Pope Francis or @Pontifex? The Engagement from Pope Francis's Presence on Twitter

Leah Kay

Media Analytics
Elon University

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Abstract

The Catholic Church has been spreading its gospel to followers around the world for almost 2,000 years, but in 2018, Pope Francis engaged followers in new ways – specifically on Twitter. This study seeks to understand how Pope Francis employs Twitter to engage with his followers. This papacy has used many modern ways to communicate both with Catholics and non-followers. Since 2013, Twitter has been a primary social media outlet for the Pope. Through the analysis of Pope Francis's top 100 favorited and top 100 retweeted tweets, the author found that he engaged his audience using three main themes: humanity, inspiration, and religiosity. The study concluded that the Pope is concerned with spreading these themes to all people, effectively adapting his three-pronged message to Twitter for widespread dissemination.

I. Introduction

Since Martin Luther's 95 Theses came off the printing press in 1517, the use of mass media to spread religious ideology has been in place. In fact, religious leaders have long used mass media to increase awareness, and ultimately religious identity and membership. The Catholic Church has been spreading its gospel to followers around the world for almost 2,000 years, but in 2018, Pope Francis engaged followers in new ways – specifically on Twitter. The unprecedented use of Twitter by Pope Francis allows for two-way dialogue between him and his followers, inviting audiences to engage through a daily 280-character statement. More people are using Twitter, and more people are interacting with the Pope through his Twitter account. The purpose of this study is to examine the effectiveness of Pope Francis's use of Twitter to engage with his audience.

II. Literature Review

Twitter is an online social networking site that involves "both mass and interpersonal communication" (Johnson & Yang, 2009, p. 2). Numerous scholarly studies examine general Twitter uses, habits of leaders on the social media platform, the Pope's ideology and use of online media, and overall audience perceptions of Twitter

and social media presence.

General Twitter Uses & Habits of Leaders on Twitter

Leaders of all different levels and professions are now using social media. More specifically, leaders are heading to Twitter to spread their messages to their followers and opponents in just 280 characters. In 2014, the top most followed world leaders on Twitter included Barack Obama, Pope Francis, the Indonesian President, and the Indian Prime Minister (Hildebrandt, 2014). These leaders are delivering messages to their audiences in a unique manner, in contrast to older media methods such as newspapers or television. Today, Twitter is a leader in social media, with 326 million active users worldwide (Statista, 2018). Religious leaders have plugged into the trend; previous studies have noted that "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, p. 59). Popular Christian blogs are directing the church to use Twitter to further reach their congregants and other followers (Horner, 2014).

Recognizing the increase of Christian leaders' 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, p. 119). Religion and specific religious groups are becoming not only integrated and influenced by media, but also reliant upon it in both communal and daily practice, particularly in Western societies, as Hjarvard (2011) notes: "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" (p. 127).

Pope Francis's 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, doing so to "modernize its message for its more than one billion followers worldwide" (Ferguson, 2011, p. 52). A primary reason for it to create a presence online was because of the scrutiny placed on the Catholic Church by 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 agenda-setting 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 this strategy is effective (Hildebrandt, 2014). To understand his use of Twitter, it is important to unpack the general ideology of Pope Francis. He has numerous critics, and there has been a decline in the membership of the Catholic Church since his predecessor Pope Benedict XVI's papacy (Gallup, 2018). Pope Francis holds more liberal social views than many other papacies, including Benedict and John Paul II. Journalist John Allen Jr. wrote 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, p. 2). At times, the Pope is often perceived as conservative, as he largely follows church precedent when it comes to sexual matters, but Allen's article shows that is not always the case.

Another interesting insight into the current Papacy is the 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. Director Wim 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 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, he has also adopted Twitter, becoming more modern in his methodology to reach a larger audience and grow Catholicism. Although Pope Francis could mobilize his followers on different social media platforms, Chen, Weber and Okulicz-Kozaryn note that Twitter has a significant global reach, and "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, p. 2). In addition, Twitter allows community building and open discussion for "people with similar religious orientation" (Hjarvard, 2011). As Everton (2018) notes, people are more likely to join a religious group if they are familiar with others involved in the group; if they do not know anyone, they will likely not join. Religious followers "are drawn structurally closer to groups they are more likely to conform to the norms and practices of those groups," such as those following Pope Francis on Twitter (Everton, 2018, p. 4).

