

IMMIGRATION, SOCIAL MEDIA, AND THE FAR-RIGHT: A TWITTER STUDY OF THE
POLITICAL COMMUNICATION OF *ALTERNATIVE FÜR DEUTSCHLAND* FOLLOWING
TERRORIST EVENTS

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A thesis submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Masters of Arts in the Department of Political Science, Concentration German-Turkish Studies.

Chapel Hill
2021

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ABSTRACT

LoLo von Tresckow Morley: Immigration, Social Media, and the Far-Right:
A Twitter Study of the Political Communication of the *Alternative für Deutschland*
Following Terrorist Events
(Under the direction of Rahsaan Maxwell)

With the global events of technological advancement and mass migration, the prominence of terrorist incidents and subsequent media coverage is garnering more and more attention. The existing literature on populist communication and population responses to terrorist events indicate a potential correlation between characteristic changes in online political communication by right-wing parties and the occurrence of terrorist events. Terror Management Theory (TMT) and sense-making suggest that a population would be more susceptible to political messaging and anti-immigration agenda setting following a terrorist attacks. I use a big-data study of Tweets in Germany from the years 2013-2019 in order to test whether or not this correlation exists. I conclude that there is no statistically significant evidence that shows that terrorist events affect either the frequency of immigration-related Tweets or the sentiment (positivity or negativity and emotionally charged content) contained within.

To my Oma, Hannelore von Tresckow Napp, who inspired my love of politics and foreign languages, and taught me to appreciate the German country, language, and culture.

ACKNOWLEDGEMENTS

First and foremost, huge thanks to Luke DiGiacomo for teaching me about text mining, APIs, and other computer-related topics, and for showing me how to do all of the coding work associated with the project. This research would not have been possible without his assistance. Thank you to Dr. Claudia Matthes and Dominik Deck for reviewing the German language aspects of this project, as well offering up further resources to assist in my research. Finally, thanks to Jay Morgan for always being willing to talk research ideas and methodology and for being my biggest support system in the thesis process during a challenging year.

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LIST OF ABBREVIATIONS

| | |
|-----|-----------------------------------|
| AfD | Alternative für Deutschland |
| API | Application Programming Interface |
| GTD | Global Terrorism Database |
| TMT | Terror Management Theory |

INTRODUCTION

The rise in high-profile terrorist attacks in Western Europe over the past 10 years has led to populist, right-wing parties employing strategies that revolve around the capitalization of mass threat perception of immigrants. When the wave of terrorist attacks in the mid-2010's overlapped in time with the so-called Migration Crisis¹ in Europe, the anti-immigrant sentiment among most Western European countries began to rise (Larsson, Cutts & Goodwin 2020). This rise can be attributed to increased emotions manifesting as anxiety and a heightened sense of threat perception, which in turn leads to excessive stereotyping (Engesser, Fawzi & Larsson 2017; Ferrín, Mancosu & Capialli 2020). This stereotyping can lead individuals to become more fearful and suspicious of threats from a certain perceived "outgroups" causing them to alter their actions (like policy preferences and voting habits) in an attempt to ensure their personal security (Mancosu & Ferrín Pereira 2020; Kim 2015).

In this paper, I study Tweets made by official accounts² of the German right-wing party, *Alternative für Deutschland* (AfD)³, on the social media platform Twitter to determine if and how terrorist attacks change the quantity and sentiment of immigration-related Tweets made by the AfD. I expect there to be a strong correlation between the frequency of negative Tweets and

¹ Also known as the Refugee Crisis, the years 2014-2019 saw an unprecedented number of displaced persons seek refugee in the European Union by way of overland means and via the Mediterranean Sea. Many of these individuals came from war-torn countries, and were seeking asylum.

² Full list of Twitter handles and corresponding account names can be found in Appendix 1

³ The AfD was officially founded in 2013. In 2014, the party won seats for the first time in the European Parliament. By the end of 2017, the AfD was represented in 14 of the 16 federal states in Germany, and became the third largest party in the German *Bundestag*. The past eight years have seen the AfD transition from a primarily anti-EU party to one that is first and foremost, an anti-immigration party.

terrorist events. The opportunity window presented by such emotional reactions to terrorist events suggests that far-right parties would be primed to take advantage of this opportunity by inundating social media spheres with public statements reaffirming constituents' fears (Garcia & Rime 2019). Available research has already established the high usage of social media platforms by populist parties for information dissemination (Gerbaudo 2018; Gil de Zúñiga, Michaska & Römmele 2020; Engesser, Ernst, Esser & Büchel 2016). Another body of literature addresses population response to terrorist events at both the psychological and policy levels (Jonas, Martens, Niesta Kayser, et.al. 2008; Juhl & Routledge 2016). I hope to add to the available literature addressing the advent of social media in conjunction with the advent of terrorist attacks.

Even more specifically, there is a lack of literature revolving around populist parties' social media reactions to terrorist events - much of the current literature focuses on population reaction. In the subsequent sections of this paper, I seek to address some of the issues, by sharing insights from a big-data study. I expect that the AfD's desire to exploit terrorist events would be visible in an increase in both social media presence and in derogatory language used therein in order to promote an anti-immigration agenda.

In this paper, I rely on psychological reactions to explain why AfD accounts would have a noticeable change in their Twitter presence and dialogue following terrorist events. This study uses empirical analysis to show when AfD accounts increase the quantity of immigration-related Tweets, as well as computer-driven content analysis to characterize the Tweets as negative or positive and determine how much emotional content is present within. These Tweets can then be juxtaposed with terrorist events during the years 2013-2019. This list has been compiled from the Global Terrorism Database from the University of Maryland. I generate two different lists for

comparison: the first takes “major terror events” which I categorize as having 10+ casualties (injuries or deaths) in Western Europe, while the second takes “German events” which have 1+ casualties and happened within Germany. When analyzed in this way, I am able to draw a number of conclusions about the changing nature and quantity of AfD Tweets following terrorist events. I present a series of graphs that offer insight into potential relationships between terrorist events and immigration-related Tweets, as well as formal regression models and statistics that help to prove or disprove my hypotheses revolving around frequency and changing sentiment dynamics.

CHAPTER 1: THEORETICAL BACKGROUND AND KEY CONCEPTS

Terrorism

Terrorism, as defined by the Global Terrorism Database, is “the threatened use of illegal force or violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation⁴”. For inclusion in the database, an incident had to meet three criteria: intentionality, some level of violence or threat of violence, and sub-national actors as perpetrators.

Furthermore, the incident must have met two of the additional three criteria for inclusion: the act must be aimed at attaining a political, economic, religious, or social goal; There must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences) than the immediate victims; The action must be outside the context of legitimate warfare activities.

For the purposes of this paper, I refer to a terrorist event as any entity within the Global Terrorism Database that was initially coded as 0 for the categorical variable “*doubtterr*”, which assures that there was “essentially no doubt” as to whether or not the incident could be classified as terrorism.

⁴ This definition, as well as the subsequent information on criteria, is found on the GTD website which can be found here: <https://www.start.umd.edu/gtd/>.

Putting it Together: Terrorist Attacks Provide the Perfect Window of Opportunity

The publicly-available body of information on why and how populist parties use social media platforms is quite extensive, but there is not as much literature on when populist parties double-down on their social media usage. Berry and Sobieraj (2014) suggest that populist parties also tend to appeal to emotion and “outrage” in order to mobilize their voting bases. Vasilopoulos, Valentino, Marcus & Foucault (2019) show that emotions are most manipulable in a heightened state. To this end, populist parties can hijack this moment of emotional vulnerability in order to promote a political agenda. By taking advantage of heightened emotional states of constituents during a time fraught with fear, anxiety, and a need for world order that upholds cultural worldviews, a party can sway a voter or reinforce negative stereotypes by assuring individuals that their policies and ideologies will ensure personal security in the future.

As it applies to this case, the AfD can use Twitter to inundate followers' feeds with anti-immigration messaging following terrorist events in order to reinforce the ideas of stereotyping, threat perception, and community-building among individuals who fear cultural worldviews that may be at odds with their own. This phenomenon is summed up by Vasilopoulos, Marcus, Valentino, and Foucault:

“far-right parties stoke anxiety, especially among authoritarian-minded citizens by presenting economic downturns, cultural change, and both domestic and international security incidents as existential threats” (2019, 679-680).

