 21: Waller-Duncan Test Results for Realism

Actor Category	<i>n</i>	Subset		
		1	2	3
Subordinates	50	2.27		
Moderates	183	2.44	2.44	
Alienated	32		2.70	
Allegiants	37			3.26
Dissidents	11			3.39

Table 22: Waller-Duncan Test Results for Coolness

Actor Category	<i>n</i>	Subset	
		1	2
Alienated	32	3.51	
Subordinates	50	3.65	
Moderates	183	3.66	
Allegiants	37		4.26
Dissidents	11		4.27

Table 23: Waller-Duncan Test Results for Agency

Actor Category	<i>n</i>	Subset	
		1	2
Alienated	32	3.69	
Moderates	183	3.77	
Subordinates	50	3.85	
Allegiants	37		4.35
Dissidents	11		4.36

Table 24: Waller-Duncan Test Results for Community Building

Actor Category	<i>n</i>	Subset	
		1	2
Subordinates	50	3.57	
Alienated	32	3.63	
Moderates	183	3.75	
Dissidents	11		4.09
Allegiants	37		4.12

Table 25: Waller-Duncan Test Results for Activity

Actor Category	<i>n</i>	Subset	
		1	2
Alienated	32	2.99	
Subordinates	50	3.04	

Moderates	183	3.23
Dissidents	11	3.64
Allegiants	37	3.77

Table 26: Waller-Duncan Test Results for Play

Actor Category	<i>n</i>	Subset		
		1	2	3
Alienated	32	3.30		
Moderates	183	3.47	3.47	
Subordinates	50	3.49	3.49	
Dissidents	11		3.79	3.79
Allegiants	37			3.94

Results of the MANOVA and the post-hoc tests show the appropriateness of conducting a descriptive discriminant analysis to identify underlying reasons that cause group differences in social media uses and gratifications. Although dissidents and allegiants had significant differences only in terms of filtering, a discriminant model that includes a combination of uses and gratifications can help examine the extent to which a group of variables can classify users into these two groups accurately. Although the primary focus of this study is to identify uses and gratifications that can characterize dissidents and allegiants, the above post-hoc analysis highlights the need for an analysis that examines how these two groups differ from other actors as well as from each other. Accordingly, a three-step discriminant analysis was conducted to answer the second research question (RQ<sub>2</sub>: what uses and gratifications, if any, characterize dissidents as opposed to assureds?)

The following analysis examines uses and gratifications that characterize four main groups of political actors, with a special focus on dissidents and allegiants. Three discriminant models were created to achieve this goal. The first model focused on identifying uses and gratifications that

can describe differences in uses and gratifications between all five categories of subjects. Then, several groups were removed to improve the ability of the model to classify subjects into actor groups accurately. Accordingly, the second model focused on dissidents, allegiants, and subordinates, and the third model included dissidents, allegiants and moderates.

In discriminant analysis, models with high eigenvalues and canonical correlations are preferable as they account for high variances and show quality of the models. On the other hand, low Wilks' Lambda values are preferable as they show the variance not explained by group differences. Moreover, for discriminant models, significant Chi-square tests in the test of functions show significant group differences. Accordingly, these criteria were used to evaluate the models.

### 5.3.1. Step 1: All Actor Categories

Table 27 shows eigenvalues, canonical correlations, Wilks' Lambda values, and the results of Chi-square tests for the first discriminant model. Accordingly, although canonical correlation for the first function was close to 0.5 and two Chi-square tests were significant (1 through 4-  $\chi^2$ : 106.94,  $p \leq 0.05$ , 2 through 4-  $\chi^2$ : 42.68,  $p \leq 0.05$ ), low eigenvalues and high Wilks' Lambda values indicated that the first model needs improvement. The standardized canonical discriminant function coefficients (Table 28) were reasonably high and the first function accounted for 61.8% of the variance, indicating that the model can be further improved.

Table 27: Eigenvalues and Wilks' Lambda Test Results- Step 1

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.234	61.8	61.8	.435
2	.089	23.5	85.4	.286
3	.044	11.6	97.0	.205
4	.011	3.0	100.0	.106

Test of Function(s)	Wilks' Lambda	$\chi^2$	<i>df</i>	Sig.
1 through 4	.705	106.942	28	.000
2 through 4	.870	42.687	18	.001
3 through 4	.947	16.612	10	.083
4	.989	3.472	4	.482

Table 28: Standardized Canonical Discriminant Function Coefficients

	Function			
	1	2	3	4
Realism	.512	-.431	.272	-.290
Coolness	.622	.074	-.330	.185
Agency	.433	-.360	-.574	-.460
Community Building	-.187	-.220	.435	.851
Filtering	.037	.970	-.308	-.265
Responsiveness	.078	.608	.819	-.265
Browsing	-.229	-.217	-.229	.626

Discriminant function plot for the first step (Figure 6) shows that dissidents and allegiants differ from the other three groups along the first function, and from each other along the second function. In other words, dissidents and allegiants tend to differ from moderates, subordinates, and alienated in terms of their perception of Realism, Coolness, and Agency, and from each other in terms of their perception of filtering and responsiveness. Degree of success of the classification for the sample is given in Table 29. The model was able to classify only 38% of the cases correctly. However, the model was able to correctly classify 63.6% of dissidents and 64.9% allegiants, indicating that uses and gratifications can help classify these two types of actors more than other groups. This was evident with the low correct classification percentages for moderates (33.9%), subordinates (32%), and alienated (31.3%).

Figure 6: Canonical Discriminant Functions for All Actor Categories

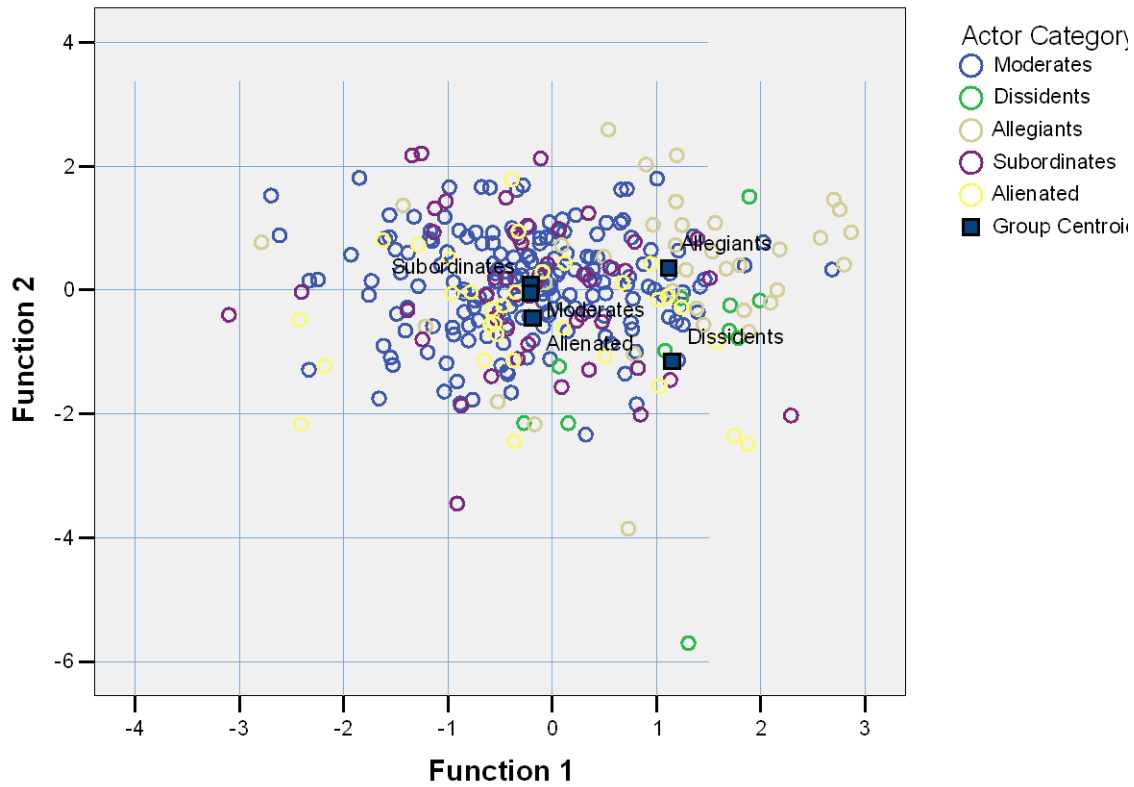


Table 29: Classification Results(a)- All Political Actor Categories

		Predicted Group Membership					Total
Actor Category		Moderates	Dissidents	Allegiants	Subordinates	Alienated	
<i>n</i>	Moderates	62	10	31	43	37	183
	Dissidents	0	7	3	1	0	11
	Allegiants	3	4	24	4	2	37
	Subordinates	14	6	6	16	8	50
	Alienated	4	5	5	8	10	32
%	Moderates	33.9	5.5	16.9	23.5	20.2	100.0
	Dissidents	.0	63.6	27.3	9.1	.0	100.0
	Allegiants	8.1	10.8	64.9	10.8	5.4	100.0
	Subordinates	28.0	12.0	12.0	32.0	16.0	100.0
	Alienated	12.5	15.6	15.6	25.0	31.3	100.0

a 38.0% of original grouped cases correctly classified.

### 5.3.2. Step 2: Dissidents, Allegiants, and Subordinates

The alienated category was dropped in the second model as it had the lowest correct classification percentage in the first model. Moderates were also dropped, as understanding uses and gratifications that can characterize subordinates could be more important from a political standpoint. Accordingly, the second model included only three actor types (dissidents, allegiants, and subordinates) and showed improvement. Table 30 shows the eigenvalues, canonical correlations, and the results of the Wilk's Lambda test for the model. The eigenvalue for the first function was 0.408 which was considerable improvement compared to the first model. Table 31 provides standardized canonical correlations. The canonical correlation for the first function was above 0.5 and both discriminant functions were significant (function 1:  $\chi^2$ : 42.48,  $p \leq 0.05$ , function 2:  $\chi^2$ : 10.68,  $p \leq 0.05$ ). Standardized canonical discriminant function coefficients indicated that Realism (0.521), Filtering (0.719), and Responsiveness (0.667) can be used to classify actors into dissidents, allegiants, or subordinates.

Table 30: Eigenvalues and Wilks' Lambda Test Results of Model 2

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.408	77.0	77.0	.538
2	.122	23.0	100.0	.329
Test of Function(s)	Wilks' Lambda	$X^2$	$df$	Sig.
1 through 2	.633	42.489	10	.000
2	.891	10.682	4	.030

Table 31: Standardized Canonical Discriminant Function Coefficients

	Function	
	1	2
Realism	.521	-.488
Coolness	.461	-.113
Agency	.233	-.287
Filtering	-.209	.719
Responsiveness	.249	.667

Figure 7 shows that dissidents, allegiants, and subordinates differ from each other along the two discriminant functions tested. As in the first model, dissidents and allegiants were different from subordinates along the first function. This shows that these two categories perceive Realism, Coolness, and Agency differently than subordinates. An independent samples t-test showed that dissidents and subordinates differ in terms of all three of these constructs (Realism:  $t: 3.882$ ,  $p \leq 0.05$ , Coolness:  $t: 3.181$ ,  $p \leq 0.05$ , and Agency:  $t: 2.312$ ,  $p \leq 0.05$ ). Similarly, there were significant differences between allegiants and subordinates in terms of these three constructs (Realism:  $t: 4.412$ ,  $p \leq 0.05$ , Coolness:  $t: 4.052$ ,  $p \leq 0.05$ , and Agency:  $t: 3.531$ ,  $p \leq 0.05$ ). Mean values for Realism, Coolness, and Agency showed that both dissidents and allegiants perceived higher Realism, Coolness, and Agency than subordinates. A t-test further showed that dissidents and allegiants do not differ in terms of their perception of uses and gratifications in the first discriminant function.

As shown in Figure 7, dissidents and allegiants differ along the second discriminant function. Two uses and gratifications constructs had high standardized canonical discriminant function coefficients (Filtering: 0.719 and Responsiveness: 0.667). Although dissidents had lower mean values for both these constructs than allegiants (Filtering: dissidents: 3.70, allegiants: 4.26, and

Responsiveness: dissidents: 3.24, allegiants: 3.85) they differed significantly only in terms of Filtering ( $t: -2.405, p \leq 0.05$ ).

The classification results for the second discriminant model are given in Table 32. The model correctly classified 68.4% of the original grouped cases. This was a considerable improvement compared to the 38% classification accuracy of the first model. This model classified 63.6% of dissidents, 67.6% of allegiants, and 70% of subordinates correctly. These results indicate that the second model is appropriate for understanding underlying uses and gratification related to different actor types. In particular, the results show that Realism, Coolness, Agency, and Filtering can be used to characterize dissidents, allegiants, and subordinates.