Audience Perception and Use of Twitter

Among U.S. adults, 40% of those aged 18-29 use Twitter, and 27% aged 30-49 use the platform (Statista, 2018), so it is not a mystery as to why it is significant for the Pope to be tweeting. When users sign up for a Twitter account, they are motivated to connect with others, gain information, and share with people what they are doing. Johnson and Yang (2009) employ uses and gratifications theory to explore Twitter's unique strengths and its ability to connect users throughout broader communities, noting that "audience members are active and goal-oriented in their selection of media" (Johnson & Yang, 2009, p. 8). Uses and gratifications theory helps explain why people follow the Pope on Twitter and engage with his messages.

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.). 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, p. 33). Through Twitter, the Pope invokes "'trust,' 'risk,' and 'vulnerability'" to encourage followers to engage in a virtual dialogue (Kent & Taylor, 2002, p. 24).

III. Research Questions and Hypotheses

The mediatisation theory, uses and gratifications theory, and dialogic theory of public relations informed the current study concerning the Pope's Twitter engagement. This study proposes two research questions (with four hypotheses) about how Pope Francis cultivates engagement on Twitter.

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. Methods

The author conducted an in-depth content analysis – both quantitative and qualitative – of the Pope's Twitter account, @Pontifex that sought to reveal patterns in the content of his tweets and the way he spreads his message through an unconventional platform – at least for a prominent religious figure of such high stature.

The Pope's tweets were collected through RStudio using the program "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, 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 were received, the exact time tweets were sent out, and much more. In addition to those details, the author was able to see the frequency of particular words Pope Francis uses in his tweets.

The author analyzed the Pope's top 100 favorited and top 100 Retweeted tweets (out of 1,710 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.
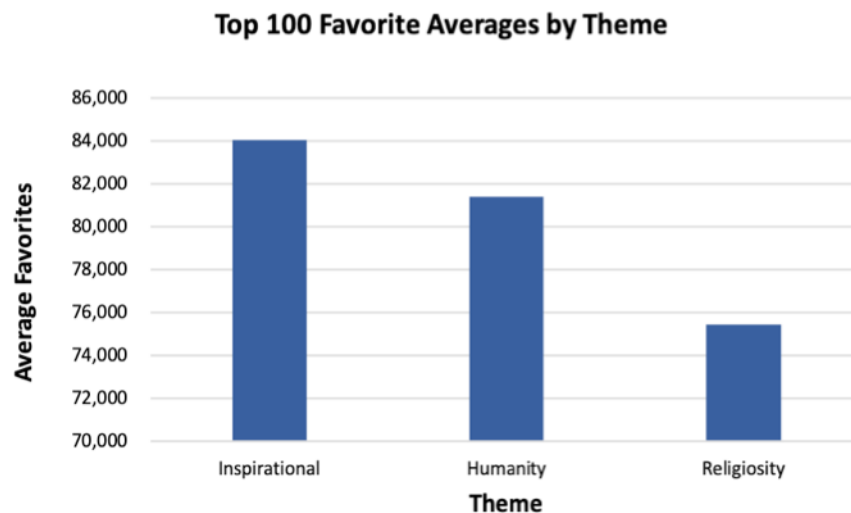
Each of the 200 tweets (favorites and retweets) were coded into three different themes: humanity, religiosity, and inspirational. These categories were based on Pope Francis's ideology and common topics he often discusses.

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 coded in the "humanity" category. A tweet reading "Love can recognize good things even in bad situations. Love keeps a tiny flame alight even in the darkest night" was coded into 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" fit in the "religiosity" category.