CHAPTER 2: HYPOTHESIS – TWITTER’S FUNCTION IN THE AFTERMATH OF TERRORIST ATTACKS

Increased Quantity

According to both Terror Management Theory and sense-making theories, there is an increased draw to social media following terrorist events due to an individual’s need to find a place of belonging, security, and shared identity to make sense of confusing, violent, and disrupting times (García & Rimes 2019). On social media, the hashtag (#) function allows for like-minded individuals to quickly and easily spread emotional sentiment, as well as search for individuals who share their worldviews (Eriksson 2016). By “hashtagging” a word or phrase, an individual Tweet or post is automatically hyperlinked to a repository containing posts with the same hashtag. These hashtags can further collectivize sense-making and provide an easy way for individuals to find a like-minded community which eases the process of sense-making and reinforces the hypothesis of Terror Management Theory (Eriksson 2016).

This not only makes it easier for individuals to seek out specific information, but also contributes to individuals seeking out and only getting information that confirms previously held beliefs. In turn, this directly contributes to the willingness of individuals to seek compatriots in social media spheres due to the knowledge that they have easy-access to people and thoughts that make them feel more secure in their own worldviews (Jonas, Martens, Niesta Kayser, et.al. 2008). Theories of populist communication and past studies show that populist parties rely on

both social media and appeal to emotion in order to quickly reach a wide audience (Gerbaudo 2018). With all of these theories taken into account, one could reasonably expect that populist use of communication via social media increases directly following terrorist events. To this end, I develop my first hypothesis:

H1: AfD Tweets about immigration will increase after terrorist events.

Consistent Language and Increased Emotional Content

Terror Management Theory and sensemaking theories could also account for changes in the emotional content and outlook (positivity or negativity) of Tweets following terrorist events. However, I would like to offer up a more nuanced hypothesis, hinging on the characterization of the AfD as a nativist party.

Chapter 9 of the AfD Party Manifesto⁵, entitled Immigration, Integration, and Asylum, characterizes the German system thus far as a failure in protecting the nation-state. “Germany has turned into an immigration country without any legal framework” (57).

It is the AfD’s view that true refugees should be granted shelter as long as there is war in the countries of origin. Irregular migrants, who are not persecuted, have no right to claim protection, contrary to refugees. Once the reasons for fleeing, such as an end to wars, or political and religious persecution, no longer apply, shall residence permits of refugees be terminated. These refugees need to leave Germany (58).

Further subsections call for changes to the Law on Repatriation, immigration from poorer EU countries, and stricter controls on immigration from non-EU countries. Sections 9.5 and 9.6 call for greater transparency to the negative consequences of immigration including economic costs and crime perpetrated by immigrants.

⁵ The English translation is officially entitled: Manifesto for Germany - The Political Programme of the Alternative for Germany. The AfD was approved at the Federal Party Congress held in Stuttgart, 30th April to 1st May, 2016.

Chapter 7, “Culture, Language, and Manifesto”, clearly states the AfD’s official views towards immigrants are consistently negative. Section 7.2 is entitled “German as Predominant Culture Instead of Multiculturalism”, and states:

The ideology of multiculturalism is blind to history and puts on a par imported cultural trends with the indigenous culture, thereby degrading the value system of the latter. The AfD views this as a serious threat to social peace and the survival of the nation state as a cultural unit. It is the duty of the government and civil society to confidently protect German cultural identity as the predominant culture (46).

Section 7.6 Islam and its Tense Relationship with our Value System outlines specific incompatibilities with the Islamic religion and inherent German values of society, as defined by the party. This section includes statements citing growing Islamic communities as a threat to the German state and calls for ending financing for mosques, ending the ability of Islamic organizations to hold public body status, and bans on full-body veiling. Further stances against immigration within the Party Manifesto include Section 3.9 Protect German Borders, which calls for the creation and implementation of a German Border Police, and Section 6.2 Larger Families Instead of Mass Immigration, which cites mass immigration as a potential for conflict and detrimental to the national economy.

In terms of this study, the computer-generated yield for “sentiment” consists of two numbers: score and magnitude. My first hypothesis involving sentiment focuses on score. Score ranges from -1 (most negative) to 1 (most positive) and indicates the positive or negative content within an entity. Due to the explicit negative view towards immigration outlined in the AfD Party Manifesto, my hypothesis is as follows:

H2: AfD Tweets about immigration will remain consistent (sentiment) following terrorist events.

One aspect that cannot be overlooked is the nativism that is present in the AfD's language and platform. The AfD clearly uses negative language in legal documents and in other communication in reference to immigration. This leads me to another conclusion that this use of negative language would also be consistent within social media communication.

H2a: AfD Tweets about immigration will be consistently more negative than Tweets about other topics.

While the previous hypothesis relies on this nativism as an indicator of negative attitude towards immigrants, nativism as an indicator of positive attitude towards native Germans, German culture, and German identity could also have an impact on the language used in immigration-related Tweets. Kai Arzheimer found that "the AfD is unusually prone (by German standards) to display national symbols and to emphasize Germany's national interests" (2015, 545).

Terror Management Theory suggests that in times of uncertainty, constituents could galvanize around a unifying call of solidarity much like those that a political party could plausibly provide in times of national confusion and chaos (Lambert, Scherer, Scott, et.al. 2010). As a nativist party, emphasizing German unity, the AfD could be reasonably expected to make such an appeal to unification following terrorist events on social media spheres. Therefore, due to the emotional appeal to German unification and national identity present both within the Party Manifesto, and in accordance with theories of populist communication, I suggest that magnitude could be affected by terrorist events.

H3: AfD Tweets about immigration will have more emotional content (magnitude) after terrorist events.

It should be noted that while there is a link between immigration and German identity, the purpose of this hypothesis is not to establish that linkage, nor study Tweets focused extensively German identity. However, Tweets containing the relevant immigration-related words do sometimes contain messages having to do with German identity, and were therefore included in my study.

CHAPTER 3: DATA SOURCES AND METHODOLOGY

The data sources for my research are primarily The Global Terrorism Database (GTD) from the National Consortium for the Study of Terrorism and Responses to Terrorism (START), University of Maryland⁶, and Twitter.

GTD

The Global Terrorism Database is self-defined as: “the most comprehensive unclassified database of terrorist attacks in the world”. This database provides a multitude of information about every terrorist event including, but not limited to, date and location of incident, weapon used, nature of target, number of casualties, etc. I generate a comprehensive list of terror events used for analysis by filtering for a number of variables. First, I filter for the categorical variable “*region_txt*” Western Europe. This region includes the countries:

Andorra, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Gibraltar, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, Vatican City, West Germany (FRG).

I then filter for the categorical variable “*success*”. By filtering for a value of 1, this ensures that only events that are considered “successful” are included in my data set. I also filter for the numeric variable “*year*”, and only include events that occurred in 2013⁷ and later.

⁶This database was first published in 2009, and updated in 2021, by the University of Maryland. The National Consortium for the Study of Terrorism and Responses to Terrorism is an Emeritus Center of Excellence of the U.S. Department of Homeland Security.

⁷ 2013 is the year that the *AfD* was officially founded.

I further filter to generate two separate lists: one referring to major terrorist events, and one referring to terrorist events in Germany. The first list includes what I entitle “major terror events”. This is filtered by taking the sum of the numeric variables “*nkill*” and “*nwound*” and create the new numerical variable “*ncasualty*”. Any event that is coded as 10 or higher for “*ncasualty*” is included. The second list entitled “German terror events” is filtered for the categorical variable “*country_txt*” = Germany. This numeric variable “*ncasualty*” is created in this list as well. Any event that is coded as 1 or higher for “*ncasualty*” is included in this list.

In both lists, “*ncasualty*” is aggregated per year per month to yield a total count for deaths and injuries resulting from terrorist events during a specific month of a specific year. The independent variable is “*month_year*” and the dependent variable is “*ncasualty_sum*”.