Figure 7: Canonical Discriminant Functions for Dissidents, Allegiants, and Subordinates

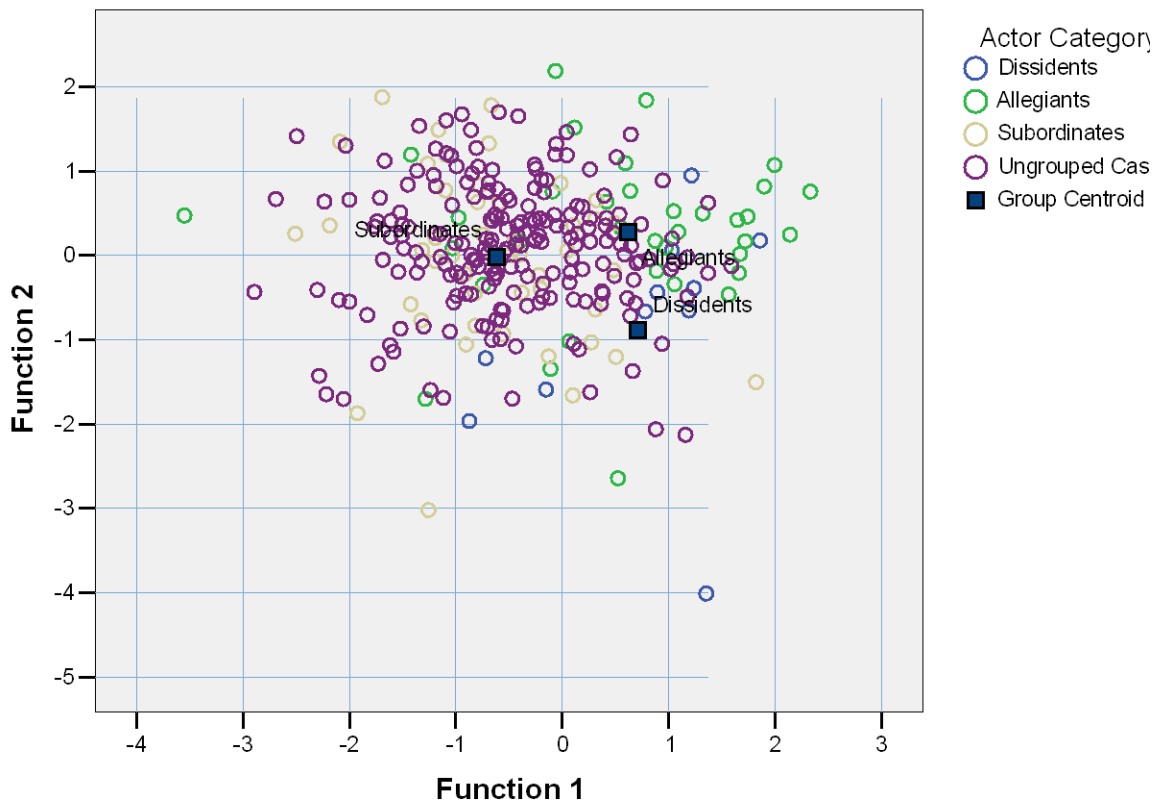


Table 32: Classification Results(a), Dissidents, Allegiants, and Subordinates

	Actor Category	Predicted Group Membership			Total
		Dissidents	Allegiants	Subordinates	
<i>n</i>	Dissidents	7	3	1	11
	Allegiants	5	25	7	37
	Subordinates	7	8	35	50
	Ungrouped cases	17	51	147	215
%	Dissidents	63.6	27.3	9.1	100.0
	Allegiants	13.5	67.6	18.9	100.0
	Subordinates	14.0	16.0	70.0	100.0
	Ungrouped cases	7.9	23.7	68.4	100.0

a 68.4% of original grouped cases correctly classified.

### 5.3.3. Step 3: Dissidents, Allegiants, and Moderates

The third discriminant model was used to discover uses and gratifications that can characterize dissidents, allegiants, and moderates. Comparing the main two political groups with moderates is important, as it shows how their social media uses and gratifications differ from politically neutral users. Table 33 and 34 show results of the discriminant model. This model also showed reasonable results as, despite a relatively low eigenvalue for the first function, canonical correlation was close to 0.50, and the Chi-square test for both functions was significant (function 1:  $X^2$ : 75.32,  $p \leq 0.05$ , function 2:  $X^2$ : 16.81,  $p \leq 0.05$ ). Moreover, standardized canonical discriminant function coefficients were high for all the gratifications. This model included the same set of gratifications as the second model (Realism, Coolness, Agency, Filtering, and Responsiveness), indicating that these five uses and gratifications can characterize political actors.

Table 33: Eigenvalues and Wilks' Lambda Test Results- Model 3

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.295	79.3	79.3	.478
2	.077	20.7	100.0	.268
Test of Function(s)	Wilks' Lambda	$X^2$	<i>df</i>	Sig.
1 through 2	.717	75.327	10	.000
2	.928	16.818	4	.002

Table 34: Standardized Canonical Discriminant Function Coefficients

	Function	
	1	2
Realism	.569	-.253
Coolness	.556	-.022
Agency	.574	-.379
Filtering	-.270	.776
Responsiveness	-.295	.713

The canonical discriminant functions for the third model (Figure 8) show that dissidents, allegiants, and moderates differ from each other. However, the difference between moderates and dissidents is more visible along the first function. Mean values and independent samples t-test results showed that dissidents have higher Realism, Coolness, and Agency perceptions than moderates (means and t-test results: Realism: dissidents: 3.39, moderates: 2.44,  $t: -3.622, p \leq 0.05$ , Coolness: dissidents: 4.27, moderates: 3.66,  $t: -3.343, p \leq 0.05$ , Agency: dissidents: 4.36, moderates: 3.77,  $t: -2.974, p \leq 0.05$ ). Similarly, allegiants were significantly different from moderates along these three gratifications (means and t-test results: Realism: allegiants: 3.26, moderates: 2.44,  $t: -4.951, p \leq 0.05$ , Coolness: allegiants: 4.26, moderates: 3.66,  $t: -5.268, p \leq 0.05$ ,

Agency: allegiants: 4.35, moderates: 3.77,  $t: -5.287, p \leq 0.05$ ). However, the t-test results showed that dissidents and allegiants do not differ in terms of their perception of these three constructs.

The second function in the third model showed that filtering and responsiveness can characterize differences between the three groups. However, according to t-test results, dissidents did not significantly differ from moderates in terms of Filtering and Responsiveness. However, perception of Filtering and Responsiveness was significantly different between allegiants and moderates (means and t-test results: Filtering: allegiants: 4.26, moderates: 3.92,  $t: -3.645, p \leq 0.05$ , Responsiveness: allegiants: 3.85, moderates: 3.21,  $t: -4.514, p \leq 0.05$ ).

The classification results (Table 35) show that the third discriminant model can accurately classify 70.1% of the actors in the sample. The model was able to correctly classify 71% of moderates, 72.7% of dissidents, and 64.9% of allegiants. This classification is slightly more accurate than the classification of the second model.

Figure 8: Canonical Discriminant Functions- Dissidents, Allegiants, and Moderates

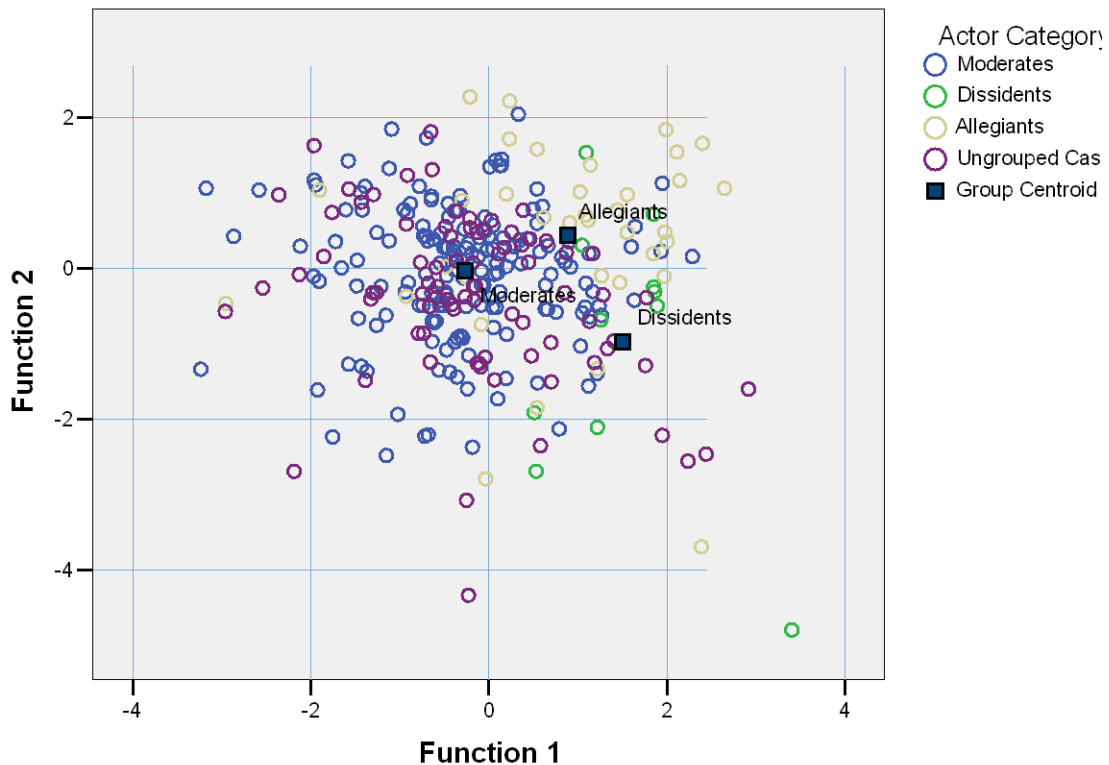


Table 35: Classification Results(a)- Moderates, Dissidents, and Allegiants

	Actor Category	Predicted Group Membership			Total
		Moderates	Dissidents	Allegiants	
<i>n</i>	Moderates	130	19	34	183
	Dissidents	0	8	3	11
	Allegiants	7	6	24	37
	Ungrouped cases	56	17	9	82
%	Moderates	71.0	10.4	18.6	100.0
	Dissidents	.0	72.7	27.3	100.0
	Allegiants	18.9	16.2	64.9	100.0
	Ungrouped cases	68.3	20.7	11.0	100.0

a 70.1% of original grouped cases correctly classified.

Both second and third discriminant models are appropriate for interpretation due to two reasons. First, both models had considerably high accuracy in predicting the political actor category based on uses and gratifications. Second, both models included the same set of uses and gratifications (Realism, Coolness, Agency, Filtering, and Responsiveness). Interpreting these two models separately is crucial as an all-inclusive model can jeopardize the accuracy of prediction. However, such an interpretation can allow for examining differences between the two main actor types (dissidents and allegiants) and other groups separately, focusing on unique political characteristics of each group.

#### 5.4. Political Dogmatism and Tolerance

Means and standard deviations given in Table 36 show that those who have high political dogmatism have high mean values for Agency ( $\bar{x}$ : 4.21), Community Building ( $\bar{x}$ : 4.09), Filtering ( $\bar{x}$ : 4.14), Browsing ( $\bar{x}$ : 4.13), and Play ( $\bar{x}$ : 4.03) gratifications of social media. However, individuals with low and moderate dogmatism gravitate toward neutral perceptions of social media uses and gratifications. The third research question focuses on differences in uses and

gratifications between individuals with high and low political dogmatism. An independent samples t-test showed that these two groups differ from each other for each construct (Realism:  $t: -6.967, p \leq 0.05$ , Coolness:  $t: -3.346, p \leq 0.05$ , Being There:  $t: -5.214, p \leq 0.05$ , Agency:  $t: -4.772, p \leq 0.05$ , Community Building:  $t: -4.144, p \leq 0.05$ , Filtering:  $t: -3.505, p \leq 0.05$ , Activity:  $t: -4.970, p \leq 0.05$ , Responsiveness:  $t: -5.626, p \leq 0.05$ , Browsing:  $t: -3.876, p \leq 0.05$ , and Play:  $t: -6.062, p \leq 0.05$ ).

The MANOVA conducted to examine the main effects of the dogmatism category on uses and gratifications (Table 37) showed that dogmatism exerts a significant impact on social media uses and gratifications. Post-hoc analysis also showed that those who have high dogmatism fall into a different subset than individuals with low dogmatism (please see Appendix E for Waller-Duncan Test results).