For the numeric analysis, the author collected Pope Francis's Twitter data from "rTweet" and used a package called "TidyText" in RStudio to clean the data. The researcher then looked at the frequency 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."
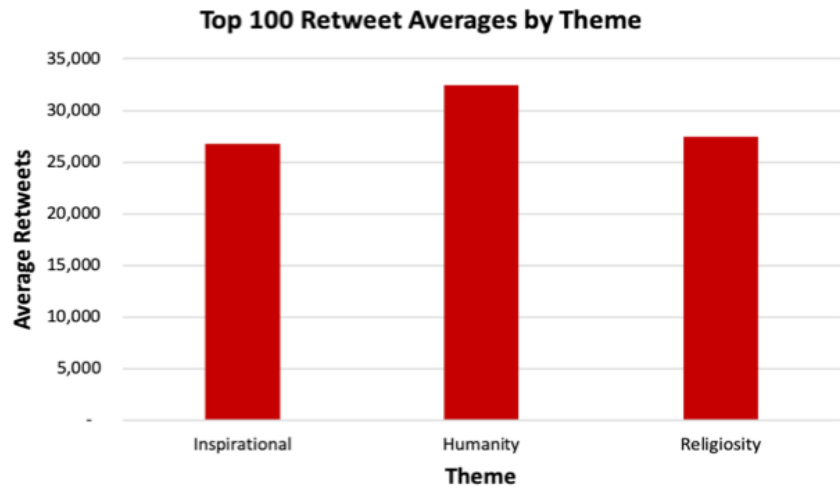
V. Findings

To test whether the themes of the messages in the Pope's Tweets influenced the number of favorites he received (Hypothesis 1), the author analyzed a sample of 100 tweets. To test whether the difference of averages of the top 100 favorited tweets by theme were 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 was popular regardless of its theme, so any particular theme in the message did 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 favorites. 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, with a confidence level above the 95% threshold.

Hypothesis 2 stated that the Pope's message type would influence the number of retweets he received. As with Hypothesis 1, the author ran an ANOVA test. 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 was popular regardless of its type, so any specific type of theme in the message did not necessarily garner more favorites over other types. To examine whether people tended to retweet the Pope's message when they also favorited his message (Hypothesis 3), the author calculated a correlation coefficient to measure the strength of a linear association between two variables. 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 = 2,362 + .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 was rejected. In this sample, when a message was favorited by four or more people, it was retweeted by 10 additional people (see Figure 3). Further, when a message was favorited by four or more people, it tended to be retweeted by one additional person. The author found that the Pope's messages were popular regardless of its type, so the theme of the messages did not necessarily garner more favorites or retweets over the other types.
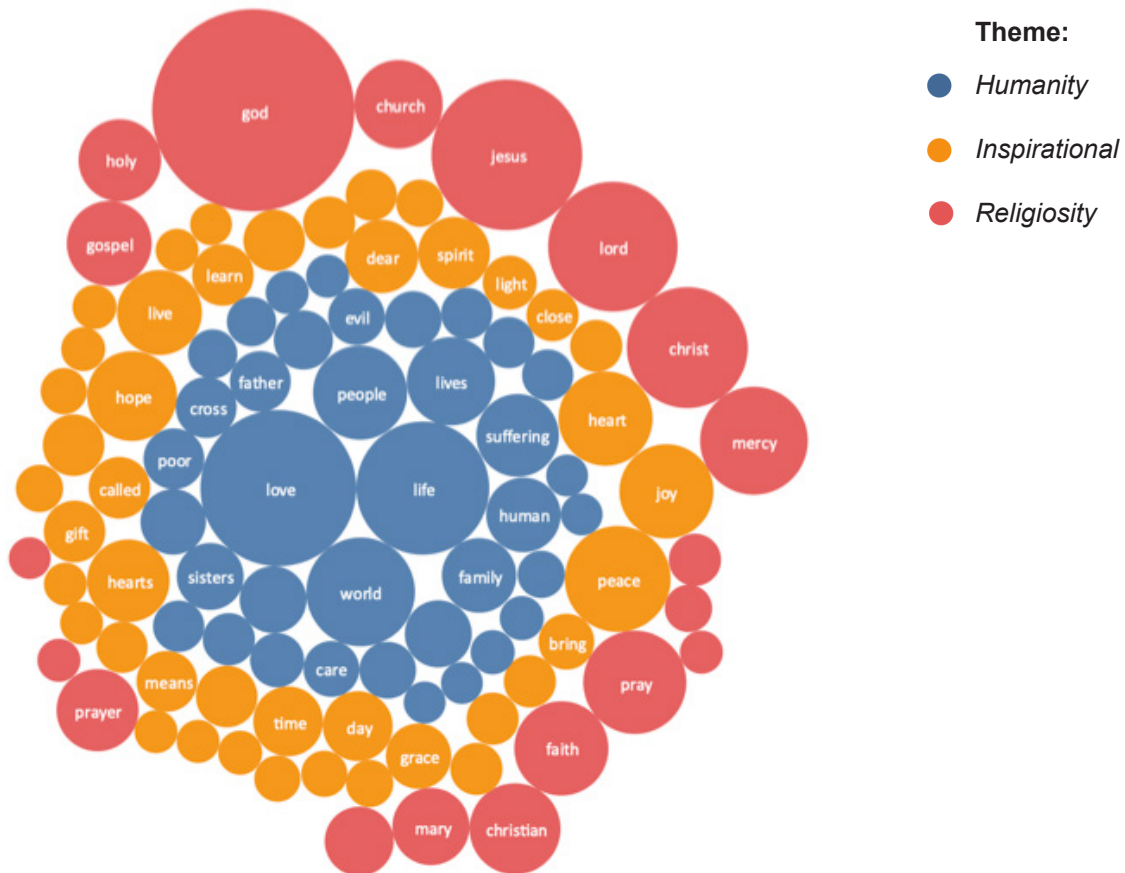
Top 100 Most Used Words' Frequencies by Theme

