Pope Francis or @Pontifex?

The Engagement from Pope Francis's Presence on Twitter

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Abstract

This paper seeks to understand how Pope Francis utilizes Twitter to engage with his followers. This papacy has included many modern ways to communicate with Catholic followers and outsiders since 2013, Twitter being a primary source for the Pope. Through the analysis of Pope Francis's top 100 favorited and top 100 Retweeted tweets, as well as numerous articles about leaders' use of Twitter, social media's influence, and Pope Francis, the author found that he was effectively reaching and engaging with his audience through tweets focusing on three main themes of humanity, inspiration, and religiosity to his followers. The study concluded that the Pope is primarily concerned with spreading these messages to all people, adapting his means of communication to Twitter.

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I. Introduction

Since Martin Luther's 95 Theses, the use of mass media to spread religious ideology has been in place. In fact, religious leaders have used mass media to increase awareness, and ultimately religious identity and membership. For almost 2000 years, the Catholic Church has been spreading its gospel to followers around the world. However, in 2018, spreading the gospel has changed and engaged followers in new ways. Pope Francis has used a new platform of influence to spread positivity and make changes in the Catholic Church and worldwide. Beyond his breaking of traditions such as living situations and statements on gay marriage and abortion, the Pope has evolved heavily on social media, specifically Twitter. He uses the platform to spread his inspirational messages and hopes for humanity to a wide audience. Among his many different methods, Pope Francis uses this popular tool that many social media users are familiar with, avoiding the nature and risk involved in using his mundane tools. The unprecedented use of Twitter by Pope Francis allows for a two-way dialogue between him and his followers. This also invites audiences into 280-character statements by the Pope daily. More people are using Twitter, and more people are engaging with the Pope due his Twitter activity. The term engagement is used in relationship to Twitter usage. According to Twitter, engagement is the "total number of times a user interacted with a Tweet... [including] clicks anywhere on the Tweet, including Retweets, replies, follows, likes" (Twitter, n.d.). The purpose of the paper is to identify the effectiveness of Pope Francis's Twitter uses and his engagement with his audience.

II. Literature Review

Twitter is an online social networking site that involves "both mass and interpersonal communication" (Philip R. Johnson & Sung-Un Yang, n.d.). There is ample research discovered about general Twitter uses and audience perceptions about Pope Francis's ideology. Ample research examined general Twitter uses and audience perceptions about Pope Francis's ideology, but not much about how the former influenced the latter, which is the focus of this research. To investigate Pope Francis's Twitter engagement from spreading his messages through tweets, the author read literature about general Twitter uses and habits of leaders on Twitter, the Pope's ideology and his use of online media, and the audience perceptions of Twitter and social media presence overall.

General Twitter Uses & Habits of Leaders on Twitter

Leaders of all different levels and professions are using social media now. More specifically, leaders are heading to Twitter to spread their messages to their followers and opponents in just 280 characters. According to a HuffPost article written in 2014, the top five most followed world leaders on Twitter were: Barack Obama, Pope Francis, the Indonesian President, the Indian Prime Minister, and The White House (Hildebrandt, 2014). These leaders are delivering their messages to their audiences in a unique and progressive way, as opposed to more mundane methods such as newspapers or TV channels. Today, Twitter is a leader in social media platforms. That being said, Statista reports that as of the third quarter in 2018 there are 336 active Twitter users worldwide (Statista, 2018). Delving further into the uses of religious leaders on Twitter, "influential pastors and Christian speakers such as Joyce Meyer, Joel Osteen, and Max Lucado were generating more reactions on Twitter than [Justin] Bieber" (Horner, 2014). It is clear that religious leaders should be turning more to Twitter to spread their message with strong levels of engagement. In his article, "How Christian Leaders Interact with the Twitter", Horner (2014), pointed out that popular Christian blogs are directing the Christian church to use Twitter to further reach their congregants and other followers.

Understanding the increase of Christian leaders and their engagement rates on Twitter, Hjarvard (2011) writes about the mediatisation of religion. Mediatisation is a "new theoretical framework to revisit and reframe old, yet fundamental questions about the role and influence of media in culture and society... mediatisation denotes the social and cultural process through which a field or institution to some extent becomes dependent on the logic of the media..." (Hjarvard, 2011). Hjarvard discusses this theory in conversation with media spreading in influential fields such as religion. Religion and specific religious groups are further becoming not only integrated and influenced but also reliant on media in both communal and daily practices. The mediatisation theory in conjunction with religious uses of social media support the increased use of Twitter by religious leaders.