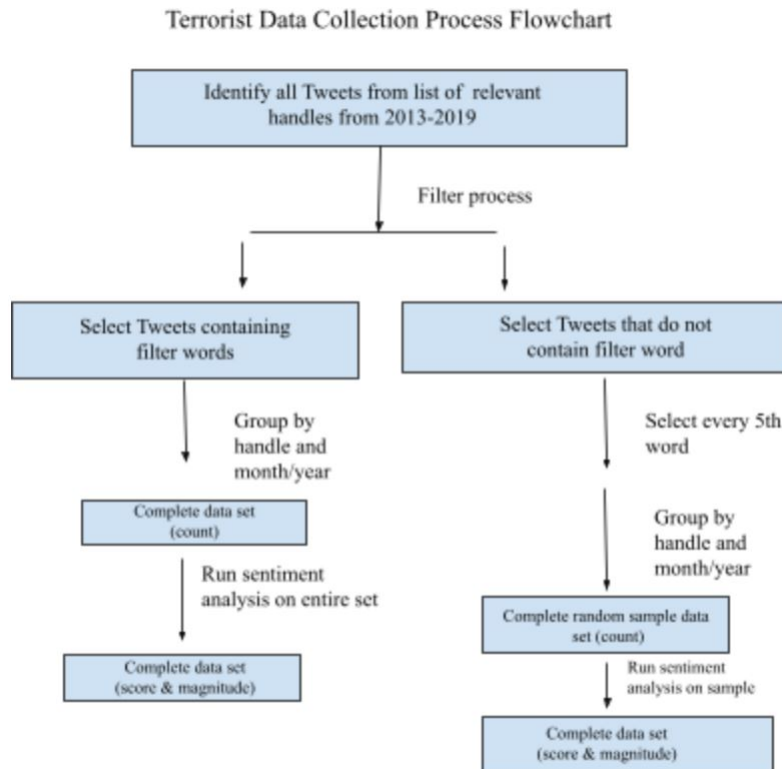


Fig. 1 illustrates process for generating list of terrorist events

Twitter

I use the Twitter API in order to parse Tweets relevant to immigration, made by AfD official accounts⁸. First, I query the Twitter API for relevant Tweets from the time range 2013-2019 for a given list of twitter handles. These Tweets are then parsed and stored as csv files. Then, I parse the file of full tweets and filter for words of interest⁹. These filtered Tweets are then grouped by handle and month, yielding a table that gives a count for how many Tweets are tweeted by each account in each month. I also generate a similar set of Tweets that do not contain words of interest in order to have control data sets. Here, the script pulls out every 5th word to obtain a simple sample that is not representative of the monthly distribution of the Tweets. The output is a series of datasets. A singular dataset can be understood as the monthly averages of Tweets from a single user, and the relevant filtered Tweets from that user for that month. In this analysis, the independent variable is “*month_year*”, while the dependent variable “*tweet_count*” is used.

Sentiment Analysis

I conduct sentiment analysis in two ways. Firstly, I use computer-assisted analysis to determine the score and magnitude of each dataset. I take all of the tweets for each given handle, consolidate the text of all of their tweets for each month, and then send requests for each set to the Google Cloud Language API. This returns a magnitude and sentiment for each Tweet.

⁸ A complete description of scripts used can be found here github.com/ledigiacom/AfD_research.

⁹ See Appendix 2 for complete list of words

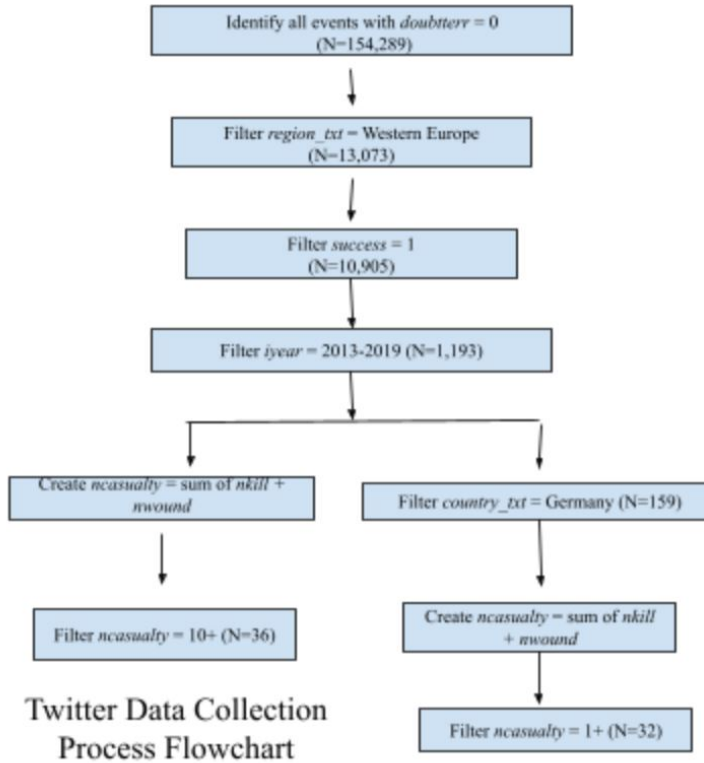


Fig. 2 Flowchart illustrating data collection process

The Natural Language Processor from the Google Cloud Language API uses two values to measure sentiment: score and magnitude. Score refers to how positive or negative the text of the Tweet set is, and will have a corresponding value between the ranges of -1 and 1, with -1 being the most negative and +1 being the most positive. Magnitude refers to how much emotional content is in each Tweet and is scored from 0 to +inf. However, due to the brevity of Tweets, this number will most likely fall between 0 and +2. Together, these scores can indicate whether the text in a Tweet is positive or negative and how emotionally charged that Tweet is.

Control Variables

I generate the dummy variable “*has_account*”. An entity receives a score of 1 if the user had an active Twitter account for that month. An entity receives a score of 0 if the user did not have an active Twitter account. All entities with a score of 0 for a given month are dropped from analysis during the time frame that the account did not exist. All Tweets from the year 2020 are dropped from analysis due to lack of available terrorism data.

The datasets generated by the script `generate_sample.py` are run through both sentiment analysis steps in order to create control datasets. Due to the random selection of Tweets, I am able to make inferences about whether the characterization of immigration-related Tweets differs from the normal sentiment of the user.

Research Design Limitations

One of the limitations of the research design is the use of month as a unit of measurement. With this design, it is difficult to tell whether a terrorist event is the cause of a characteristic change in Tweets or an increase in quantity because it does not account for when in the month a specific terrorist event occurred. For example, an increase in immigration-related Tweets could occur in the beginning of a month, while a terrorist event could have occurred at the end, and there would be no way to account for this. Further research into this topic could use a different design that would account for this discrepancy by analyzing Tweets made in days after a terrorist event.

Another aspect of this research design is the list of filtering words compiled. The list is mostly made up of nouns. It was compiled from looking at public statements within Germany having to do with immigration, but there was no formal process for collecting these words. A more appropriate way of devising such a list could involve parsing Twitter for most commonly used words or terms having to do with immigration. This list also tends to trend away from economic related terms, which of course is connected to the immigration conversation. Finally, this list includes terms that have been specifically constructed or used in the mainstream news by the AfD that are derogatory in nature and not used by other parties to refer to immigrants, such as *Asylant*. A different study could analyze only Tweets that contain these words to see if the prevalence of this language increases at times.

CHAPTER 4: RESULTS

Terrorist Events and Associated Quantity

First, I show the frequency of immigration-related Tweets by AfD accounts over a given period of time. I then identify a relevant period of time for analysis, based on presence of active Twitter accounts, and present graphs that juxtapose these numbers with casualties from terrorist events. I conduct regression analysis to determine whether or not there is a correlation between these measures.