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

The top three most-used words were "God" (419 times), "love" (249 times), and "Jesus" (233 times). However, words such as "world" (121), "prayer" (69), and "human" (58) were used frequently as well. Pope Francis's Twitter had an overall engagement rate of .19%, which is on the higher side for an influencer, who should expect 0.9 to 3.3 reactions for every 1,000 followers on Twitter (Mee, 2018). In this study, words that related to religiosity and humanity were used more frequently.

VI. Discussion

Horner (2014) found that about 30% of tweets written by religious leaders were inspirational in nature and "meant to encourage or challenge their followers" (p. 65). The "inspirational" category was also apparent in the current study, but themes of humanity and religiosity were also commonly used by the Pope. It suggests that he has equally significant investment in humanity, inspiration, and religiosity for his followers.

The results also shed additional light on several theories used to underpin this study. The mediatisation theory is evident in the high engagement of the Pope's Twitter feed, as he is consistent and reliant on using the platform for his messages for his followers. More specifically, it shows how mediatisation is becoming more pronounced in religion's influence on culture and society. The high engagement rate of Pope Francis's Twitter also reflects uses and gratifications theory, as followers continue to seek satisfaction from his messages. Finally, the study's results suggest that the dialogic theory of public relations is apparent in the way the Pope uses specific words to connect with his followers, facilitating online conversation.

VII. Conclusion

Twitter is one of the predominant social media forces in the world today. When Pope Francis chooses to send out a tweet, he is reaching a broader audience and engaging them with the Catholic Church. As a result, the Pope has taken advantage of the success of Twitter to spread his messages of inspiration, religion, and humanity. In the future, researchers could investigate whether or how the Pope continues to use these themes on Twitter to deliver his messages to his followers. In addition, it will be interesting to see if – and how – Pope Francis uses other social media platforms.

The current study could also be expanded by future researchers, measuring other religious leaders and their social media engagement rates and audience perceptions. Comparing the top 100 favorites and retweets of additional religious leaders would provide further understanding of the importance of Twitter to spread religious messages.

Acknowledgements

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Appendix A

Top 100 Favorited and Retweeted tweets

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				

Appendix A (continued)

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

Appendix B

Top 100 Most Frequently Used Words

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		