Much of the necessity for leaders to use Twitter is due to the modernity of social media and meeting the needs of followers and the general trend of globalization (Hjarvard, 2011). Looking at the needs of users and followers on Twitter, it is significant to point out the uses and gratifications model in juxtaposition with the platform. In the same way that McLuhan emphasized that "the medium is the message", leaders are effectively utilizing Twitter as their medium. There are various motives for leaders to send tweets to their followers: spreading a message, letting followers know about news, or simply saying what is on their minds. Uses and gratifications theory, which will be discussed in audience perceptions of Twitter literature review further, "is an audience-centered approach that focuses on what people do with media, as opposed to what media does to people" (David L., 2016). It is significant, if not imperative, for leaders such as Pope Francis to understand this theoretical framework to strategically spread their messages on Twitter.

The mediatisation is held up by various theories of media effects that explain why leaders are flocking to Twitter for the delivery of their messages. These theories focus on behaviors being changed on both societal and individual levels (Hjarvard, 2011). The media (social, news, network, and entertainment media) has shown powerful effects on people. Pope Francis draws on these powers through his unprecedented use – for any Pope – of Twitter and engagement with Catholics and others worldwide. Hjarvard (2011) discusses the mediatisation of religion as a phenomenon mainly in Western societies. This is an important source of information for religion, religious experiences being shaped by media demands, and media taking over social and cultural functions of religions. Among many arguments supporting his three points mentioned, "media not only transmit communication, but also serve a cultural function by creating and sustaining communities... [making] the influence of media on social interaction – including religion – more pronounced" (Hjarvard, 2011).

Pope Francis Ideology and Use of Social Media

Before Pope Francis began his papacy, the Catholic Church previously moved to develop a strong presence on online media platforms. The Church did this to "modernize its message for its more than one billion followers worldwide" (Ferguson, 2011). A primary reason to create its own presence online was because of the scrutiny placed on the Catholic Church throughout various news media. Today, the Vatican – the home of the Roman Catholic Church and Pope Francis – has its own website ("The Holy See") and news outlet ("Vatican News").

Similar to other world leaders' goals, there is no doubt that there is intention and agendasetting in Pope Francis's use of Twitter. However, with his modern approach of using social media to deliver his message, the Pope is engaging with more users and becoming one of the most followed world leaders on Twitter – clearly proving to be effective in his strategy (Hildebrandt, 2014). Before understanding his use of Twitter, it is important to unpack the general ideology of Pope Francis. He has numerous critics, and has even proved to show a decline in Catholicism membership since Pope Benedict XVI's papacy (Gallup, 2018). Nonetheless, Pope Francis holds more liberal social views than many other papacies. In an article from 2016 in the Boston Globe, John Allen Jr. states that "Francis stands for greater mercy and compassion for people who don't live up to those ideals, which was the heart of his famous 'Who am I to judge?' sound bite about gay persons in July 2013" (Allen, 2016). The Pope is often seen as conservative as he is orthodox when it comes to sexual concerns as well (Allen, 2016).

Another interesting insight into the current Papacy is the recent documentary, "Pope Francis: A Man of His Word," released in May 2018. This documentary takes audiences into never-seen-before aspects of the Pope's life in the Vatican highlighting three distinguishing features of his papacy: Pope Francis is the first Jesuit pope, the first pope to hail from the Americas (specifically Argentina), and the first pope to adopt the name of St. Francis of Assisi. The director, Wes Wenders, interviewed Francis in candid settings where the pope frankly spoke his mind, giving audiences direct access to the leader whose words and decisions have stirred controversy and admiration in the Catholic Church. The documentary covers other aspects of the current papacy, such as Pope Francis's emphasis on his three T's: *trabajo* (work), *tierra* (earth), and *techo* (roof), each of which he believes is fundamental to the rights of all people (Garcia, 2018).