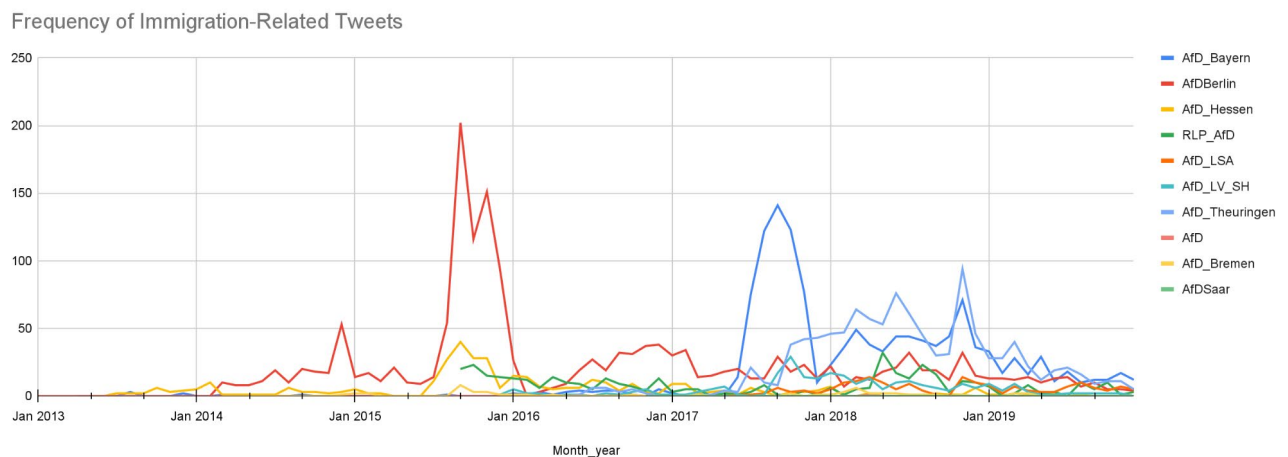


Fig. 3 shows immigration-related Tweets made by AfD accounts from the years 2013-2019.

Fig. 3 shows noticeable spikes by all accounts in mid-2015. Additionally, the creation of some accounts can be seen during this same time period, for instance the account @RLP_AfD. There are also significant spikes in activity near the end of 2016. Mid-2017 through the end of the year shows significant activity, and this activity remains volatile until the beginning of 2019.

The next graph presented will focus on the years 2015-2019, as many of the analyzed accounts did not exist before this period of time.

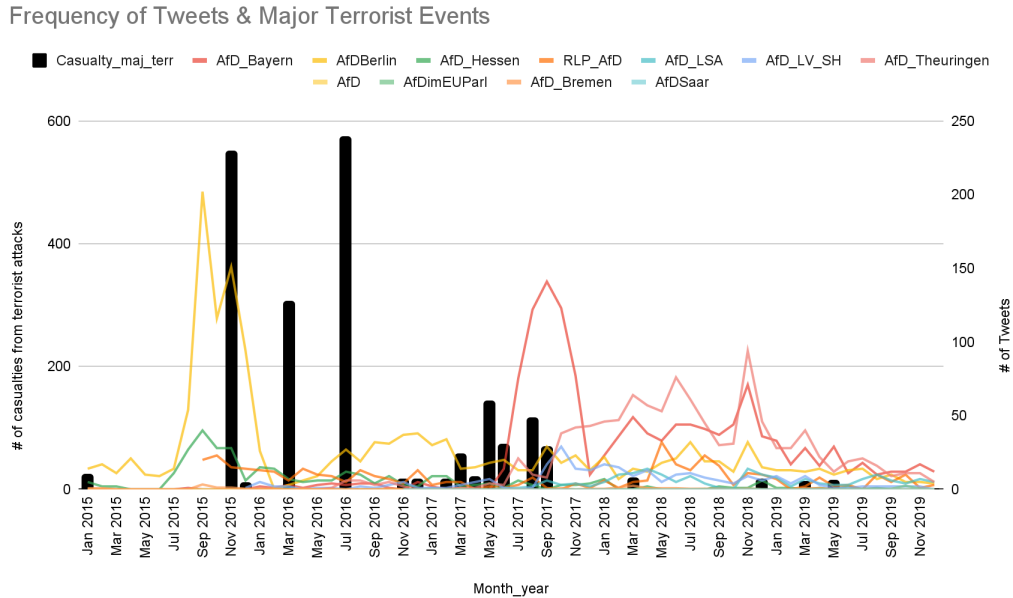


Fig. 4 shows immigration-related Tweets made by AfD account during the years 2015-2019 juxtaposed with the total # of casualties from major terrorist events.

Fig. 4 adds in the dependent variable casualty_maj_terr to indicate how many killed+injured there were in a certain month due to major terror events. However, the spikes in activity with immigration-related Tweets do not appear to correlate to the number of casualties from major terrorist incidents. There is a visible lack of Tweets mentioning anti-immigration following major attacks in 2016, as well as in the beginning of 2017. The major spikes in terror casualties in 2015 are due to the attacks in Paris. The spike in May 2017 marks the Manchester bombing that occurred.

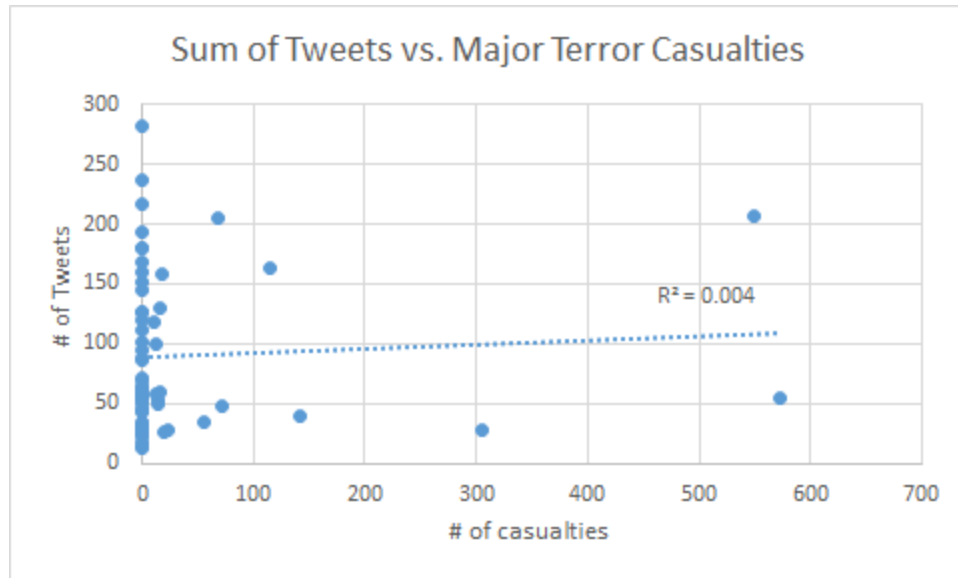


Fig. 5 shows regression analysis for all immigration-related Tweets made by AfD accounts compared to the sum of casualties from major terrorist events. This graph represents the correlation between the years 2013-2019.

Figure 5 reinforces the notion that there is not a strong correlation between # of casualties from major terrorist events and # of immigration-related Tweets. The R-square value is incredibly low. Furthermore, the p-value is almost .63, which is far greater than the widely-accepted statistically significant value of 0.05 or less.