Table 36: Means and Standard Deviations by Dogmatism Category

	Dogmatism Category					
	Moderate		Low		High	
	$\bar{x}$	<i>SD</i>	$\bar{x}$	<i>SD</i>	$\bar{x}$	<i>SD</i>
Realism	2.59	.863	2.16	.816	3.14	1.078
Coolness	3.65	.634	3.66	.647	3.99	.650
Being There	3.25	.921	3.12	.938	3.82	.807
Agency	3.76	.729	3.75	.653	4.21	.596
Community Building	3.67	.718	3.65	.742	4.09	.625
Filtering	3.87	.532	3.84	.546	4.14	.591
Activity	3.11	.755	3.11	.853	3.72	.750
Responsiveness	3.19	.709	3.01	.818	3.69	.785
Browsing	3.74	.610	3.75	.665	4.13	.629
Play	3.41	.833	3.31	.819	4.03	.747

Table 37: Results of the MANOVA based on Dogmatism Category

Effect		Value	<i>F</i>	Hypothesis		
				<i>df</i>	Error <i>df</i>	Sig.
Dogmatism	Pillai's Trace	1.137	18.480	30.000	909.000	.000
Category	Wilks' Lambda	.012	103.763	30.000	884.170	.000
	Hotelling's Trace	70.600	705.212	30.000	899.000	.000
	Roy's Largest Root	70.430	2134.039	10.000	303.000	.000

The MANOVA results in the Table 37 suggest that social media uses and gratifications may characterize individuals with different degrees of dogmatism. Accordingly, a discriminant analysis was conducted to identify uses and gratifications that can best characterize individuals with high levels of dogmatism as opposed to others (RQ<sub>4</sub>). Table 38 provides eigenvalues and Wilk's Lambda test results for the model. The model had an eigenvalue of 0.366, a canonical correlation of 0.518, and accounted for 100% of variance. The Chi-square test was significant for the function ( $\chi^2$ : 55.18,  $p \leq 0.05$ ). Standardized canonical discriminant function coefficients for the model indicated that Realism (0.635) and Play (0.401) have a high ability to discriminate between individuals with different degrees of dogmatism. However, the other four gratifications included in the model had low standardized coefficients (Being There: -0.038, Agency: 0.117, Filtering: 0.122, Responsiveness: 0.084). An independent samples t-test showed that there are significant differences between those who have high and low levels of dogmatism in terms of their perception of Realism ( $t$ : -6.967,  $p \leq 0.05$ ) and Play ( $t$ : -6.062,  $p \leq 0.05$ ). Mean values show that those who have low dogmatism disagree with the Realism affordance of social media ( $\bar{x}$ : 2.16) while those who have high dogmatism are neutral about the Realism of social media. Moreover, individuals with high dogmatism agree with the Play gratification ( $\bar{x}$ : 4.03) while those who show low dogmatism are moderate along this dimension ( $\bar{x}$ : 3.31). According to the

results of the classification (Table 39), the model correctly classified 75.8% of original grouped cases. This included 77.8% of individuals with low dogmatism and 73% of individuals with high dogmatism.

Table 38: Eigenvalues and Wilks' Lambda Test Results- Political Dogmatism

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.366	100.0	100.0	.518
Test of Function(s)	Wilks' Lambda	$X^2$	<i>df</i>	Sig.
1	.732	55.184	6	.000

Table 39: Classification Results(a)- Dogmatism Categories

		Dogmatism Category		Total
		Predicted Group Membership Low	High	
<i>n</i>	Low	84	24	108
	High	20	54	74
	Ungrouped cases	76	55	131
%	Low	77.8	22.2	100.0
	High	27.0	73.0	100.0
	Ungrouped cases	58.0	42.0	100.0

a 75.8% of original grouped cases correctly classified.

The fifth research question focused on differences in social media uses and gratifications between individuals with different degrees of political tolerance. Table 40 shows means and standard deviations of social media uses and gratifications for tolerance categories. According to the mean values, those who have high tolerance indicate higher perception of Coolness ( $\bar{x}$ : 3.89), Agency ( $\bar{x}$ : 3.98), Community Building ( $\bar{x}$ : 3.89), Filtering ( $\bar{x}$ : 4.02), and Browsing ( $\bar{x}$ : 3.99). The mean values of other groups did not highly deviate from those mean values. An independent samples t-test showed that there are significant differences between these two groups for six constructs (Coolness:  $t$ : -1.556,  $p \leq 0.05$ , Community Building:  $t$ : -3.060,  $p \leq 0.05$ ; Filtering  $t$ : -

4.370,  $p \leq 0.05$ , Responsiveness:  $t: -3.080$ ,  $p \leq 0.05$ , Browsing:  $t: -4.736$ ,  $p \leq 0.05$ , Play:  $t: -2.31$ ,  $p \leq 0.05$ ).

The MANOVA results (Table 41) showed that tolerance category exerts a significant impact on the perception of social media uses and gratifications. The Waller-Duncan test showed that while subjects with different degrees of political tolerance fell into the same subset for Realism and different subsets for Coolness and Browsing, respondents with moderate and low political tolerance were included in the same subset for most of the gratifications (e.g., Being There, Agency, Community Building, Activity, Responsiveness, and Play). Moreover, subjects with moderate and high political tolerance fell into the same subset for Filtering (please see Appendix F for post-hoc results).

Table 40: Means and Standard Deviations by Tolerance Category

	Tolerance Category					
	Moderate		Low		High	
	$\bar{x}$	<i>SD</i>	$\bar{x}$	<i>SD</i>	$\bar{x}$	<i>SD</i>
Realism	2.45	.885	2.43	.769	2.69	1.062
Coolness	3.63	.642	3.42	.637	3.89	.627
Being There	3.21	.909	3.19	.787	3.46	.985
Agency	3.72	.676	3.77	.667	3.98	.705
Community Building	3.67	.755	3.54	.824	3.89	.655
Filtering	3.89	.532	3.63	.676	4.02	.514
Activity	3.12	.795	3.03	.791	3.40	.836
Responsiveness	3.12	.668	2.97	.777	3.40	.861
Browsing	3.72	.671	3.52	.680	3.99	.587
Play	3.36	.903	3.37	.870	3.67	.800

Table 41: Results of the MANOVA based on Tolerance Category

Effect		Value	<i>F</i>	Hypothesis		
				<i>df</i>	Error <i>df</i>	Sig.
Tolerance	Pillai's Trace	1.044	16.166	30.000	909.000	.000
Category	Wilks' Lambda	.013	99.904	30.000	884.170	.000
	Hotelling's Trace	71.553	714.737	30.000	899.000	.000
	Roy's Largest Root	71.494	2166.261	10.000	303.000	.000

As the MANOVA results showed significant effects of political tolerance on social media uses and gratifications, a discriminant analysis was conducted to discover gratifications that can characterize respondents with different degrees of political tolerance (RQ<sub>6</sub>: What uses and gratifications, if any, characterize individuals with high levels of political tolerance as opposed to others?). Despite a low eigenvalue and canonical correlation, the Chi-square test for the discriminant function was significant ( $\chi^2$ : 33.688,  $p \leq 0.05$ ) (see Table 42). The standardized canonical discriminant function coefficients showed that Coolness (0.563), Filtering (0.434), and Browsing (0.456) have high capacity to differentiate between subjects with high and low political tolerance. According to t-test results, perception of these three constructs is significantly different between subjects with high and low political tolerance (Coolness:  $t$ : -4.529,  $p \leq 0.05$ , Filtering:  $t$ : -4.370,  $p \leq 0.05$ , Browsing:  $t$ : -4.736,  $p \leq 0.05$ ). The mean values showed that those who have high political tolerance perceive Coolness, Filtering, and Browsing affordances more than those with low tolerance. However, the standardized canonical discriminant function coefficient values for other gratifications included in the model were low (Community Building: -0.186, Responsiveness: 0.016). This model was able to classify 74.2% of the grouped cases accurately (Table 43). This included 75.2% of individuals with high tolerance and 70.8% of subjects with low tolerance. Given the high accuracy of this classification, this model can be

used to characterize groups with different degrees of political tolerance using their social media uses and gratifications.

Table 42: Eigenvalues and Wilks' Lambda Test Results- Political Tolerance

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.175	100.0	100.0	.386
Test of Function(s)	Wilks' Lambda	$X^2$	<i>df</i>	Sig.
1	.851	33.688	5	.000

Table 43: Classification Results(a)- Tolerance Categories

	Tolerance Category	Predicted Group Membership		Total
		Low	High	
<i>n</i>	Low	34	14	48
	High	41	124	165
	Ungrouped cases	45	55	100
%	Low	70.8	29.2	100.0
	High	24.8	75.2	100.0
	Ungrouped cases	45.0	55.0	100.0

a 74.2% of original grouped cases correctly classified.

## CHAPTER 6

### DISCUSSION

#### 6.1. Introduction

The transition of the media audience from relatively passive readers, viewers, and listeners to active users has reached a pinnacle with the rise of social media. This change has opened a new domain of inquiry for uses and gratifications scholars. The social media uses and gratifications literature, however, can benefit from studies that capture the ability of social media to trigger the perception of new uses and gratifications. Although some scholars have examined unique social media uses and gratifications, such as socializing (Apaolaza et al., 2014), virtual community (Chen & Kim, 2013), interpersonal utility (Luo & Remus, 2014) previous studies have not adequately examined platform-oriented uses and gratifications. This has hindered the understanding of the potential of social media as tools that can characterize behavioral dimensions, in particular, online political.

This study fills this gap by suggesting an affordance-driven scale to measure social media uses and gratifications and applying it to study characteristics of political dissidents, allegiants, subordinates, and moderates, and individuals with different political levels of political tolerance and dogmatism. This chapter discusses the results of two studies that were conducted to achieve this objective. The chapter is organized into two sections. The first section discusses the appropriateness of the suggested scale to measure social media uses and gratifications. The second section discusses the implications of the results of the five discriminant models to uncover the ability of the suggested scale to characterize political actors and attributes.

## **6.2. Carrying Forward the Uses and Grats 2.0 Agenda**

The notion of social media affordances can provide a conceptual platform to integrate platform-oriented measures. However, this concept has not permeated adequately to the social media uses and gratifications literature. As this study highlighted, based on Sundar and Limperos' (2013) work, measuring social media uses and gratifications considering the unique affordances they offer is important to capture their full potential. Integrating affordances to uses and gratifications is an extensive process that includes developing and validating measures, testing them across populations, and examining their causes and effects. The MAIN model (Sundar & Limperos, 2013; Sundar, 2008) sets the conceptual background for such an endeavor, based on an extensive literature review, and suggests a pool of items that can potentially lead to the development of an affordance-based scale for social media uses and gratifications. Based on the MAIN model, and using the list of new media uses and gratifications items as an initial pool of items, the first part of this study developed an affordance-based social media uses and gratifications scale that can help researchers to examine social media uses and gratifications.

While the MAIN framework was conceptually rich and the suggested pool of items is comprehensive, a refinement to those items was necessary due to several reasons. First, the items were written for “new media” users, rather than social media users. New media is a nebulous term and it is context-dependent. Therefore, the items should be revised to fit social media. Second, some of the items in the pool were targeted at devices. Third, this pool of items has not been subject to empirical examination. Addressing these issues, this study developed a potential social media uses and gratifications scale based on Sundar and Limperos' work. This scale, however, is different from a conventional instrument as it is proposed as a second-order factor structure that includes uses and gratifications constructs as well as the affordances they represent.

While the model fit of the uses and gratifications scale as a second-order factor structure was at an acceptable level and was not statistically weaker than a first-order structure, the model-fitting process suggested several modifications to the original framework, such as combining Coolness and Novelty, Filtering and Ownness, Responsiveness and Dynamic Control, and Browsing and Scaffolding Aids to improve the model fit. As the pool of items suggested by Sundar and Limperos has not been subject to validation, deviations of the scale tested in this study from the original conceptualization can provide guidelines for further investigation on operationalizing social media uses and gratifications. While some of these deviations strengthen the empirical validity of the measure, some deviations stress the need for further work.

Coolness, as Sundar, Tamul, and Wu (2014) found, includes several dimensions, such as attractiveness, originality, and sub-cultural appeal. Therefore, capturing the essence of Coolness is challenging at best. Differentiating between Coolness and Novelty is challenging in particular. Sundar et al. (2014, p.177) describe Novelty as a variation of uniqueness that is strongly associated with Coolness. While Coolness items suggested by Sundar and Limperos (2013) and the newly introduced items capture aspects of Coolness (e.g., stylish and unique) with high internal consistency, novelty items loaded onto the same factor, triggering a very similar perception among respondents. This might result from the striking similarity between the two factors. For instance, distinctiveness (COOL2) and differences in interface (NOVL3) are highly related and load into one factor. Similarly, the fact that social media platforms can be perceived as unique compared to other media (COOL1) and they have innovative features (NOVL2) can trigger similar perceptions in the minds of the users. Accordingly, combining Coolness and Novelty into one factor is conceptually sound until further empirical work reveals convincing evidence about differences between the two constructs.

As in the case of Coolness and Novelty, the results of the factor analysis did not capture a difference between Filtering and Ownness. Arguably, these two gratifications are highly related so that social media users do not differentiate between them. In other words, Filtering may result in a sense of Ownness, as it gives users some control over social media platforms and content. For instance, the ability to sort through information (FILT3) and limit the visibility of information (FILT4) can result in unique social media uses that make users feel like their friends have their own ways of using social media (OWNN3). However, this study does not support the argument that Filtering and Ownness are the same, as they represent two distinct gratifications. This raises the need for a study that captures differences between these two constructs. Such a study can improve the quality of the scale suggested in this study. The results also suggested that Responsiveness and Dynamic Control need to be combined into a single construct. It is reasonable to use both Responsiveness and Dynamic Control items to operationalize a single factor, as Responsiveness is a necessary condition for Dynamic Control. In other words, a social media user will not perceive controllability if the platform is not responsive. For instance, Responsiveness of social media to the commands (RESP2) and requests (RESP3) can trigger the perception that the users are in charge (DYNM1), have more control over information (DYNM2), and able to control the interaction (DYNM3).

Similarly, the results of the factor analysis indicated that participants' perception of Browsing and Scaffolding Aids were not different. The Scaffolding heuristic, according to Sundar (2008), is triggered when users perceive navigational aids as helpful, particularly when using new tools. Moreover, Browsing relates to the availability of links for navigation. Arguably, combining these two constructs to operationalize a single construct is not conceptually inaccurate as user may use Navigational Aids during the browsing process. The items included in the combined construct

particularly do not represent distinct dimensions. For instance, the ability of social media to link users to sites that have different types of information (BROW2) and other pieces of information (SCAF2) are very similar. Visual aids available on social media (SCAF3) help users to obtain a variety of information (BROW1). Due to the highly related nature of these two concepts, and with the evidence provided by exploratory and confirmatory factor analyses, Browsing and Scaffolding Aids can be conceptualized as a single factor.