In conjunction with the Pope's more liberal social views, and his liberal actions such as filming the recent documentary, he has also adopted Twitter, becoming more modern in his methodology to reach a larger audience through his messages. What is most interesting about The Pope utilizing Twitter so strongly is that "46 percent of churches claim social media as 'their most effective outreach method", and he is of that percentage taking advantage of the influence of social media today (Horner, 2014). For this reason, he is ensuring the growth and continuation of Catholicism in a unique way, reaching new generations and new followers overall (Chen, et al., 2014). Although Pope Francis could mobilize his followers on different social media platforms, Chen, Weber and Okulicz-Kozaryn mention that Twitter has a significant global reach, which is useful for him and researchers to analyze leaders' uses of Twitter to reach their followers. In their article "U.S. Religious Landscape on Twitter", the three authors note that Twitter "has such a large influence on people that it can be used as a measure of culture... [that] satisfies 'the need to belong'" (Chen et al., 2014). Referring back to mediatisation theory, it is a long-term process that allows for change and growth of a religious institution, such as the Catholic Church, from the media's influence. It is clear that this is the case in Pope Francis utilizing Twitter to reach his followers.

Another significant reason for him to reach followers via Twitter is for community building and open discussion for "people with similar religious orientation" (Hjarvard, 2011). Social ties in religious networks play a large role in the use of Twitter for the Pope's followers as well. In the article, "Networks and Religion: Ties that Bind, Loose, Build Up and Tear Down", Sean Everton notes that people are going to join a religious group if familiar people are also involved in the group; whereas if they do not know anyone, they will likely not join (2018). Similarly, this is seen on Twitter. If Pope Francis had significantly less than 17.8 million followers on Twitter, he would likely not have the same level of engagement or influence as other world leaders. This aligns with the theory of group-think: if other people are following him, other individuals will feel the need to as well, because clearly his message is worthy of reading and referencing in a Twitter feed (Decision Innovation, n.d.). These followers are interpreted as people who "are drawn structurally closer to groups they are more likely to conform to the norms and practices of those groups", such as other groups of people following Pope Francis on Twitter (Everton, 2018). Understanding that about "26% of people who are members of religious group also participated in 8-28 other groups on social media" proves The Pope's necessity of reaching his followers on Twitter (Kim & Asim, n.d.).

Audience Perception of Twitter

Beyond understanding general leaders' uses of Twitter and Pope Francis's ideology, the author chose to further understand users' reactions to religious messages. According to a Pew Research Center, 20.8% of the population identifies as Catholic in the United States alone. Breaking down that number, 17% are ages 18-29, 33% are ages 30-49, 29% are ages 50-64, and 20% are ages 60+ (Pew Reseach Center, 2014). Among those age groups, 40% of U.S. adults ages 18-29 use Twitter and 27% ages 30-49 use Twitter. It is not a mystery as to why it is significant for the Pope to be spreading his message on Twitter to reach those large age distributions (Statista, 2018). When someone signs up for a Twitter account, they sign up with intentions to connect with others, gain information, and share with people what they are doing. In their article, "Uses and Gratifications of Twitter: An Examination of User Motives and Satisfaction of Twitter Use", Johnson and Yang note that "audience members are active and goal-oriented in their selection of media use behavior" (Philip R. Johnson & Sung-Un Yang, n.d.). The uses and gratifications theory is evident in the popularity of Pope Francis on Twitter as

users seek gratifications from following him and engaging in his messages. Johnson and Yang further support this theory in their observations that Twitter has unique strengths that satisfy users in its abilities to connect throughout broader communities.

Horner's study about Christian leaders and Twitter observed that the leaders are more likely to adapt their social media habits in order to reach more people that align with their beliefs. This enables a larger audience for the leaders, and an audience that will positively perceive and engage with the content they are seeing. This also shows the "progress of the relationship between religion and communications" that is clearly seen in the Vatican's move toward using more online media – specifically Twitter – since they are more accessible for users (Horner, 2014).