Frequency of Tweets & German Terrorist Events

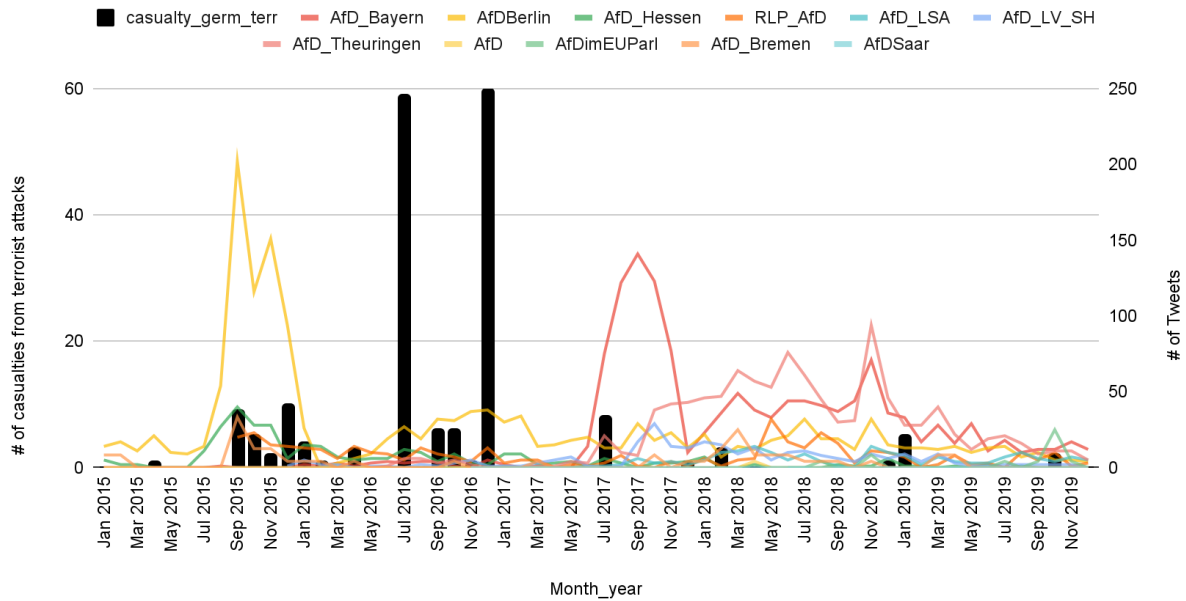


Fig. 6 shows immigration-related Tweets made by AfD account during the years 2015-2019 juxtaposed with the total # of casualties from terrorist events that occurred within Germany.

Fig. 6 analyzes the frequency of immigration-related Tweets in conjunction with casualties from terrorist events that occurred within Germany. There does appear to be a slightly more of a correlation between casualties from terrorist events in Germany and Tweets revolving around immigration. This can be seen in the spikes in both dependent variables in late 2015, mid 2016, and late 2018. The attack in Berlin in December 2016, is also considered a major terrorist event, and both Fig. 4 and Fig. 6 see a spike in immigration-related Twitter activity from all accounts.

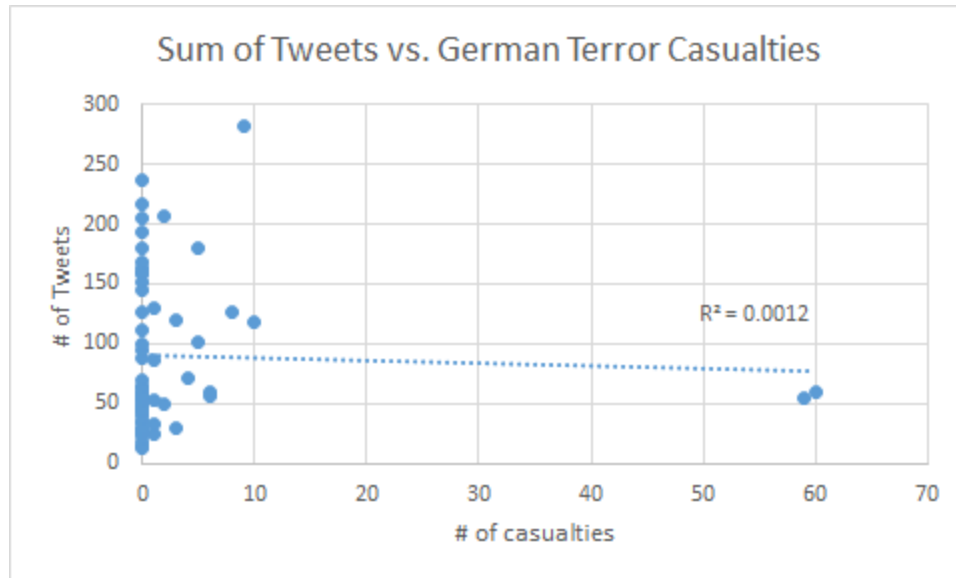


Fig. 7 shows regression analysis for all immigration-related Tweets made by AfD accounts compared to the sum of casualties from German terrorist events. This graph represents the correlation between the years 2013-2019.

Overall, Fig. 7 shows that there is an even weaker correlation between overall # of immigration-related Tweets and casualties from events that occurred within Germany. However, there are some accounts that do appear to correlate more than others in previous figures, and that holds true when analyzing the regression data¹⁰. These results are still statistically insignificant, but do suggest that further research, and a different research design could provide more insight.

Based on the above information, I reject *H1* on the grounds that major terrorist events and German-originated terror events do not statistically alter the frequency of immigration-related Tweets from AfD accounts. The correlations between the two variables are not strong, nor are the results from this study statistically significant, causing a complete rejection of the hypothesis. However, some AfD accounts do appear to increase the number of immigration-related Tweets following terrorist events that occur in Germany, and this could be a line of

¹⁰ Full table of regression data can be found in Appendix 3.

further questioning. This would also be in line with much of the research that characterizes the AfD as a party that focuses primarily on German identity, nationalism, ethnicity, and threats to German homogeneity.

Terrorist Events and Associated Sentiment

Next, I present sentiment data that shows the changing score, and magnitude over the relevant period of time in conjunction with casualties from terrorist events to make a number of claims about the changing nature of sentiment within these Tweets. In my hypotheses, I offer terrorist events as a predictor of increased magnitude, but maintain that score remains consistent in regards to immigration-related Tweets.

Score of Tweets & Major Terrorist Events

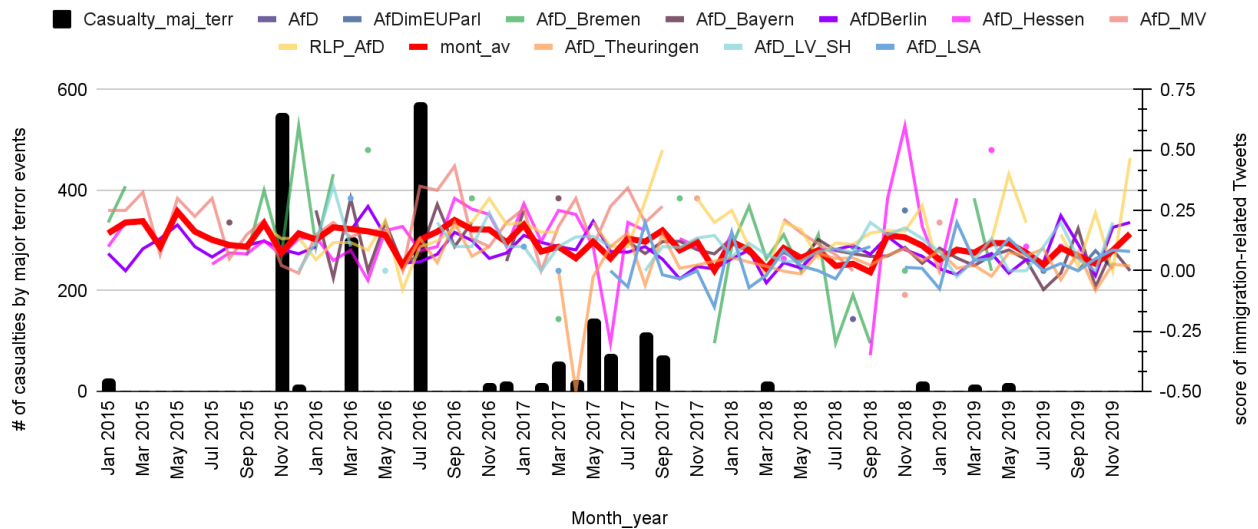


Fig. 8 shows the score immigration-related Tweets made by AfD account during the years 2015-2019 juxtaposed with the total # of casualties from major terrorist events. The red line represents the average score of immigration-related Tweets from all accounts.