Subject to the scale revisions discussed above, the results support Sundar and Limperos' (2013) conceptualization of uses and gratifications under each class of affordance. Table 44 shows a revision to Sundar and Limperos' conceptual framework based on the EFA and CFA results discussed in the fourth chapter. The revision suggested does not differ, except the changes discussed above, from the original conceptualization. Although the results suggested combining several constructs (e.g., Coolness and Novelty, and Browsing and Scaffolding/Navigation Aids), no item loaded into factors that represent a different class of affordance. This indicates that, while there is some room to refine the measures within each affordance, the distinction between affordances is supported by the classification of social media uses and gratifications. In other words, the Sundar and Limperos' conceptualization of new media uses and gratifications under four classes of affordances can be applied in the context of social media. Accordingly, the items included in the final analysis can be used as a validated scale to measure social media uses and gratifications. This is an improvement on the original pool of items suggested by Sundar and Limperos, as it includes newly introduced items, and it is also tailored to capture the uniqueness of social media.

Table 44: Revised MAIN Framework for Social Media Uses and Gratifications

Modality	Agency	Interactivity	Navigability
Realism	Agency-enhancement	Activity	Browsing
Coolness	Community Building	Responsiveness	Play
Being There	Bandwagon Filtering		

The results of the MANOVA show that the suggested scale is appropriate for further analysis.

The fact that basic demographic variables, such as gender, age, and ethnicity, have no direct effect on uses and gratifications indicates that the perception of constructs is consistent within a considerably homogenous student sample. However, the results show that there can be nuances, rather than direct differences, in the perception of social media uses and gratifications. For instance, significant interaction effects show that the impact of age on perception of uses and gratifications depends on the educational level and ethnicity of respondents for some constructs.

This leaves room for further examination of social media uses and gratifications in different settings with special attention on the effects of different variables on specific constructs included in the model.

As mentioned before, once validated, a measure should be tested across different populations to ensure its reliability. Accordingly, the model was re-tested with a more diverse sample (Chapter 5). The results indicated a strikingly similar fit, supporting the appropriateness of the items to examine social media uses and gratifications. This scale is applicable in any field that connects various constructs with social media uses and gratifications. Accordingly, the second phase of this dissertation research was implemented where social media uses and gratifications were connected to political actors and attributes.

### **6.3. Social Media, a Level Field or Dissidents' Utopia?**

The second phase of this study is built on the premise that there are differences in uses and gratifications between users. Accordingly, the field of social media studies can benefit from work that examines relationships between user types, attributes, and their social media uses and gratifications. While the social media uses and gratifications scale suggested in the first phase of this study provides a foundation to measure U&G constructs, the second phase focuses on connecting uses and gratifications with political characteristics of social media users.

Accordingly, this discussion section builds on the previous, connecting social media uses and gratifications with political actors (dissidents and allegiants in particular) and attributes (political tolerance and dogmatism). Six research questions were asked in the second phase of this dissertation. These questions were targeted to detect differences in social media uses and gratifications between political actor types and between individuals with different levels of political tolerance and dogmatism. The results revealed that there are differences and showed that they can be used to characterize political actor types and attributes. The main contribution of the second phase of the study is in its development of five discriminant models that support this characterization.

Political impact of the rise of the Internet, social media in particular, is perhaps one of the most researched areas in social media studies. Starting from early work that discussed the impact of the Internet on political participation in general (e.g., Bimber, 1998), the body of literature has reached into numerous dimensions of online politics. Among them is political dissidence, currently one of the most investigated topics. Recent studies that examine this topic (e.g., Al-Ani, Mark, Chung, & Jones, 2012; Lim, 2012; Marzouki, Skandrani-Marzouki, Béjaoui, Hammoudi, & Bellaj, 2012; Shklovski & Valtysson, 2012) provide ample evidence to understand the ways in

which social media help political dissidence in contexts of oppression. These studies, however, approach online political dissidence from an issue-based perspective, focusing on specific contexts. The issue-based perspective, however, does not provide a full explanation of dissident behavior on social media due to at least two reasons. First, it pays less attention on less-oppressive political contexts. Second, it ignores the ability of social media to help those who have dissident potential to engage in politics. Given this issue, the notion of potential political dissidence remains largely unexplored in the literature, particularly in contexts where principles of democracy are followed. The second phase of this study fills this gap by focusing on the group that has the highest potential for dissidence, i.e., individuals with high political efficacy and low trust in government (Gamson, 1968), and characterizing them based on their uses and gratifications. This characterization is done by comparing and contrasting them with other types of political actors.

Political dissidence is important as it places stress on crucial social values, such as inclusiveness, that can shape socio-political values (Renwick, 2011). This study views democratic dissidence as an important element for democracy, as individuals with high efficacy and low trust in government have high tendency to raise issues and actively critique policies implemented to address them. This conceptualization is different from the common perception of the term “dissidence” as a nefarious phenomenon that connotes a sense of violence and a disruption in the political process. Identification of groups that lack trust in the system, but have high potential for engaging in active political critique, helps expand the boundaries of democracy. Understanding social media uses and gratification that can characterize such potential democratic dissidence helps improve social media platforms for better political engagement. It is from this perspective that this study predicts individuals with high dissidence potential by identifying their social

media uses and gratifications. Therefore, the inferences made in this study should not be applied beyond dissidence in democratic contexts. There are several questions that can be raised when discussing potential dissidence based on social media uses and gratifications: are social media platforms not politically neutral? Do they not provide the same uses and gratifications to other actors? Is the dissidence the same in every context? The results of the second survey can be discussed in light of these questions.

The first three discriminant models supported the identification of two groups of uses and gratifications (1: Realism, Coolness, and Agency-enhancement, and 2: Filtering and Responsiveness) that can help differentiate between potential dissidents, allegiants, subordinates, and moderates. In general, the results supported the argument that uses and gratifications can characterize political actors. The first discriminant model was a comprehensive preliminary model, rather than a conclusive model, that guided further analysis. Accordingly, the first model showed that, by removing some uses and gratifications and political actors, convincing models can be developed to predict political actor types based on uses and gratifications. The second model provided convincing results indicating that uses and gratifications can help classify users into political actor categories with almost 70% accuracy. According to the results of the second model, dissidents and allegiants differ from subordinates, and these two groups perceive social media platforms as real, cool, and give them agency more than subordinates. However, results showed that the allegiants tend to filter their social media content significantly more than dissidents. The third model further confirmed the findings of the second model, with more than 70% accuracy, showing that although dissidents are close to moderate users in terms of Filtering, allegiants tend to filter social media content more than moderates and dissidents. These results provide an important perspective to understand social media uses and gratifications. Rather than

directly identifying political actors with specific uses and gratifications, the results suggest that, while actors in separate political camps have some common uses and gratifications, there are unique gratifications that can differentiate between them.

While a reasonable number of studies has examined social media activism in oppressive contexts (e.g., Al-Ani, Mark, & Semaan, 2010; Lim, 2012; Mark & Semaan, 2009), relatively little attention has been paid to the politics of allegiants. However, scholars have pointed out other aspects of politics on social media, such as the use of Twitter by politicians (Grant, Moon, & Grant, 2010) and government agencies (Waters & Williams, 2011), and citizens representing different ideologies (Bond & Messing, 2015). Particularly, the analysis of Facebook preferences conducted by Bond and Messing (2015) shows the existence of different political ideologies and clustering within each polarity on Facebook. Social media are open platforms that provide equal opportunity for any political actor. Therefore, Realism and Agency-enhancement gratifications can be equally prevalent among different political actors, including dissidents and allegiants. This shows that social media are double-edged swords that provide Realism and Agency-enhancement functions for anti- as well as pro-system politics. In other words, rather than recognizing social media as a utopia for political dissidence, they should be understood as a set of tools that provide platforms that any political actor perceives as real and agency-enhancing. This supports the idea that social media can act as politically neutral platforms that offer affordances for every activist, regardless of their ideology, hence “level fields” that provide similar uses and gratifications for anti- as well as pro-system politics. However, the fact that dissidents and allegiants perceive Realism, Coolness, and Agency-enhancement more than subordinates and moderates show that these two groups have common characteristics that can enable the perception of these uses and gratifications. While dissidents and allegiants share a

sense of capability in political participation, they are different from each other in terms of their trust in government. Accordingly, high efficacy separates dissidents and allegiants from other actors. The fact that these two groups perceive social media to have high Realism, Coolness, and Agency-enhancement shows that these uses and gratifications can characterize actors who have high political efficacy and are confident about their political potential.

The fact that there are uses and gratifications common for dissidents and allegiants does not necessarily mean that they do not differ in terms of their uses and gratifications. As the results showed, dissidents and allegiants differed in terms of their perception of Filtering and Responsiveness gratifications, particularly the former. The results revealed that allegiants perceive Filtering gratification significantly higher than dissidents. Dissidents, however, did not differ significantly from moderates and subordinates. This shows that political dissidents act as normal users in terms of filtering their content while allegiants are more careful about their social media content. That indicates that political dissidence is characterized by a sense of freedom as opposed to restricting one's political opinions. In general, political dissidence is characterized by a sense of high self-censorship. This, however, is context-dependent. For instance, Shklovski and Valtysson's (2012) discussion on secretly political publics in Kazakhstan shows that members of online forums avoid open discussions that are critical of the regime. Conversely, the above result that allegiants filter their social media content more than dissidents can be viewed as a unique gratification in the American context, where expression of politically critical opinions is free and commonplace. However, even in oppressive contexts, this is not counter-intuitive, as information sharing is a crucial aspect of online political dissidence. For instance, Al-Ani et al. (2010) Al-Ani et al. (2012) and Lim (2012) show how information spreads on social media, even in oppressive contexts. Dissidence, democratic or otherwise, is characterized by participation. Therefore,

dissidents may tend to indicate political “bravery” by posting content that regular social media users may find unconventional or controversial.

While dissidence has been a highly active topic in social media literature, political attributes, such as political dogmatism and tolerance, have not been subject to adequate investigation. Just as political trust and efficacy can guide identification of dissidents and other political actors, political tolerance and dogmatism can help reveal nuances in political behavior. As discussed in the literature review (Chapter 2), previous studies (e.g., Kim, Hsu, & Gil de Zúñiga, 2013; Quintelier & Theocharis, 2012) show that political attributes, such as openness and extraversion, affect participation on social media. Taking a somewhat different perspective, the fourth and fifth discriminant models developed in this study focus on characterizing users with two types of political attributes (tolerance and dogmatism) using their social media uses and gratifications. Such an analysis can guide users to improve their qualities to build a more pleasant political atmosphere on social media. Supporting further analysis, the preliminary results showed that social media users with high tolerance and dogmatism significantly differ from those who have low tolerance and dogmatism respectively.

The fourth discriminant model showed that a combination of uses and gratifications can predict social media users with high or low levels of political dogmatism with more than 75% accuracy. In other words, this indicates that a combination of uses and gratifications can predict high or low political dogmatism. The model included six uses and gratifications (Realism, Play, Being There, Agency-enhancement, Filtering, and Responsiveness), and Realism and Play gratifications were prominent among them. According to the results, Realism and Play gratifications can best characterize political dogmatism levels. Accordingly, those who have high dogmatism perceive social media as real and enjoy the Play gratification of social media more

than those with low dogmatism. Similarly, this group perceived significantly higher gratifications of Realism, Coolness, Being There, Agency-enhancement, Community Building, Filtering, Activity, Responsiveness, and Browsing.

Political dogmatism, as discussed in the literature review, is a trait characterized by political close-mindedness and unchangeable certainty (Altemeyer, 2002; Shearman & Levine, 2006).

However, this does not mean a lack of ability or intention to interact, build communities, and use social media for political or other purposes. The results of this study show that political close-mindedness does not keep social media users from experiencing social media uses and gratifications. There are many uses and gratifications that might fit individuals with high dogmatism. For instance, individuals with high dogmatism can build communities and interact with like-minded users. This argument is consistent with the work of Himelboim, McCreery, and Smith (2013) who claimed that it is unlikely that Twitter users are exposed to different political ideologies from their Twitter networks. Similarly, filtering can help them to filter out content that they disagree with. However, this demands more academic investigation as contextual clues, such as the composition of their online friendship networks, nature of the content shared, level of political engagement, can affect their perception of uses and gratifications.

According to the fifth discriminant model, uses and gratifications can help predict social media users with high or low political tolerance with more than 74% accuracy. The model showed that Coolness, Filtering, and Browsing can highly account for the group differences. The results also showed that those who have high political tolerance perceive Coolness, Filtering, and Browsing affordances more than those with low tolerance. There can be many factors that enable politically tolerant users to perceive gratifications like Coolness. For instance, diversity in social networks positively influence tolerance (Ikeda & Richey, 2009), and therefore, tolerance can be

an indicator of a more diverse social network. Social media content may seem cool for more tolerant people, as they tend to accept diverse opinions. The results showed that highly tolerant users filter their social media content more than others, indicating that tolerance does not mean that users accept everything on social media. As Sullivan, Marcus, Feldman, & Piereson (1981) claimed, the commitment to general norms and perceived threat can be considered as sources of political tolerance. Arguably, both these variables may force highly tolerant social media users to filter their content. Moreover, the fact that those who have high political tolerance perceive Browsing gratification more than others indicate that they are open to explore social media content more than others.