Understanding audiences' reasons for following Pope Francis subscribes to the dialogic theory of public relations. An outside observer can see that his use of Twitter to engage in a modern method is a definitely a public relations stunt to conform with what many world leaders are doing today with their followers. Pope Francis evokes this theory from his audiences through his Twitter, which "involves 'trust', 'risk', and 'vulnerability'" with followers to continue to engage with his tweets (Kent & Taylor, 2002). The Pope facilitates dialogue with his followers and between followers with his content. This a primary aspect of the dialogic theory of public relations as he creates effective communications paths within and beyond the Catholic Church (Revolvy, n.d.). Nonetheless, this two-way communication method increases the "likelihood that publics and organizations will better understand each other and have ground rules for communication" among Catholic organizations worldwide (Kent & Taylor, 2002).

III. Research Questions and Hypotheses

Once understanding the general Twitter uses and audience perceptions about the Pope's ideology, the author developed two primary research questions, with four corresponding hypotheses. The mediatisation theory, uses and gratifications theory, and dialogic theory of public relations informed the author's research and understanding of the Pope's Twitter engagement. The questions and hypotheses below guided the author in further investigation as to how Pope Francis cultivates engagement on Twitter to spread his messages.

RQ1: Does the message theme in Pope Francis's Tweets influence the number of favorites or Retweets he receives?

H1: The theme of the messages in The Pope's Tweets influences the number of favorites he receives.

H2: The theme of the messages in The Pope's Tweets influence the number of Retweets he receives.

H3: The more favorited Tweets are, the more frequently they are Retweeted.

RQ2: What kind of language does Pope Francis use in his Tweets?

H4: The type of words The Pope chooses to use in his Tweets creates more engagement.

IV. Research Methods

It is important to further understand how Pope Francis uses his social media platform to spread his message and reach his followers through unique methodology. The author conducted an in-depth content analysis of the Pope's Twitter account, @Pontifex. This method was chosen because it provides quantitative and qualitative results of the Pope's tweets to further understand how his messaging is being received by his followers.

Analyzing the Pope's tweets through this methodology is significant because it shows patterns in the content he is tweeting and the way he is choosing to spread his message through an unconventional platform for a religious figure of such high stature (and one who has not traditionally used social media).

The author chose to answer research questions through a content analysis of the Pope's tweets. This was conducted initially by intaking the Pope's tweets through RStudio using the program called "rTweet". This program formulates and sends requests to Twitter to stream its APIs (Application Program Interfaces) to retrieve and iterate Twitter data and eventually clean the data structures.

By retrieving Pope Francis's Twitter data (@Pontifex), the author was able to see all of his tweets from the creation of his Twitter account, the location they were sent from, any hashtags used, how many favorites and Retweets they got, the exact time they were sent out, and much more. In addition to those details, the author was able to clean the text to see the frequency of words Pope Francis uses in his tweets.

The author sampled 100 cases of the Pope's top 100 favorited and top 100 Retweeted tweets out of 1710 tweets in total through a thematic analysis. Pope Francis started Tweeting on March 17, 2013, as @Pontifex and the data was collected for tweets until October 4, 2018. The author sorted all of the tweets from most to least favorites, and then from most to least retweets.

Each of the 200 tweets (favorites and Retweets) were analyzed through a thematic analysis and coded into three different themes: humanity, religiosity, and inspirational. These categories were decided based on Pope Francis's ideology and common topics he often discusses.

For the thematic analysis, after cleaning the 1710 tweets retrieved from the "rTweet" package in RStudio, the author coded the top 100 favorited tweets into themes. The same method was done for the top 100 Retweeted tweets. As shown in the table in appendix A, there are three

columns that have the themes, "humanity", "religiosity", and "inspirational", and the number of Retweets and favorites underneath. After coding the themes of the tweets, the author made three columns titled: "humanity", "inspirational", and "religiosity"; each column had the list of Retweet and favorite counts. To determine what tweets belonged in each of the three categories, the author categorized them based on them on the content of each tweet. For example, a Tweet reading "Let us work together to find concrete solutions to help the poor, refugees, victims of modern forms of slavery, in order to promote peace" was appropriate for the "humanity" category. While a Tweet reading "Love can recognize good things even in bad situations. Love keeps a tiny flame alight even in the darkest night" fits more in the "inspirational" category. Finally, a Tweet that reads "May the Lord grant us the wisdom to seek that which is worthwhile and to love, not with our words but with our actions" clearly is fitting in the "religiosity" category.