Score of Tweets & German Terrorist Events

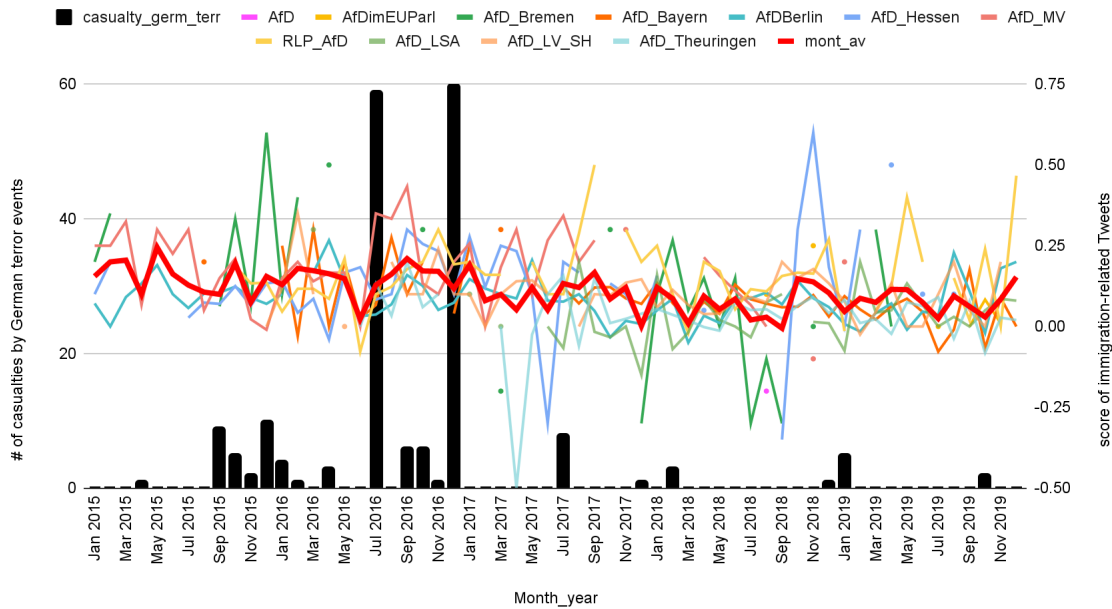


Fig. 9 shows the score immigration-related Tweets made by AfD account during the years 2015-2019 juxtaposed with the total # of casualties from terrorist events within Germany. The red line represents the average score of immigration-related Tweets from all accounts.

Fig. 8 & Fig. 9 both reveal that the average score of Tweets remains both relatively neutral and consistent, fluctuating mostly between 0.023 and 0.024. The low score is to be expected due to the lack of content in general contained within a Tweet, but relatively this is still a very small range. However, it is notable that the average is consistently in the positive range, indicating that Tweets regarding immigration are generally found to be more positive than negative in nature.

There are certain accounts that do tend to have more negative content regarding immigration, such as @AfD_Thuringen, @AfD_Hessen, and @AfD_Bremen. However, it should be noted that @AfD_Hessen and @AfD_Bremen also have some of the higher scores, indicating that these accounts tend to use more extreme language in both directions than some of

the other accounts. This could be potential due to presence of AfD within state parliaments, for example, in Thuringen, the AfD holds the second most seats of any party, behind Die Linke. The lowest scores from certain accounts seem to correlate with the large period of major terrorist attacks in the summer of 2017; however, this does not seem to be a universal trend due to the peaks in score for other accounts. German terror attacks appear to have even less of a correlation with falling scores, as none of the major dips in score seem to be in line with months during which terrorist events occurred within Germany. Furthermore, every account saw a rise in scores during the summer of 2016 - the period with the highest number of casualties from terror attacks within Germany.

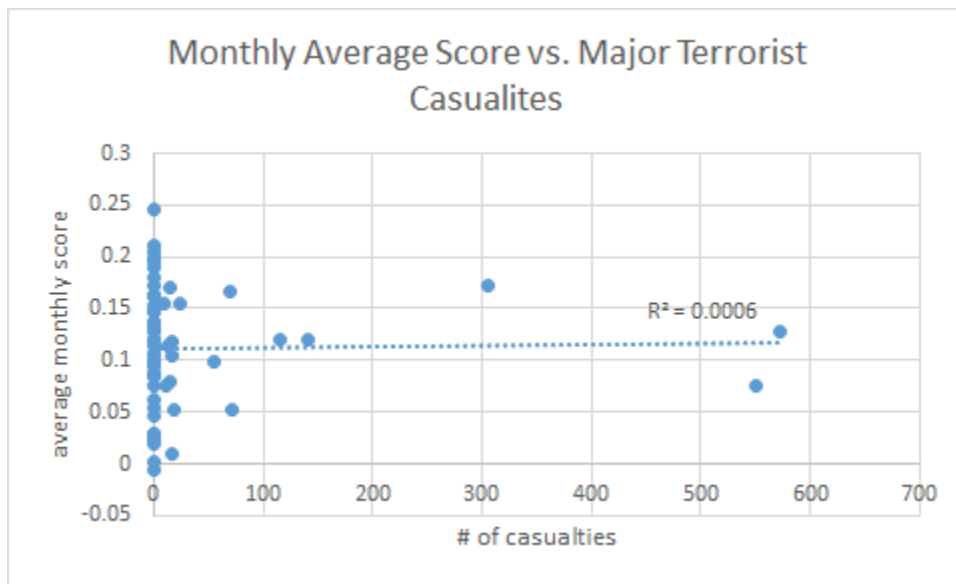


Fig. 10 shows regression analysis for monthly average score of immigration-related Tweets made by AfD accounts compared to the sum of casualties from major terrorist events. This graph represents the correlation between the years 2015-2019.

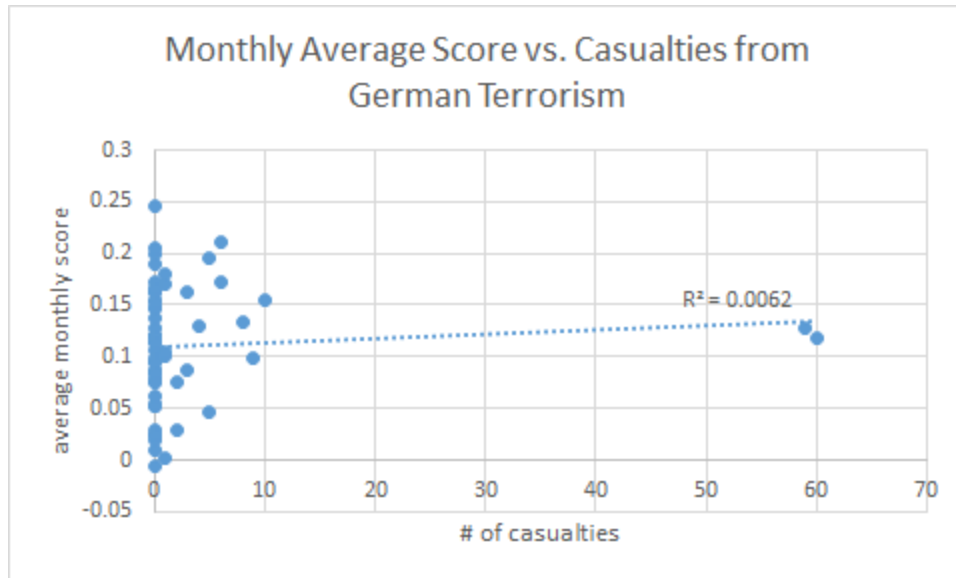


Fig. 11 shows regression analysis for monthly average score of immigration-related Tweets made by AfD accounts compared to the sum of casualties from German terrorist events. This graph represents the correlation between the years 2015-2019.

There does not appear to be any major correlation between terrorist events and score, according to the regression data¹¹. The R-squared values are incredibly low, and the p-values are statistically insignificant. To this end, I conclude that *H2, terrorist events will have no noticeable impact on the score of Tweets regarding immigration, from AfD handles*, is correct in terms of average score. This may be reversed when individual accounts are taken into consideration due to the parliamentary make-up of each state's *Landtag*.

¹¹ See Appendix 3 for full data.