Social media are often associated with values like collectivism, sense of community, interaction, and tolerance. The above results provide interesting insight to understand uses and gratifications of social media users with different degrees of dogmatism and tolerance. While some gratifications, such as Filtering, are common to individuals with high dogmatism as well as users with high tolerance, there were differences in the nature of uses and gratifications between these two groups. This shows that social media are equally open platforms that are not particularly designed for positive, open-minded users. These results support the above assertion that social media can be viewed as value-neutral platforms that can provide uses and gratifications for any user regardless of their political attributes.

## CHAPTER 7

### CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

#### 7.1. Introduction

Starting from the early work that stressed the importance of examining uses and gratifications in computer-mediated communication, such as the work of Ruggiero (2000), the field of social media uses and gratifications has evolved into a large body of literature. The notion of social media affordances, however, has not permeated social media uses and gratifications studies, creating a dearth of work that develops affordance-based measures and tests them across user populations. Filling this gap, this study used the MAIN framework suggested by Sundar (2008) and Sundar and Limperos (2013) to develop an affordance-based scale for social media uses and gratifications and tested it across four types of political actors and two types of political attributes. This chapter presents conclusions based on the results reported in the fourth and fifth chapters and discussed in detail in the sixth chapter.

Conclusions, Recommendations, and Future Research

#### 7.2. An Affordance-based Measure of Social Media Uses and Gratifications

Testing an affordance-driven measure of social media uses and gratifications using the conceptual framework and items suggested by Sundar and Limperos (2013) requires achieving two main goals: 1) testing the appropriateness of items (or revisions to the items) to operationalize constructs, and 2) examining the statistical validity of classifying constructs tested in the first step into four types of affordances conceptualized by the original study. This requires moving beyond a more conventional single-order scale development to testing a scale as a second-order factor structure (constructs and their broad classification). The first part of this dissertation, using a sample of 393 students, achieves these two goals. Sundar and Limperos'

work builds a solid conceptual background to test an affordance-based social media scale. Their framework is conceptually rich, and it has practical suggestions for operationalization. The measure they suggested, however, needed refining for application in the context of social media, as the items included are generally written for new media. The results of this study supported the conceptual accuracy of the MAIN model, as the results showed that conceptualizing social media uses and gratifications as a second-order factor structure that classifies constructs into four different types of affordances does not jeopardize the statistical validity of measures.

Rather than treating the results of the first survey discussed in the fourth chapter as a mere validation of the items suggested by Sundar and Limperos (2013), the factor structure and the measures tested can be considered as an improved scale to measure social media uses and gratifications. This is reasonable due to several reasons: 1) the original items suggested by Sundar and Limperos (2013) were written for new media and not targeted towards social media, 2) the original items were subject to substantial revisions in this study to tailor them to social media users, 3) a reasonable number of new items were added, and a good number of them were included in the final measure, and 4) several constructs suggested by the original study were combined to create new constructs, making the present framework a reduced version of the original conceptualization. However, the essence of the MAIN framework remains intact in this study. Therefore, the social media uses and gratification scale validated in this study should be considered as a contribution towards carrying forward the Uses and Grats 2.0 agenda put forward by Sundar and Limperos (2013), by situating the original items in a more strictly defined social media context.

### **7.2.1. Points of Departure from the Original Conceptualization**

The revised model for social media uses and gratifications suggested in this study has some deviations from the original framework. For instance, the results suggested combining several constructs. However, the combined factors did not include items from other affordances, supporting the conceptual accuracy of the original model. The question of operationalizing Coolness and Novelty emerges as a main topic that could be supported with further studies, as this study failed to identify distinct factors for these two constructs. There are important studies (e.g., Sundar et al., 2014) that show that Coolness is a complex construct that includes several dimensions. Possibly, a multi-dimensional Coolness measure can be integrated to the present model. Such an introduction, however, may lead to complications, as a three-level factor structure could be too abstract. On the other hand, there is a lack of conceptualization of the meaning of the Novelty of social media. Accordingly, there is a need for a precise definition of Novelty and empirical work that establishes the differences between Coolness and Novelty. A similar issue arises with regard to Browsing and Scaffolding, two constructs that this study failed to differentiate between. However, as the focus of the social media uses and gratifications scale tested here is to test an all-inclusive model, conceptualizing Coolness and Novelty, and Browsing and Scaffolding/Navigation Aids, as single constructs does not jeopardize the value of the conceptualization. The fact that Ownness and Filtering was combined to form a single factor should be further investigated, as it is possible that these two constructs, though related, may form distinct factors if the measures are further refined.

### **7.2.2. Future Applications of the Measure**

The scale tested in the study can form the foundation for a number of studies. For instance, future work can focus on differences in perception of social media uses and gratifications across different actors, such as political actors, customers, social workers, professionals, and organizations. Similarly, effects of different attributes, such as efficacy, tolerance, community engagement, openness, sociability, introversion, extroversion, political orientation, political party affiliation, intercultural experience, intercultural orientation, cynicism on social media uses and gratifications can be examined. Moreover, moderating effects of constructs such as Internet skills, social media adoption, individualism and collectivism, perceived Internet controls, social surveillance, and privacy concerns can be tested to uncover nuances in relationships between actors, attributes, and social media uses and gratifications. While there is a reasonable number of studies that examine causes and effects of social media uses and gratifications, the measure tested in this study can help strengthen the existing body of research with a more affordance-driven perspective.

### **7.3. Political Actors, Attributes, and Social Media Uses and Gratifications**

The second phase of this study is an application of the scale developed in the first phase in the context of politics. Connecting social media uses and gratifications with political actor types and attributes should be done with caution, as it is difficult to hypothesize cause-and-effect relationships between generic social media uses and gratifications constructs and specific actor types, such as potential dissidents, and attributes, such as dogmatism. It is technologically deterministic to assume social media as a force that causes dissidence. It is also overly individualistic to conceptualize psychological properties, such as political efficacy, trust, tolerance, and dogmatism, as the sole cause of social media uses gratifications. Identifying

combinations of uses and gratifications that can characterize political actor types and attributes is perhaps the best way to connect uses and gratifications with political actors and attributes, and discriminant analysis is appropriate to achieve this goal.

This study asked the question of whether there are uses and gratifications that can characterize political actors and attributes. This question was answered using three social media uses and gratifications-based discriminant models that can classify four types of political actors (dissidents, allegiants, subordinates, and moderates) and individuals with two political attributes (dogmatism and tolerance) with more than 70% accuracy. The results painted a nuanced picture, indicating that social media uses and gratifications can describe differences as well as similarities between potential political dissidents and allegiants. While Realism, Coolness, and Agency-enhancement gratifications were common among dissidents and allegiants, dissidents showed significantly lower Filtering than allegiants. The results also showed that uses and gratifications, such as Realism and Play, can characterize dogmatism. Similarly, Coolness, Filtering, and Browsing can indicate high political tolerance. Accordingly, as opposed to the utopian perspective that social media are ideal platforms for alternative politics, the results of this study showed that they can cater to individuals engaged in both anti- and pro-system politics. Similarly, the results indicate that social media uses and gratifications are not limited to less dogmatic users.

### **7.3.1. Recommendations for Platform Designers and Policy Makers**

The results of the second study can provide recommendations for social media platform designers, policy makers, as well as citizens. Designers should be aware of the potential of social media platforms as political tools that can provide uses and gratifications for both potential dissidents and allegiants. From an overall point of view, as opposed to a utopian vision in which social media are portrayed as venues ideal for alternative politics, both platform designers and

policymakers need to view social media as diverse platforms where different political actors and individuals with different political attributes co-exist. As Realism, Coolness, and Agency-enhancement gratifications are perceived by both allegiants and dissidents, it is important to design social media platforms to enhance the perception of those gratifications. Such enhancements can motivate more debate and elevate the political potential of society as higher gratifications can lead to higher engagement of both pro- and anti-system political actors. Moreover, the observation that allegiants tend to filter their social media content more than dissidents can also help design social media platforms that can encourage democratic dissidence. Adding rich filtering features to the platforms can help both dissidents and allegiants to engage in online politics. For allegiants, the availability of such features directly help filter social media content. Moreover, although dissidents are moderate on whether or not to filter their content, the availability of affordances that can help filter content may create the impression that filtering is possible, if necessary. This can also ensure that potential dissidents in more oppressive contexts have the option to filter their content. These observations are significant as they paint a more comprehensive picture of political actors as, except for a few studies that examine media use of dissidents and allegiants (e.g., Johnson, Kaye, & Kim, 2010; Johnson & Kaye, 2013), the work that compares social media use of dissidents with allegiants is largely non-existent. Therefore, future studies need to pay more attention to online political activities of allegiants as well as other groups, such as subordinates and the alienated.

The fact that dissidents filter their social media content less than allegiants might indicate that the political atmosphere enables potential dissidence on social media. It is counter-intuitive to assume that dissidents filter their content less than allegiants in highly oppressive contexts.

Therefore, this is a sign of strong democracy, as it shows the freedom for political expression and

critique. This also helps raise several important questions that policymakers can ask, i.e., in which context can potential dissidents enjoy gratifications such as agency-enhancement, community building, and play? What sort of a political atmosphere will result in potential dissidents filtering their social media content less than allegiants, and how can we create such a context? In contexts where dissidents tend to self-censor, governments and policymakers can take actions to encourage open political critique. In other words, governments should create an atmosphere where potential dissidents do not feel the need to filter and self-censor. Creating such an environment may result in increased trust among potential dissidents, and therefore, integrate them into the political system. This is a step towards strengthening democracy.

Social media are open platforms for diverse groups of users. The fact that individuals with high dogmatism, as well as those who have high political tolerance, perceive social media uses and gratifications indicate that social media platforms can cater to the needs of individuals with diverse political attributes. High perception of some gratifications, such as realism, play, and community building, by politically close-minded individuals shows that social media users can keep politically close-minded individuals from being socially isolated or clustered into small groups. This can help expose dogmatic users to the opinions of more tolerant users. However, social media platform designers should develop features that can discourage inappropriate forms of expression, such as defamation and hate speech, so that both individuals that have different levels of tolerance and dogmatism and can interact with each other. Policymakers can build a policy foundation that provides a framework for designers to constrain inappropriate behavior.

## **7.4. Limitations**

### **7.4.1. Phase 1: Social Media Uses and Gratifications Scale**

Despite the contribution this study makes by building on Sundar and Limperos (2013) work, the size and the nature of the first sample may limit the scope of analysis. The sample size, compared to the number of parameters tested, might be on the lower side. The sample size, however, does not significantly reduce the validity of the claims made, as the final model included only 33 items that resulted in a number of items-to-respondents ratio more than 11. Using a student sample has merits as well as demerits. On one hand, findings based on a student sample may not be generalized to a larger population. On the other hand, it is likely that students use social media frequently. As discussed in the results chapter, this was clearly the case in this study. Therefore, using a student sample can ensure that a reasonable number of social media users are included in the sample. Given this challenge, the scope of analysis was limited to testing the goodness-of-fit of the two-layer factor structure, rather than examining causes and effects of the uses and gratifications dimensions.

### **7.4.2. Phase 2: Political Actors, Attributes, and Social Media Uses and Gratifications**

The second phase of the study also has several limitations. Although the models tested in the study were able to classify the subjects with more than 70% accuracy, cross-listed cases showed that there can be other factors that count for differences between political actors and those who indicate different levels of political tolerance and dogmatism. Therefore, future studies can add a combination of uses and gratifications and other constructs, such as political orientation, political party affiliation, political apathy, and Internet skills, to develop models with better predictive ability. Moreover, the claims made in this study can be affected by the limited number of potential dissidents identified. However, it is reasonable that the sample included only 11

potential dissidents, as democratic dissidents are minorities in their communities. In other words, a majority cannot be dissidents, as the system they choose is perhaps the dominant system in their society. Moreover, the claims made in the study are limited to the American context where freedom of expression is acknowledged and applied as a fundamental principle that guides society. Future studies can examine the constructs tested in this study in more oppressive contexts where the results may be different.

## Appendix A

### Survey 1: A Survey on Social Media Uses and Gratifications

This questionnaire measures uses and gratifications people seek from social media. Please read the instructions and answer the questions. Thank you for your participation in this survey.

For the study, social media are defined as online platforms where users can interact with each other, build networks, share content, create content, publish, and make comments. Social media include a range of platforms, such as Facebook, Twitter, YouTube, Instagram, Tumblr, Reddit, Pinterest, Google Plus, and WordPress. Please answer the questions in this survey based on your experience on one or more of these social media platforms.

#### Section 1: Social Media Use

This section includes general questions on your social media use. Please answer the following questions (check “X” the appropriate answer).

1) Do you use social media?

Yes \_\_\_\_\_  
No \_\_\_\_\_

2) If yes, how often?

Several times a day \_\_\_\_\_  
About once a day \_\_\_\_\_  
3-5 days a week \_\_\_\_\_  
1-2 days a week \_\_\_\_\_  
Every few weeks \_\_\_\_\_  
Less often \_\_\_\_\_

#### Section 2: Uses and Gratifications of Social Media

This survey measures uses and gratifications of social media. For the study, social media are defined as online platforms where users can interact with each other, build networks, share content, create content, publish, and make comments. Social media include a range of platforms, such as Facebook, Twitter, YouTube, Instagram, Tumblr, Reddit, Pinterest, Google Plus, and WordPress. Please answer the following questions based on your experience on one or more of these social media platforms.