For the numeric analysis, the author collected Pope Francis's Twitter data from "rTweet" and cleaned out stop words and other common or unfamiliar characters with a package called "TidyText" in RStudio. She then looked at the frequency of the use of the top 100 most used words. Using the same process for coding the top 100 favorites and Retweets, the author coded the top 100 words into the three themes of "humanity", "inspirational", and "religiosity". As shown in the table in appendix B, there are three columns for each theme. Under the themes are the correlating words and their usage count.

V. Findings

The author answered the following two research questions and corresponding four hypotheses below.

RQ1: Does the message theme in Pope Francis's Tweets influence the number of favorites or Retweets he receives?

H1: The theme of the messages in The Pope's Tweets influences the number of favorites he receives.

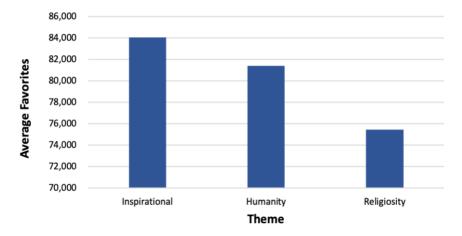
H2: The theme of the messages in The Pope's Tweets influence the number of Retweets he receives.

H3: The more favorited Tweets are, the more frequently they are Retweeted.

RQ2: What kind of language does Pope Francis use in his Tweets?

H4: The type of words The Pope chooses to use in his Tweets creates more engagement.

To test H1 on whether the themes of the messages in the Pope's Tweets will influence the number of favorites he receives, the author analyzed a sample of 100 tweets. To test whether the difference of averages of the top 100 favorited tweets by theme at the sample level can be generalized to the population, the author ran an ANOVA test. The test showed a p-value of 0.45, much higher than the significance level of 0.05, so the null hypothesis was accepted. This means that the Pope's message is popular regardless of its type, so any specific type of theme in the message will not necessarily garner more favorites over other types (see Figure 1).



Top 100 Favorite Averages by Theme

Figure 1 – Top 100 favorited tweets' averages by theme. Inspirational tweets had the highest average of 84,073, then humanity at 81,404, with religiosity following at 75,459

The author found that inspirational-themed tweets garnered the highest average of 84,073 among the top 100 most favorited tweets. Humanity-themed tweets had an average of 81,404 favorites, and religiosity-themed tweets followed with 75,459 average favorites. These numbers are predictive of the population, and there is a significant level of certainty at 95% because of passing the critical threshold level of .05%.

Hypothesis 2 stated that the Pope's message type will influence the number of Retweets he receives. To test whether this difference of averages of the top 100 Retweeted tweets by theme at the sample level can be generalized to the population, the author ran an ANOVA test again. The test showed a p-value of 0.074, higher than the significance level of 0.05, so the null hypothesis was accepted (see Figure 2).

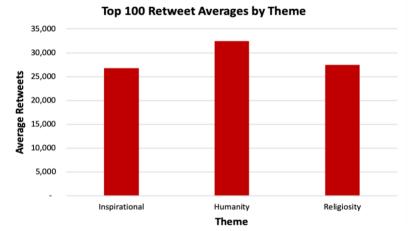


Figure 2 – Top 100 Retweet averages by theme. Humanity had the highest average of Retweets with 32,463 and then 26,785 for inspirational, and 27,476 for religiosity.

The analysis of a sample of 100 tweets showed that "humanity" received 32,463 Retweets, followed by 26,785 for "inspirational" and 27,476 for "religiosity". This means that the Pope's message is popular regardless of its type, so any specific type of theme in the message will not necessarily garner more favorites over other types.

After understanding hypotheses 1 and 2, the author developed hypothesis 3, which stated that the more favorited tweets are, the more frequently they are Retweeted. To examine whether people tend to Retweet the Pope's message when they also favorite his message, the author calculated a correlation coefficient. This measures the strength of a linear association between two variables here. The coefficient was 0.79, a high positive relationship.

To see the causal relationship of these two variables at the population level, the author regressed the number of retweets on the number of favorites. The relationship is shown in the formula of:

of retweets = 2362 + .25x # of favorites

The regression analysis showed that the p-values of the intercept and the retweet coefficient are lower than 0.05, the significance level, so the null hypothesis that they is no relationship was rejected. This means that the formula is valid, and when a message is favorited by four or more people, it seems to be Retweeted by 10 additional people (see Figure 3). The author found that the Pope's messages will be popular regardless of its type so the specific type of theme in the messages will not necessarily garner more favorites over the other types – this goes for favorites and Retweets. Further, when a message is favorited by four or more people, it seems to be Retweeted by ne additional person.