Relevant Tweet Average Score vs. Random Sample Average Score

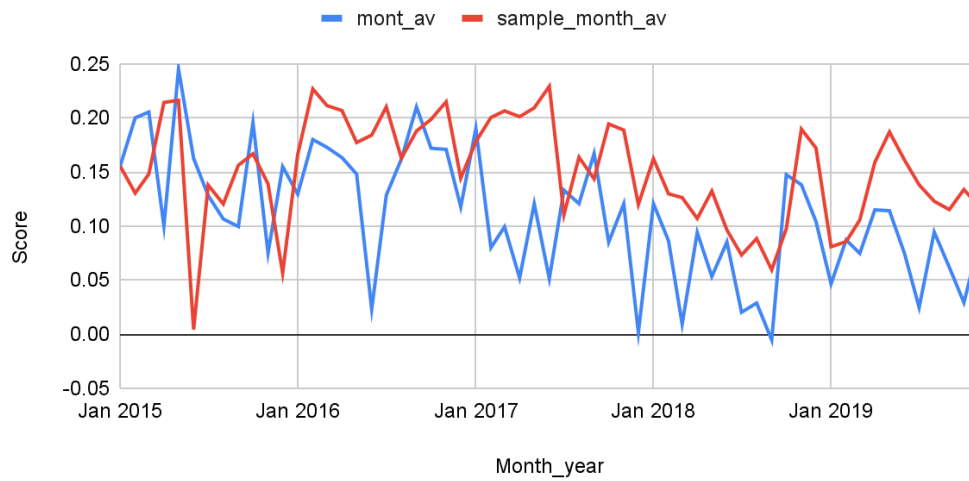


Fig. 12 shows the monthly average score of immigration-related Tweets by AfD accounts vs. the monthly average score of a random sample of Tweets (not related to immigration) by AfD accounts.

Fig. 12 shows that the average score of immigration-related Tweets is usually lower than the average score of Tweets unrelated to immigration. While the two lines can be seen following similar trends at times, the immigration-related Tweets still appear to have more negative content present than the random sample of Tweets. Therefore, *H2a: The score of Tweets regarding immigration, from AfD handles, will be consistently lower than the score of Tweets regarding other issues*, is true.

Magnitude of Tweets & Major Terrorist Events

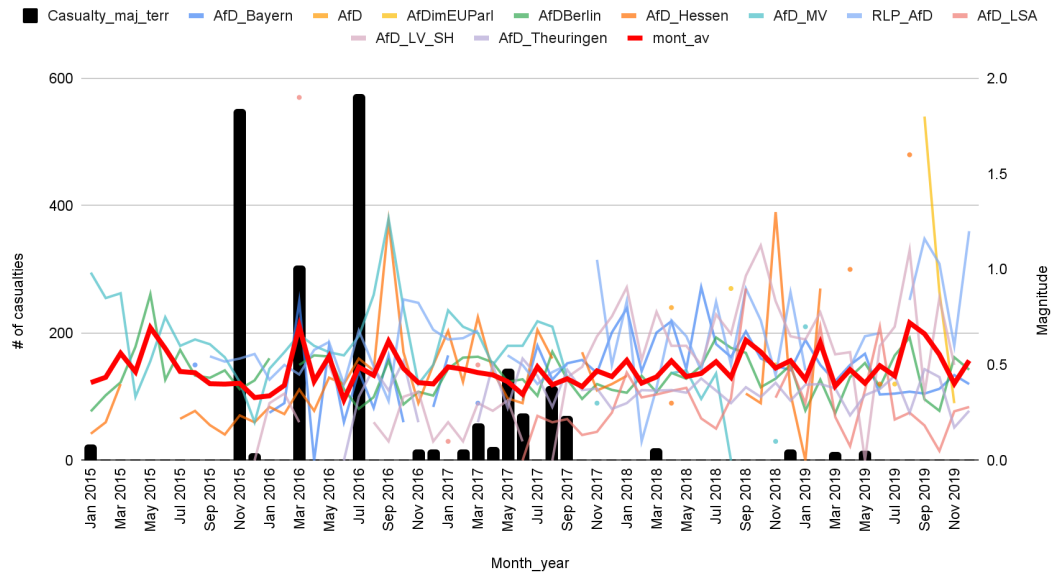


Fig. 13 shows the magnitude immigration-related Tweets made by AfD account during the years 2015-2019 juxtaposed with the total # of casualties from major terror events. The red line represents the average magnitude of immigration-related Tweets from all accounts.

Magnitude of Tweets & German Terrorist Events

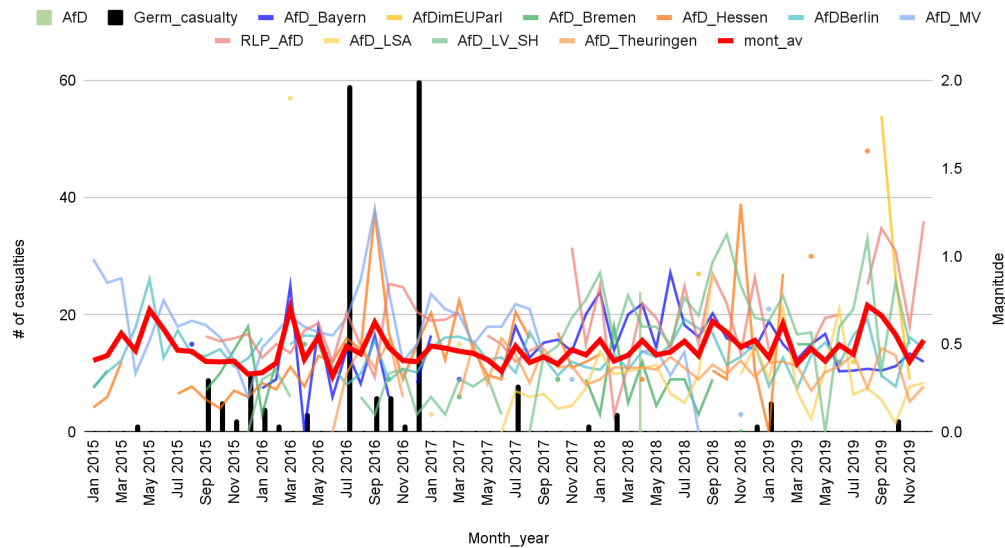


Fig. 14 shows the magnitude immigration-related Tweets made by AfD account during the years 2015-2019 juxtaposed with the total # of casualties from German terror events. The red line represents the average magnitude of immigration-related Tweets from all accounts.

Fig. 13 and Fig. 14 show massive discrepancies in emotional content from different accounts. @AfD_Hessen and @AfD_MV appear to have some of the highest magnitude scores, which do appear to line up with terror events that occur within Germany. In the summer of 2016, where there were the most casualties in Germany, there is a general peak in emotional content present, but it is not very extreme. Furthermore, many of the terror events within Germany during this time period occurred in the state of Bavaria. While this account did see a spike in emotional content, it was still relatively low compared to the emotional spikes in the summer of 2018.

In regards to major terror events, there appears to be one noticeable spike that correlates to a major terrorist event: the March 2016 attacks in Belgium. This peak in emotional content continues through the summer of 2016, which saw the truck incident in Nice, France, as well as two significant attacks within Germany. However, it would be erroneous to correlate major terror attacks with change in magnitude because of the negative downtrend following the massive attacks in Paris in November 2015. Furthermore, there seems to be almost no correlation between magnitude and casualties in the first half of 2017, which saw a large number of mass terrorist events in Western Europe.

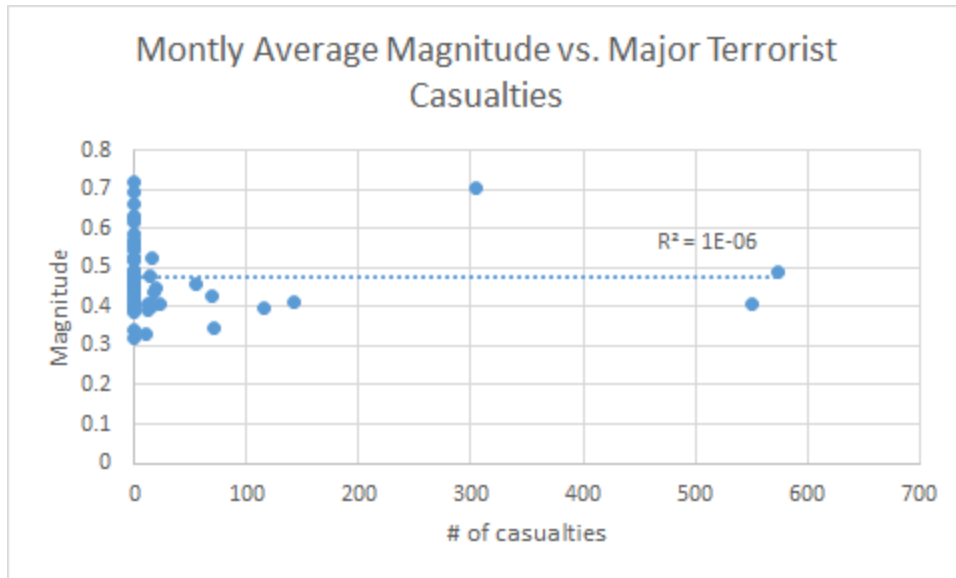


Fig. 15 shows regression analysis for monthly average magnitude of immigration-related Tweets made by AfD accounts compared to the sum of casualties from major terrorist events. This graph represents the correlation between the years 2015-2019.