Please select the choice that best describes your answer.

1. I know that the social media content is real and not made up

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

2. Communicating using social media is not that different from face-to-face communication.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

3. The experience in social media is very much like real life

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

4. I can experience the real world through social media.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

5. Social media allow me to see content for myself rather than through the experience of another party.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

6. Social media platforms are unique compared to other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

7. Social media platforms are distinctive compared to other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

8. Social media platforms are more stylish than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

9. Social media platforms are more attractive than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

10. There is something special about social media that makes users stand apart from the crowd.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

11. Social media platforms are new compared to other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_

12. Social media platforms have innovative features.

Strongly Disagree \_\_\_\_\_

Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_

13. Social media interfaces are different than traditional websites.

Strongly Disagree \_\_\_\_\_

Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_

14. The experience I gain by using social media is out of the ordinary.

Strongly Disagree \_\_\_\_\_

Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_

15. Social media help me immerse myself in places that I cannot physically experience

Strongly Disagree \_\_\_\_\_

Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_

16. Social media create the experience of being present in distant environments

Strongly Disagree \_\_\_\_\_

Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_

17. Social media provide quality information that makes me feel like I am able to experience things as they are without actually being there.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

18. Social media bring me information about different incidents so quickly that it does not make a big difference that I am not physically there to experience them.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

19. Social media help me to have real interactions with people although I am not in physical proximity.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

20. Social media allow me to freely express my opinions.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

21. Social media allow me to freely assert my identity.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

22. I can build an audience for myself on social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

23. Social media give me the power to provide different types of information to my followers.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

24. Social media allow me to have my say.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

25. I can use social media to easily connect with people living in different parts of the world.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

26. Social media help me to be part of a community that I would not otherwise have been part of.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

27. Social media allow me to build a network that could bring me social support.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

28. Social media allow me to actively contribute to communities that make an impact on society.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

29. Social media allow me to review the opinions of others before I make decisions.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

30. Social media comfort me to know the thoughts and opinions of others

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

31. Social media allow me to compare my opinions with those of others

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

32. Reading others' comments on social media before I make comments helps me to avoid potential conflict with those with whom I might disagree.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

33. I try to adjust my reactions to social media posts based on comments made by others.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

34. Social media allow me to set my preferences.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

35. On social media, I can avoid viewing things that I do not want to see.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

36. Social media allow me to sort through information before I share it with others

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

37. Social media allow me to limit the visibility of information I post to a small group.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

38. I feel like I have some ownership over the social media platforms I use.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

39. Social media platforms help me to publish content that is a true reflection of myself.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

40. My friends have their own ways of using social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

41. Social media platforms allow me to customize so that I can make them my own

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

Social media allows users to interact with the platform. For this study, interaction means a range of activities including liking, commenting, sharing, posting, tweeting, retweeting, tagging, and rating. Please answer the following questions based on your interaction on social media platforms.

Please select the choice that best describes your choice.

42. Social media rely on user interaction.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

43. When I use social media, I frequently interact with the platform.

Strongly Disagree \_\_\_\_\_

Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

44. On social media, I can specify my needs and preferences on an ongoing basis.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

45. I expect my friends to interact with social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

46. I can perform a number of tasks on social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

47. I feel active when I use social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

48. My Interaction on social media is not passive.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

49. I get to do a lot of things on social media

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

50. Social media are more responsive than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

51. Social media are responsive to my commands.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

52. Social media respond well to my requests.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

53. Social media can anticipate my needs.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

54. Social media allow me to be in charge

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

55. Social media give me more control over information I post.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

56. I am able to control my interaction with the interface of the social media platforms I use.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

57. I am able to influence how the social media platforms look.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

58. I am able to influence how social media platforms work.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

59. Social media allow me to obtain a wide variety of information.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

60. Social media help me to skim and check out various links

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

61. Social media can link me to sites that have different types of information.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

62. Social media allow me to surf for things that I am interested in

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

63. Social media allows me to browse freely.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

64. I enjoy information shared on social media more than that shared on other media because it comes in different forms.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

65. The interfaces of social media platforms help me every step of the way as I use them.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

66. Social media allow me to link to other pieces of information.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

67. Social media offer a number of visual aids for more effective use.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

68. Social media will double-check with me before performing a risky transaction.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

69. Social media are fun to explore

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

70. Social media let me play

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

71. I enjoy escaping into a different world on social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

72. Social media provide more entertaining information than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

73. Social media offer more entertaining features than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

### Section 3: Demographic Questions

74. Gender:

Male \_\_\_\_\_  
Female \_\_\_\_\_

75. Age:

Between 18-25 years \_\_\_\_\_  
Between 26-32 years \_\_\_\_\_  
Between 33- 40 years \_\_\_\_\_  
Between 41-47 years \_\_\_\_\_  
Above 47 years \_\_\_\_\_

76. Ethnicity:

Caucasian \_\_\_\_\_  
African American \_\_\_\_\_  
Asian \_\_\_\_\_  
Native American \_\_\_\_\_  
Native Hawaiian \_\_\_\_\_  
Pacific Islander \_\_\_\_\_

Hispanic \_\_\_\_\_  
Middle Eastern \_\_\_\_\_  
Other \_\_\_\_\_

77. Education:

College Freshman \_\_\_\_\_  
Sophomore \_\_\_\_\_  
Junior \_\_\_\_\_  
Senior \_\_\_\_\_  
Graduate Student \_\_\_\_\_  
Other \_\_\_\_\_

## Appendix B

### Survey on Social Media Uses and Gratifications, and Political Opinions and Attributes

This questionnaire measures uses and gratifications people seek from social media and attitudes people have towards politics. For the study, social media are defined as online platforms where users can interact with each other, build networks, share content, create content, publish, and make comments. Social media include a range of platforms, such as Facebook, Twitter, YouTube, Instagram, Tumblr, Reddit, Pinterest, Google Plus, and WordPress. Please answer the questions in this survey based on your experience with one or more of these social media platforms.

#### Section 1: Social Media Use

This section includes general questions about your social media use. Please answer the following questions (check “X” the appropriate answer).

3) Do you use social media (e.g., Facebook, Twitter, Pinterest, YouTube, blogs)?

Yes \_\_\_\_\_  
No \_\_\_\_\_

4) If yes, how often?

Several times a day \_\_\_\_\_  
Once a day \_\_\_\_\_  
Three to five days a week \_\_\_\_\_  
One to two days a week \_\_\_\_\_  
Every few weeks \_\_\_\_\_  
Less often \_\_\_\_\_

#### Section 2: Uses and Gratifications of Social Media

This section includes statements on what you might think about social media. Social media include a range of web-based platforms such social network sites (e.g., Facebook, LinkedIn), microblogging sites (e.g., Twitter), picture sharing sites (e.g., Instagram), video sharing sites (e.g., YouTube), blogging services (e.g., WordPress) or any other online platform that allows users to create and share content, and interact with each other.

Below is a list of statements about different uses of social media. Please read each of the statements and select the option that best describes your view.

1. I know that information available on social media is real and not made up.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

2. Communicating using social media is not that different from face-to-face communication.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

3. The experience in social media is very much like real life.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

4. I can experience the real world through social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

5. Social media platforms are unique compared to other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

6. Social media platforms are distinctive compared to other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_  
\_\_\_\_\_

7. Social media platforms are more stylish than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

8. Social media platforms are more attractive than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

9. Social media platforms are new compared to other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

10. Social media platforms have innovative features.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

11. Social media interfaces are different than traditional websites.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

12. The experience I gain by using social media is out of the ordinary.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

13. Social media help me immerse myself in places that I cannot physically experience.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

14. Social media create the experience of being present in distant environments.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

15. Social media provide quality information that makes me feel like I am able to experience things as they are without actually being there.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

16. Social media bring me information about different incidents so quickly that it does not make a big difference that I am not physically there to experience them.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

17. Social media allow me to freely express my opinions.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

18. Social media allow me to freely assert my identity.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

19. Social media give me the power to provide different types of information to my followers.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

20. Social media allow me to have my say.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

21. I can use social media to easily connect with people living in different parts of the world.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

22. Social media help me to be part of a community that I would not otherwise have been part of.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

23. Social media allow me to build a network that could bring me social support.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

24. Social media allow me to actively contribute to communities that make an impact on society.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

25. Social media allow me to review the opinions of others before I make decisions.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

26. Social media comfort me by letting me know the thoughts and opinions of others.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

27. Social media allow me to compare my opinions with those of others.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

28. Reading others' comments on social media before I make comments helps me to avoid potential conflict with those with whom I might disagree.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

29. I try to adjust my reactions to social media posts based on comments made by others.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

30. Social media allow me to set my preferences.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

31. On social media, I can avoid viewing things that I do not want to see.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

32. Social media allow me to sort through information before I share it with others.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

33. Social media allow me to limit the visibility of information I post to a small group.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

34. I feel like I have some ownership over the social media platforms I use.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

35. Social media platforms help me to publish content that is a true reflection of myself.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

36. My friends have their own ways of using social media.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

37. Social media platforms allow me to customize so that I can make them my own.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

Social media allows users to interact with the platform. For this study, interaction means a range of activities including liking, commenting, sharing, posting, tweeting, retweeting, tagging, and rating. Please answer the question below based on your interactive experience on social media platforms.

38. Social media rely on user interaction.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

39. When I use social media, I frequently interact with the platform.

- Strongly Disagree \_\_\_\_\_
- Disagree \_\_\_\_\_
- Neither Agree nor Disagree \_\_\_\_\_
- Agree \_\_\_\_\_
- Strongly Agree \_\_\_\_\_

40. On social media, I can specify my needs and preferences on an ongoing basis.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

41. I expect my friends to interact with social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

42. I can perform a number of tasks on social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

43. I feel active when I use social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

44. My Interaction on social media is not passive.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

45. I get to do a lot of things on social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

46. Social media are more responsive than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

47. Social media are responsive to my commands.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

48. Social media respond well to my requests.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

49. Social media can anticipate my needs.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

50. Social media allow me to be in charge.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

51. Social media give me more control over information I post.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_

Strongly Agree \_\_\_\_\_  
\_\_\_\_\_

52. I am able to control my interaction with the interfaces of the social media platforms I use.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

53. I am able to influence how social media platforms look.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

54. I am able to influence how social media platforms work.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

55. Social media allow me to obtain a wide variety of information.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

56. Social media can link me to sites that have different types of information.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

57. Social media allow me to surf for things that I am interested in.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

58. I enjoy information shared on social media more than that shared on other media because it comes in different forms.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

59. The interfaces of social media platforms help me every step of the way as I use them.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

60. Social media allow me to link to other pieces of information.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

61. Social media offer a number of visual aids for more effective use.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

62. Social media will double-check with me before performing a risky transaction.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

63. Social media are fun to explore.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

64. I enjoy escaping into a different world through social media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

65. Social media provide more entertaining information than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

66. Social media offer more entertaining features than other media.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

**Section 3: Attitudes towards Politics**

This section includes statements about your attitudes towards politics. Please select the option that best describes your agreement or disagreement with each statement.

67. I consider myself well qualified to participate in politics.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

68. I feel I could do as good of a job in public office as most other people.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

69. I think that I am better informed about politics and government than most people.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

70. I feel that I have a pretty good understanding of the important political issues facing our country.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

71. Most of our leaders are not devoted to the service of our country.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

72. Politicians never tell us what they really think.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

73. I don't think public officials care much about what people like me think.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_

Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

**Section 4: Self Evaluation**

The following questions focus on how you think about yourself. Please select the option that best describes your agreement with each statement.