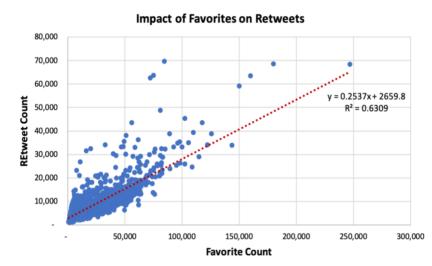
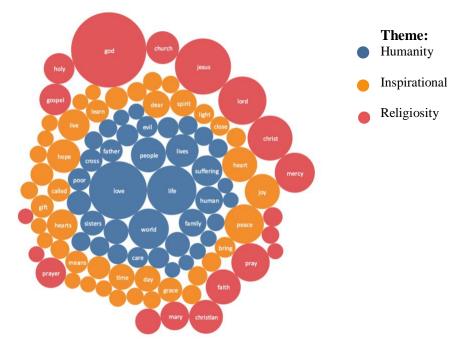


Figure 3 – Correlation of favorite count to Retweet count in total tweets.

Hypothesis 4 states that the type of words the Pope chooses to use in his tweets creates more engagement. Out of 2,773 unique words, the author looked at the frequency of the top 100 most used words. The author conducted a thematic analysis in a similar way to the top 100 favorited and Retweeted tweets using the three themes: humanity, religiosity, and inspirational. The word cloud below represents the top 100 most used words in The Pope's tweets: frequency represented by the size of circles and theme of word by colors (See Figure 4).



Top 100 Most Used Words' Frequencies by Theme

Figure 4 – Top 100 most used words' frequencies by theme (colors) and size of circle is frequency

The top 3 most used words are "god" (419 times), "love" (249 times), and "Jesus" (233 times). However, in relation to the 3 themes analyzed, words such as "world" (121), "prayer" (69), and "human" (58) are used frequently as well. Pope Francis's Twitter has an overall engagement rate of .19%, which is on the higher side for an influence who should "expect 0.9 to 3.3 reactions for every 1000 followers on Twitter (Mee, 2018). The author found that words related more to religiosity and humanity were used higher, which both had higher Retweet averages (seen in Figure 2).

VI. Discussion

In Zachary Horner's article, "How Christian Leaders Interact with the Twitter", he found that "about 30 percent of the tweets sent out by these leaders come in the form of these 'inspirational messages' tweets with statements meant to encourage or challenge their followers" (2014). This is something that is clearly seen in the "inspirational" category the author defined in her findings section of the top 100 most favorited and Retweeted tweets from Pope Francis.

After addressing the two research questions and two hypotheses about Pope Francis's use of Twitter, the author found that he has a developed a strong following of people who engage with all three themes. His tweets gathered up to October 4, 2018 showed an engagement rate of 0.19%, high in comparison with "0.9 - 3.3 reactions for every 1000 followers on Twitter (Mee, 2018). After analysis of the four hypotheses about the Pope's Twitter use, it indicates that he has equally significant investment in humanity, inspiration, and religiosity for his followers. For hypothesis 1, the author accepted the null hypothesis because of the p-value showing no direct difference among the themes. This predicts the population of all of the Pope's tweets, based on the analysis of the 100 most favorited tweets.

There seems to be a significant infiltration of religious messages based on the three themes into mainstream social media by Pope Francis and the Vatican overall. These positive results indicate the high engagement questioned about the Pope's Twitter presence. In the future, researchers can investigate whether or how the Pope continues to utilize these themes on Twitter to deliver his messages to his followers.

Given more time, it would have been interesting to see the comparison of other religious leaders (Dalai Lama, Rabbi Jonathan Sacks, Franklin Graham, etc.) and their engagement rates and audience perceptions. Comparing the top 100 favorites and Retweets of more religious leaders would provide further understanding to the importance of Twitter used to spread religious messages.

VII. Conclusion

Twitter is one of the predominant social media forces in the world today. When Pope Francis chooses to send a Tweet out, he is reaching a broader audience and engaging them with the Catholic Church. The three theories discussed are manifested in the analyses of Pope Francis's Twitter engagement. The mediatisation theory is evident in the high engagement of the Pope's Twitter as he is consistent and reliant on using the platform for his messages for his followers. His influence on Twitter supports the mediatisation theory of religion and its influence of media in culture and society. The high engagement rate of Pope Francis's Twitter also supports the uses and gratifications theory that followers continue to seek satisfaction from his messages. Finally, the dialogic theory of public relations shows the Pope is using certain words to connect with his followers. This allows conversation between him and his followers and followers among each other. Consequently, the Pope has taken advantage of the success of Twitter to spread his messages of inspiration, religion, and humanity, just as "popular culture might be communicated in many ways, but it most often becomes widespread, and thus, popular, through mass media...marked by its larger audience (Forbes & Mahan, 2017). It will be interesting to see how, and if, Pope Francis further utilizes other social media platforms to the Church's advantage.

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Appendix A

Humanity		Religiosity		Inspirational	
Favorites	Retweets	Favorites	Retweets	Favorites	Retweets
58761	24752	63380	29053	64322	33928
108771	25369	63381	26279	60069	21658
62902	20464	114838	25424	143809	24350
61972	34171	67575	32358	62215	35061
95097	23447	62255	20368	61886	19494
61723	19671	81787	19087	64124	28973
61022	20129	85429	48808	70665	33256
58569	20868	81006	30310	65580	22727
62419	23275	61989	20311	64727	43512
74002	23062	61598	34040	80739	23823
122244	25299	76114	26852	65079	26794
68330	26514	74836	20807	82929	32397
69720	19160	62098	21894	64309	25774
61239	33181	59348	23903	67847	32355
125796	26023	74135	20548	59475	23288
78579	22495	68506	22283	71939	21569
82209	39383	80361	19037	74950	24293
58797	35378	82404	21020	72738	33072
100238	34755	98489	28790	105588	21304
63432	29492	89405	63562	78351	21515
109867	25352	76820	19938	83184	20892
98102	68545	68202	38860	82621	19239
96332	22383	64861	23172	92868	
81242	20950	63996	29186	62946	
68079	24589	69234	21034	117603	
180136	31008	60436		62486	
75930	29952	75598		69333	
62284	26872	159808		82057	
102627	45424	61000		64025	
63684	29184	71524		76373	
61630	28454	89348		102507	
72262	19913	61381		246979	
84527	24524	58999		150094	
75223	36360				

Top 100 Favorited and Retweeted tweets

20231	
29590	
33125	
62623	
32454	
31521	
23144	
30164	
35499	
38083	
43561	
69634	
63658	
25932	
68456	
38755	
59149	
33449	
21127	

Appendix B

Top 10	0 Most	Frequently	Used	Words
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Humanity		Religiosity		Inspirational	
Word	Count	Word	Count	Word	Count
love	249	peace	115	god	419
life	181	heart	93	jesus	233
world	121	joy	91	lord	172
people	93	hope	83	christ	150
lives	79	live	75	mercy	119
human	58	hearts	71	pray	109
family	57	dear	55	faith	91
brothers	47	spirit	53	christian	85
encounter	46	day	50	church	80
sisters	46	time	50	gospel	74
children	43	grace	44	holy	70
poor	38	called	40	prayer	69
cross	37	forgiveness	40	mary	61
father	37	gift	40	christians	49

mother	36	journey	40	holiness	28
suffering	36	learn	39	sin	23
evil	33	tenderness	39	faithful	19
families	33	means	38	mission	19
person	33	bring	32	saint	18
care	32	light	30		
witness	30	close	29		
friends	28	future	28		
humanity	27	living	28		
society	27	remember	28		
charity	26	strength	28		
loves	26	word	28		
afraid	25	follow	27		
dignity	25	laudatosi	27		
service	24	join	23		
unity	21	path	23		
victims	21	power	23		
suffering	36	courage	22		
born	19	death	22		
feel	19	trust	22		
experience	18	grow	21		
helps	18	free	20		
poverty	18	merciful	20		
protect	18	common	19		
		eyes	19		
		forget	19		
		loving	19		
		share	19		
		concrete	18		