74. When I make a decision, I stick with it.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

75. I am so sure I am right about the important things in life, there is no evidence that could convince me otherwise.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

76. I may be wrong about some of the little things in life, but I am quite certain I am right about all the BIG issues.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

77. There is a clear line between what is right and what is wrong.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

78. People who disagree with me are usually wrong.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_

Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

79. There is a single correct way to do most things.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

80. I am a “my way or the highway” type of person.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

81. I will not compromise on the things that are really important to me.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

82. People should be allowed to organize public meetings to protest against the government.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

83. In a true democracy, the majority has a responsibility to protect the rights of all minorities.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

84. I usually take the opinions of people who support other parties seriously even if I don't agree with them.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

85. Every citizen has the right to support his/her political views even if I don't agree with them.

Strongly Disagree \_\_\_\_\_  
Disagree \_\_\_\_\_  
Neither Agree nor Disagree \_\_\_\_\_  
Agree \_\_\_\_\_  
Strongly Agree \_\_\_\_\_

**Section 4: Demographic Questions**

86. Gender:

Male \_\_\_\_\_  
Female \_\_\_\_\_

87. Age:

Between 18-25 years \_\_\_\_\_  
Between 26-32 years \_\_\_\_\_  
Between 33- 40 years \_\_\_\_\_  
Between 41-47 years \_\_\_\_\_  
Above 47 years \_\_\_\_\_

88. Ethnicity:

Caucasian \_\_\_\_\_  
African American \_\_\_\_\_  
Asian \_\_\_\_\_  
Native American \_\_\_\_\_  
Native Hawaiian \_\_\_\_\_  
Pacific Islander \_\_\_\_\_  
Hispanic \_\_\_\_\_  
Middle Eastern \_\_\_\_\_

Other \_\_\_\_\_  
\_\_\_\_\_

89. Education level

College freshman \_\_\_\_\_  
Sophomore \_\_\_\_\_  
Junior \_\_\_\_\_  
Senior \_\_\_\_\_  
Graduate student \_\_\_\_\_  
Other \_\_\_\_\_

90. Political self-identification:

Liberal \_\_\_\_\_  
Conservative \_\_\_\_\_  
Conservative democrat \_\_\_\_\_  
Social conservative \_\_\_\_\_  
Moderate \_\_\_\_\_  
Independent \_\_\_\_\_

91. Political Party Identification:

Democratic \_\_\_\_\_  
Republican \_\_\_\_\_  
Other \_\_\_\_\_

## Appendix C

### Model Fit Statistics: Uses and Gratifications Scale as a First-order Factor Structure

Table 1: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	128	881.698	502	.000	1.756
Saturated model	630	.000	0		
Independence model	35	6132.475	595	.000	10.307

Table 2: RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.046	.891	.863	.710
Saturated model	.000	1.000		
Independence model	.203	.292	.250	.276

Table 3: Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.856	.830	.933	.919	.931
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 4: Parsimony-adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.844	.722	.786
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

Table 5: NCP

Model	NCP	LO 90	HI 90
Default model	379.698	300.976	466.270
Saturated model	.000	.000	.000
Independence model	5537.475	5289.443	5792.001

Table 6: FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	2.249	.969	.768	1.189
Saturated model	.000	.000	.000	.000
Independence model	15.644	14.126	13.493	14.776

Table 7: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.044	.039	.049	.983
Independence model	.154	.151	.158	.000

Table 8: AIC

Model	AIC	BCC	BIC	CAIC
Default model	1137.698	1163.586	1646.346	1774.346
Saturated model	1260.000	1387.416	3763.500	4393.500
Independence model	6202.475	6209.553	6341.558	6376.558

Table 9: ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	2.902	2.701	3.123	2.968
Saturated model	3.214	3.214	3.214	3.539
Independence model	15.823	15.190	16.472	15.841

Table 10: HOELTER

Model	HOELTER	
	.05	.01
Default model	247	258
Independence model	42	44

Table 11: Regression Weights: (Group number 1 - Default model)

		Estimate	S.E.	C.R.	P
REAL4_1	<--- REAL	1.000			
REAL3_1	<--- REAL	1.233	.128	9.660	***
REAL2_1	<--- REAL	.889	.096	9.241	***
NOVL1_1	<--- COOL	1.000			
COOL1_1	<--- COOL	1.196	.153	7.808	***
NOVL3_1	<--- COOL	.858	.116	7.391	***
BEIN3_1	<--- BEIN	1.000			
BEIN2_1	<--- BEIN	1.160	.073	15.978	***
BEIN1_1	<--- BEIN	1.008	.068	14.729	***
AGNC5_1	<--- AGNC	1.000			
AGNC2_1	<--- AGNC	1.231	.082	14.987	***
AGNC1_1	<--- AGNC	1.213	.083	14.651	***
CMNB4_1	<--- CMNB	1.000			
CMNB3_1	<--- CMNB	1.135	.091	12.448	***
CMNB2_1	<--- CMNB	1.151	.097	11.920	***
BAND5_1	<--- BAND	1.000			
BAND4_1	<--- BAND	.899	.104	8.642	***
BAND2_1	<--- BAND	1.387	.175	7.933	***
OWNN3_1	<--- FILT	1.000			
FILT4_1	<--- FILT	1.526	.203	7.502	***
FILT3_1	<--- FILT	1.662	.218	7.628	***
ACTV2_1	<--- ACTV	1.000			
ACTV3_1	<--- ACTV	.807	.071	11.355	***
ACTV4_1	<--- ACTV	.941	.077	12.289	***
RESP2_1	<--- RESP	1.000			
RESP3_1	<--- RESP	.975	.058	16.934	***

DYNAM1_1	<---	RESP	.910	.068	13.419	***
DYNAM3_1	<---	RESP	.696	.056	12.484	***
BROW1_1	<---	BROW	1.000			
BROW2_1	<---	BROW	.879	.058	15.049	***
SCAF2_1	<---	BROW	.806	.069	11.738	***
SCAF3_1	<---	BROW	.880	.075	11.732	***
PLAY3_1	<---	PLAY	1.000			
PLAY4_1	<---	PLAY	1.363	.115	11.861	***
PLAY5_1	<---	PLAY	1.335	.112	11.901	***

Table 12: Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
REAL4_1	<---	REAL	.595
REAL3_1	<---	REAL	.908
REAL2_1	<---	REAL	.577
NOVL1_1	<---	COOL	.557
COOL1_1	<---	COOL	.662
NOVL3_1	<---	COOL	.574
BEIN3_1	<---	BEIN	.758
BEIN2_1	<---	BEIN	.866
BEIN1_1	<---	BEIN	.770
AGNC5_1	<---	AGNC	.745
AGNC2_1	<---	AGNC	.831
AGNC1_1	<---	AGNC	.800
CMNB4_1	<---	CMNB	.673
CMNB3_1	<---	CMNB	.812
CMNB2_1	<---	CMNB	.742
BAND5_1	<---	BAND	.483
BAND4_1	<---	BAND	.504
BAND2_1	<---	BAND	.747
OWNN3_1	<---	FILT	.493
FILT4_1	<---	FILT	.645
FILT3_1	<---	FILT	.680
ACTV2_1	<---	ACTV	.708
ACTV3_1	<---	ACTV	.670
ACTV4_1	<---	ACTV	.741
RESP2_1	<---	RESP	.812
RESP3_1	<---	RESP	.824
DYNAM1_1	<---	RESP	.668
DYNAM3_1	<---	RESP	.628
BROW1_1	<---	BROW	.722
BROW2_1	<---	BROW	.762
SCAF2_1	<---	BROW	.724
SCAF3_1	<---	BROW	.724
PLAY3_1	<---	PLAY	.570
PLAY4_1	<---	PLAY	.878

Table 13: Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
ACTV	<-->	PLAY	.211	.034	6.135	***
RESP	<-->	PLAY	.163	.028	5.813	***
BROW	<-->	PLAY	.187	.028	6.565	***
ACTV	<-->	BROW	.204	.035	5.865	***
RESP	<-->	BROW	.240	.032	7.483	***
ACTV	<-->	RESP	.372	.044	8.433	***
REAL	<-->	COOL	-.013	.019	-.696	.487
REAL	<-->	BEIN	.169	.034	5.033	***
REAL	<-->	AGNC	.062	.023	2.700	.007
REAL	<-->	CMNB	.061	.023	2.681	.007
REAL	<-->	BAND	.078	.024	3.303	***
REAL	<-->	FILT	.008	.013	.593	.553
COOL	<-->	BEIN	.167	.030	5.516	***
COOL	<-->	AGNC	.067	.020	3.250	.001
COOL	<-->	CMNB	.101	.022	4.591	***
COOL	<-->	BAND	.049	.020	2.500	.012
COOL	<-->	FILT	.060	.014	4.263	***
BEIN	<-->	AGNC	.168	.031	5.439	***
BEIN	<-->	CMNB	.206	.033	6.297	***
BEIN	<-->	BAND	.216	.037	5.796	***
BEIN	<-->	FILT	.075	.019	4.031	***
AGNC	<-->	CMNB	.190	.027	6.938	***
AGNC	<-->	BAND	.136	.027	5.089	***
AGNC	<-->	FILT	.105	.018	5.800	***
CMNB	<-->	BAND	.161	.029	5.555	***
BAND	<-->	FILT	.053	.015	3.620	***
REAL	<-->	ACTV	.184	.036	5.156	***
COOL	<-->	ACTV	.107	.028	3.842	***
BEIN	<-->	ACTV	.305	.045	6.843	***
AGNC	<-->	ACTV	.212	.034	6.220	***
CMNB	<-->	ACTV	.216	.035	6.249	***
BAND	<-->	ACTV	.246	.041	5.989	***
FILT	<-->	ACTV	.083	.020	4.169	***
REAL	<-->	RESP	.068	.026	2.589	.010
COOL	<-->	RESP	.104	.024	4.255	***
BEIN	<-->	RESP	.258	.037	6.931	***
AGNC	<-->	BROW	.125	.025	4.995	***
CMNB	<-->	BROW	.183	.028	6.586	***
BAND	<-->	BROW	.160	.029	5.453	***
FILT	<-->	BROW	.119	.020	6.014	***
REAL	<-->	PLAY	.067	.022	3.048	.002
COOL	<-->	PLAY	.093	.021	4.413	***

BEIN	<-->	PLAY	.156	.030	5.211	***
AGNC	<-->	PLAY	.142	.025	5.711	***
CMNB	<-->	PLAY	.122	.024	5.150	***
BAND	<-->	PLAY	.184	.032	5.824	***
FILT	<-->	PLAY	.057	.014	4.042	***
REAL	<-->	BROW	.002	.023	.098	.922
COOL	<-->	BROW	.156	.026	5.936	***
BEIN	<-->	BROW	.187	.033	5.733	***
AGNC	<-->	RESP	.180	.029	6.287	***
CMNB	<-->	FILT	.085	.017	5.122	***
CMNB	<-->	RESP	.179	.029	6.202	***
BAND	<-->	RESP	.207	.034	6.034	***
FILT	<-->	RESP	.105	.019	5.456	***
e38	<-->	e39	.035	.018	1.959	.050
e34	<-->	e35	.052	.022	2.407	.016
e19	<-->	e20	.260	.043	6.027	***

Table 14: Correlations: (Group number 1 - Default model)

			Estimate
ACTV	<-->	PLAY	.490
RESP	<-->	PLAY	.410
BROW	<-->	PLAY	.537
ACTV	<-->	BROW	.443
RESP	<-->	BROW	.569
ACTV	<-->	RESP	.709
REAL	<-->	COOL	-.048
REAL	<-->	BEIN	.361
REAL	<-->	AGNC	.169
REAL	<-->	CMNB	.173
REAL	<-->	BAND	.258
REAL	<-->	FILT	.040
COOL	<-->	BEIN	.474
COOL	<-->	AGNC	.241
COOL	<-->	CMNB	.384
COOL	<-->	BAND	.213
COOL	<-->	FILT	.419
BEIN	<-->	AGNC	.362
BEIN	<-->	CMNB	.465
BEIN	<-->	BAND	.561
BEIN	<-->	FILT	.312
AGNC	<-->	CMNB	.546
AGNC	<-->	BAND	.450
AGNC	<-->	FILT	.555
CMNB	<-->	BAND	.558
BAND	<-->	FILT	.339
REAL	<-->	ACTV	.402

COOL	<-->	ACTV	.311
BEIN	<-->	ACTV	.524
AGNC	<-->	ACTV	.463
CMNB	<-->	ACTV	.496
BAND	<-->	ACTV	.651
FILT	<-->	ACTV	.349
REAL	<-->	RESP	.160
COOL	<-->	RESP	.328
BEIN	<-->	RESP	.483
AGNC	<-->	BROW	.340
CMNB	<-->	BROW	.523
BAND	<-->	BROW	.525
FILT	<-->	BROW	.622
REAL	<-->	PLAY	.192
COOL	<-->	PLAY	.356
BEIN	<-->	PLAY	.356
AGNC	<-->	PLAY	.410
CMNB	<-->	PLAY	.371
BAND	<-->	PLAY	.644
FILT	<-->	PLAY	.320
REAL	<-->	BROW	.006
COOL	<-->	BROW	.561
BEIN	<-->	BROW	.400
AGNC	<-->	RESP	.429
CMNB	<-->	FILT	.469
CMNB	<-->	RESP	.446
BAND	<-->	RESP	.594
FILT	<-->	RESP	.481
e38	<-->	e39	.149
e34	<-->	e35	.196
e19	<-->	e20	.372

Table 15: Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P
REAL	.368	.064	5.719	***
COOL	.209	.043	4.908	***
BEIN	.592	.071	8.304	***
AGNC	.366	.045	8.053	***
CMNB	.333	.048	6.879	***
BAND	.250	.057	4.408	***
FILT	.099	.022	4.429	***
ACTV	.571	.078	7.294	***
RESP	.483	.053	9.195	***
BROW	.370	.050	7.359	***
PLAY	.327	.056	5.866	***
e1	.671	.057	11.807	***

e2	.119	.044	2.670	.008
e3	.583	.048	12.077	***
e4	.464	.041	11.269	***
e6	.383	.042	9.193	***
e8	.313	.028	11.003	***
e9	.438	.040	10.854	***
e10	.267	.037	7.226	***
e12	.414	.039	10.593	***
e13	.293	.027	10.882	***
e14	.249	.030	8.360	***
e15	.302	.032	9.441	***
e16	.403	.035	11.462	***
e17	.221	.028	7.998	***
e18	.361	.036	10.135	***
e19	.823	.065	12.612	***
e20	.594	.048	12.457	***
e21	.382	.053	7.247	***
e22	.307	.025	12.352	***
e23	.323	.032	10.221	***
e24	.317	.034	9.407	***
e26	.569	.053	10.762	***
e27	.458	.040	11.401	***
e28	.415	.041	10.026	***
e29	.249	.026	9.691	***
e30	.216	.023	9.309	***
e31	.495	.040	12.260	***
e33	.359	.029	12.605	***
e34	.340	.034	10.090	***
e35	.206	.022	9.297	***
e38	.218	.021	10.169	***
e39	.261	.026	10.176	***
e40	.680	.051	13.206	***
e41	.181	.026	7.035	***
e42	.141	.023	6.005	***

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## Appendix D

### Model-fit Statistics: Uses and Gratifications Scale as a Second-order Factor Structure

Table 16: CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	85	911.235	476	.000	1.914
Saturated model	561	.000	0		
Independence model	33	5544.578	528	.000	10.501

Table 17: RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.052	.875	.852	.742
Saturated model	.000	1.000		
Independence model	.205	.311	.268	.293

Table 18: Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI
	Delta1	rho1	Delta2	rho2	
Default model	.836	.818	.914	.904	.913
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Table 19: Parsimony-adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.902	.753	.823
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

Table 20: NCP

Model	NCP	LO 90	HI 90
Default model	435.235	353.746	524.522
Saturated model	.000	.000	.000
Independence model	5016.578	4780.780	5258.866

Table 21: FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	2.325	1.110	.902	1.338
Saturated model	.000	.000	.000	.000
Independence model	14.144	12.797	12.196	13.415

Table 22: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.048	.044	.053	.718
Independence model	.156	.152	.159	.000

Table 23: AIC

Model	AIC	BCC	BIC	CAIC
Default model	1081.235	1097.380	1419.009	1504.009
Saturated model	1122.000	1228.559	3351.307	3912.307
Independence model	5610.578	5616.846	5741.714	5774.714

Table 24: ECVI

Model	ECVI	LO 90	HI 90	MECVI
Default model	2.758	2.550	2.986	2.799
Saturated model	2.862	2.862	2.862	3.134
Independence model	14.313	13.711	14.931	14.329

Table 25: HOELTER

Model	HOELTER	
	.05	.01
Default model	228	237
Independence model	42	43

Table 26: Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
REAL	<---	Modality	1.000			
COOL	<---	Modality	1.027	.248	4.140	***
BEIN	<---	Modality	2.803	.581	4.825	***
AGNC	<---	Agency	1.000			
CMNB	<---	Agency	1.099	.142	7.723	***
BAND	<---	Agency	1.105	.171	6.454	***
FILT	<---	Agency	.472	.084	5.607	***
ACTV	<---	Interactivity	1.000			
RESP	<---	Interactivity	.855	.089	9.636	***
BROW	<---	Navigability	1.000			
PLAY	<---	Navigability	.760	.100	7.630	***
REAL4_1	<---	REAL	1.000			
REAL3_1	<---	REAL	1.174	.130	9.056	***
REAL2_1	<---	REAL	.882	.095	9.270	***
NOVL1_1	<---	COOL	1.000			
COOL1_1	<---	COOL	1.231	.177	6.965	***
NOVL3_1	<---	COOL	.866	.127	6.830	***
BEIN3_1	<---	BEIN	1.000			
BEIN2_1	<---	BEIN	1.170	.074	15.816	***
BEIN1_1	<---	BEIN	1.019	.069	14.669	***
AGNC5_1	<---	AGNC	1.000			
AGNC2_1	<---	AGNC	1.255	.085	14.689	***
AGNC1_1	<---	AGNC	1.234	.086	14.410	***
CMNB4_1	<---	CMNB	1.000			
CMNB3_1	<---	CMNB	1.126	.091	12.340	***
CMNB2_1	<---	CMNB	1.148	.097	11.883	***

BAND5_1	<---	BAND	1.000				
BAND4_1	<---	BAND	.934	.109	8.578	***	
BAND2_1	<---	BAND	1.319	.177	7.438	***	
OWNN3_1	<---	FILT	1.000				
FILT4_1	<---	FILT	1.599	.237	6.735	***	
FILT3_1	<---	FILT	1.913	.280	6.825	***	
ACTV2_1	<---	ACTV	1.000				
ACTV3_1	<---	ACTV	.797	.073	10.900	***	
ACTV4_1	<---	ACTV	.980	.081	12.160	***	
RESP2_1	<---	RESP	1.000				
RESP3_1	<---	RESP	.991	.060	16.473	***	
DYNN1_1	<---	RESP	.900	.068	13.169	***	
BROW1_1	<---	BROW	1.000				
SCAF2_1	<---	BROW	.698	.069	10.052	***	
SCAF3_1	<---	BROW	.812	.077	10.596	***	
PLAY3_1	<---	PLAY	1.000				
PLAY4_1	<---	PLAY	1.359	.116	11.725	***	
PLAY5_1	<---	PLAY	1.359	.115	11.766	***	

Table 27: Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
REAL	<---	Modality	.381
COOL	<---	Modality	.540
BEIN	<---	Modality	.869
AGNC	<---	Agency	.636
CMNB	<---	Agency	.721
BAND	<---	Agency	.829
FILT	<---	Agency	.617
ACTV	<---	Interactivity	.876
RESP	<---	Interactivity	.800
BROW	<---	Navigability	.821
PLAY	<---	Navigability	.703
REAL4_1	<---	REAL	.609
REAL3_1	<---	REAL	.886
REAL2_1	<---	REAL	.586
NOVL1_1	<---	COOL	.549
COOL1_1	<---	COOL	.671
NOVL3_1	<---	COOL	.571
BEIN3_1	<---	BEIN	.753
BEIN2_1	<---	BEIN	.867
BEIN1_1	<---	BEIN	.773
AGNC5_1	<---	AGNC	.736
AGNC2_1	<---	AGNC	.837
AGNC1_1	<---	AGNC	.804
CMNB4_1	<---	CMNB	.675
CMNB3_1	<---	CMNB	.809

CMNB2_1	<---	CMNB	.742
BAND5_1	<---	BAND	.489
BAND4_1	<---	BAND	.530
BAND2_1	<---	BAND	.719
OWNN3_1	<---	FILT	.456
FILT4_1	<---	FILT	.626
FILT3_1	<---	FILT	.724
ACTV2_1	<---	ACTV	.699
ACTV3_1	<---	ACTV	.653
ACTV4_1	<---	ACTV	.762
RESP2_1	<---	RESP	.817
RESP3_1	<---	RESP	.843
DYNN1_1	<---	RESP	.665
BROW1_1	<---	BROW	.758
SCAF2_1	<---	BROW	.659
SCAF3_1	<---	BROW	.701
PLAY3_1	<---	PLAY	.566
PLAY4_1	<---	PLAY	.870
PLAY5_1	<---	PLAY	.907

Table 28: Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P
Interactivity	<-->	Navigability	.261	.037	7.050	***
Modality	<-->	Agency	.065	.015	4.231	***
Modality	<-->	Navigability	.080	.019	4.220	***
Agency	<-->	Interactivity	.203	.030	6.821	***
Modality	<-->	Interactivity	.109	.025	4.344	***
Agency	<-->	Navigability	.176	.025	6.899	***
e38	<-->	e39	.067	.022	3.016	.003
e19	<-->	e20	.246	.044	5.536	***

Table 29: Correlations: (Group number 1 - Default model)

			Estimate
Interactivity	<-->	Navigability	.761
Modality	<-->	Agency	.719
Modality	<-->	Navigability	.646
Agency	<-->	Interactivity	.819
Modality	<-->	Interactivity	.701
Agency	<-->	Navigability	.880
e38	<-->	e39	.247
e19	<-->	e20	.359

Table 30: Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P
Modality	.056	.021	2.667	.008
Agency	.144	.029	5.028	***
Interactivity	.427	.071	6.015	***
Navigability	.276	.048	5.744	***
e43	.330	.058	5.666	***
e44	.143	.034	4.269	***
e45	.143	.055	2.601	.009
e46	.212	.030	7.017	***
e47	.161	.028	5.721	***
e48	.080	.029	2.808	.005
e49	.052	.014	3.744	***
e50	.129	.039	3.273	.001
e51	.175	.031	5.628	***
e52	.133	.034	3.887	***
e53	.163	.032	5.174	***
e1	.653	.059	11.110	***
e2	.146	.049	2.976	.003
e3	.574	.050	11.558	***
e4	.471	.044	10.785	***
e6	.375	.047	7.932	***
e8	.315	.030	10.358	***
e9	.446	.041	10.931	***
e10	.263	.037	7.069	***
e12	.410	.039	10.480	***
e13	.302	.028	10.966	***
e14	.241	.031	7.891	***
e15	.298	.033	9.126	***
e16	.401	.035	11.337	***
e17	.225	.028	7.942	***
e18	.360	.036	9.976	***
e19	.817	.067	12.198	***
e20	.572	.049	11.801	***
e21	.417	.055	7.584	***
e22	.321	.026	12.436	***
e23	.336	.034	9.878	***
e24	.280	.039	7.239	***
e26	.583	.054	10.760	***
e27	.476	.041	11.503	***
e28	.386	.042	9.245	***
e29	.244	.027	8.913	***
e30	.196	.025	7.905	***
e31	.500	.041	12.124	***
e34	.302	.037	8.189	***
e38	.260	.026	10.097	***

e39	.279	.030	9.343	***
e40	.684	.052	13.219	***
e41	.192	.027	7.140	***
e42	.129	.025	5.194	***

---

## Appendix E

### Political Dogmatism: Post-hoc Test Results

Table 31: Waller-Duncan Test Results- Realism

Dogmatism Category	n	Subset		
		1	2	3
Low	108	2.16		
Moderate	131		2.59	
High	74			3.14

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .816.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 32: Waller-Duncan Test Results- Coolness

Dogmatism Category	n	Subset	
		1	2
Moderate	131	3.65	
Low	108	3.66	
High	74		3.99

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .412.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 33: Waller-Duncan Test Results- Being There

Dogmatism Category	n	Subset	
		1	2
Low	108	3.12	
Moderate	131	3.25	
High	74		3.82

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .813.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 34: Waller-Duncan Test Results- Agency

Dogmatism Category	n	Subset	
		1	2
Low	108	3.75	
Moderate	131	3.76	
High	74		4.21

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .454.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 35: Waller-Duncan Test Results- Community Building

Dogmatism Category	n	Subset	
		1	2
Low	108	3.65	
Moderate	131	3.67	
High	74		4.09

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .498.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 36: Waller-Duncan Test Results- Filtering

Dogmatism Category	n	Subset	
		1	2
Low	108	3.84	
Moderate	131	3.87	
High	74		4.14

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .304.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 37: Waller-Duncan Test Results- Activity

Dogmatism Category	n	Subset	
		1	2
Moderate	131	3.11	
Low	108	3.11	
High	74		3.72

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .623.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 38: Waller-Duncan Test Results- Responsiveness

Dogmatism Category	n	Subset	
		1	2
Low	108	3.01	
Moderate	131	3.19	
High	74		3.69

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .587.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 39: Waller-Duncan Test Results- Browsing

Dogmatism Category	n	Subset	
		1	2
Moderate	131	3.74	
Low	108	3.75	
High	74		4.13

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .402.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 40: Waller-Duncan Test Results- Play

Dogmatism Category	n	Subset	
		1	2
Low	108	3.31	
Moderate	131	3.41	
High	74		4.03

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .654.

a Uses Harmonic Mean Sample Size = 98.664.

b Type 1/Type 2 Error Seriousness Ratio = 100.

## Appendix F

### Political Tolerance: Post-hoc Test Results

Table 41: Waller-Duncan Test Results- Realism

Tolerance Category	n	Subset 1
Low	48	2.43
Moderate	100	2.45
High	165	2.69

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .937.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 42: Waller-Duncan Test Results- Coolness

Tolerance Category	n	Subset 1	Subset 2	Subset 3
Low	48	3.42		
Moderate	100		3.63	
High	165			3.89

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .401.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 43: Waller-Duncan Test Results- Being There

Tolerance Category	n	Subset 1	Subset 2
Low	48	3.19	
Moderate	100	3.21	
High	165		3.46

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .870.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 44: Waller-Duncan Test Results- Agency

Tolerance Category	n	Subset 1	Subset 2
Moderate	100	3.72	
Low	48	3.77	
High	165		3.98

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .476.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 45: Waller-Duncan Test Results- Community Building

Tolerance Category	n	Subset	
		1	2
Low	48	3.54	
Moderate	100	3.67	
High	165		3.89

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .512.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 46: Waller-Duncan Test Results- Filtering

Tolerance Category	n	Subset	
		1	2
Low	48	3.63	
Moderate	100		3.89
High	165		4.02

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .300.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 47: Waller-Duncan Test Results- Activity

Tolerance Category	n	Subset	
		1	2
Low	48	3.03	
Moderate	100	3.12	
High	165		3.40

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .667.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 48: Waller-Duncan Test Results- Responsiveness

Tolerance Category	n	Subset	
		1	2
Low	48	2.97	
Moderate	100	3.12	
High	165		3.40

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .626.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 49: Waller-Duncan Test Results- Browsing

Tolerance Category	n	Subset		
		1	2	3
Low	48	3.52		
Moderate	100		3.72	
High	165			3.99

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .396.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

Table 50: Waller-Duncan Test Results- Play

Tolerance Category	n	Subset	
		1	2
Moderate	100	3.36	
Low	48	3.37	
High	165		3.67

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = .714.

a Uses Harmonic Mean Sample Size = 81.314.

b Type 1/Type 2 Error Seriousness Ratio = 100.

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