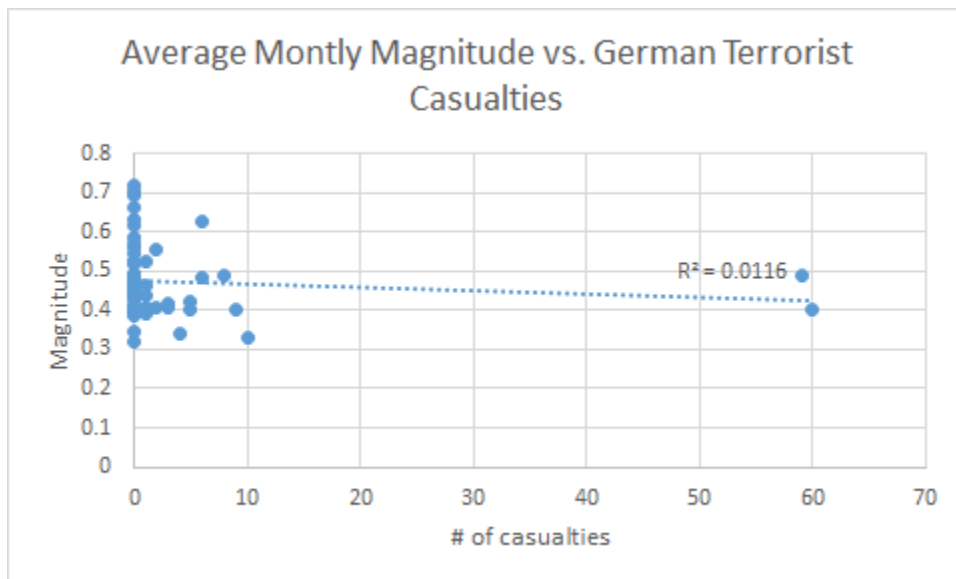


Fig. 16 shows regression analysis for monthly average magnitude of immigration-related Tweets made by AfD accounts compared to the sum of casualties from German terrorist events. This graph represents the correlation between the years 2015-2019.

However, the regressions disprove *H3, the magnitude of Tweets regarding immigration, from AfD handles, will increase following terrorist events*. Both R-squared values are incredibly low. It does appear that the emotional content of a certain subset of handles are significantly

affected by terrorist events; however, it is not a general trend, and not something that can be concluded given this data. It is notable that the R-squared value is higher between # of German casualties and immigration-related Tweets than # of casualties from major terrorist events. This could be a place for potential further exploration. All of the correlation data from the regressions remains statistically insignificant due to the extremely high p-values¹². Much like the previous data, there is a wide variance of both r-squared and p-values depending on the account in question.

¹² See all data in Appendix 3.

DISCUSSION AND CONCLUSIONS

With the rise of populist parties around the world, and the increasing use of social media platforms as a battleground for politics, in order to be more informed when making political decisions, it is important to understand not only why, but also when and how parties will be most likely to use this new sphere of influence. This study was designed to provide insight as to how times of crisis, specifically terrorist events, can cause social disarray and heightened emotions which can lead to increased susceptibility to political messaging and subversion. Theories of populist communication in conjunction with psychological theories of crisis reaction provide a foundation for analyzing why terrorist events might prove to be the perfect storm for populist parties to advance their political agendas.

My analysis of immigration-related Tweets indicates that there could be changing dynamics in immigration-related messaging following terrorist events, however, my research design makes it difficult to uncover this nuance. Primarily, the frequency of immigration-related messages and sentiment could be affected. While my research indicates differences between this information within immigration-related Tweets versus other Tweets on a general basis, further analysis is needed to pinpoint exactly how terrorist events affect these messages. My research rejects most of the hypotheses that frequency and sentiment are correlated with # of casualties from immigration-related Tweets on the grounds of insignificant statistical regressions.

One interesting finding is that many of the AfD accounts within the study were made active in the months immediately following the Paris attacks of 2015. This not only suggests that

social media usage massively upticked due to social need to make sense of the state of fear and confusion, but also would have bearing on all of the data following. My research offers many new questions for further investigation, among the most important being: Why are some AfD accounts more reactive to terror events than others? Is geographical proximity to terror events important or is parliamentary make-up of state government an important factor? And what other notable events could account for any of the analyzed trends? For example, major upticks in frequency of Tweets, heightened emotional content, etc., that do not necessarily correlate with terror events could be caused by other traceable events, like the 2017 *Bundestag* elections. Many of these questions could also be better explored with a research design that better accounted for the timing of terrorist events within a month in relation to when in a month certain Tweets were made. For example, if a terrorist attack happened in the middle of a month with a high number of relevant Tweets, a research design that accounted for whether Tweets were made before or after the event would be able to determine whether these were related in any way or merely coincidental.

Another point of interest would be a further analysis of sentiment that could better account for changes in negativity and emotional content of small entities, like Tweets. Google's Natural Language Processor offers "Entity Sentiment Analysis", which functions much like the sentiment analysis used in my research, but focuses specifically on the sentiment of nouns and proper nouns within a text. This method of analysis may be better primed to account for the harsher language used by the AfD in reference to immigrants (Klikauer 2018). Finally, one last line of questioning could be to analyze how the AfD talks about German nationalism following

major terrorist events. My research touches on this due to the overlap in data between identity-related Tweets and immigration-related Tweets, but fails to elaborate. My data often shows spikes in positive emotional content following major terrorist attacks, indicating that perhaps the political messaging following terrorist events is focused more on the positives of a homogenous German culture rather than more negatively-toned messaging about immigration.

It should be noted that my data range covers only AfD accounts from the federal states plus the official accounts of the “AfD”, “AfD im Bundestag” and “AfD im EU-Parlament”; however, this does not mean that they all are the most popular, nor have the largest number of followers. Major cities also have relevant accounts that could have been added to this study. The time range of this study is only up to date to 2019, due to the availability of data on the GTD. More current studies would have significant variances in data due to the 2021 federal elections, and the 2020 Coronavirus pandemic, which one could reasonably assume affects the political communication of the AfD on Twitter.

Appendix 1: List of Twitter Handles and Users

Figure 17

| <i>Account Name</i> | <i>Handle</i> |
|-------------------------------------|-----------------|
| Alternative für Deutschland | @AfD |
| AfD-Fraktion im Deutschen Bundestag | @AfDimBundestag |
| AfD im EU-Parlament | @AfDimEUParl |
| AfD Bayern | @AfD_Bayern |
| AfD Berlin | @AfDBerlin |
| AfD-Fraktion Brandenburg | @AfD_FraktionBB |
| AfD Bremen | @AfD_Bremen |
| AfD Hamburg | @AfD_Hamburg |
| AfD Hessen | @AfD_Hessen |
| AfD MV | @AfD_MV |
| AfD NRW | @AlternativeNRW |
| AfD Rheinland-Pfalz | @RLP_AfD |
| AfD Saarland | @AfDSaar |
| AfD-Fraktion Sachsen | @AfD_SLT |
| AfD Sachsen-Anhalt | @AfD_LSA |
| AfD Schleswig-Holstein | @AfD_LV_SH |
| AfD Thüringen | @AfD_Theuringen |

Appendix 2: List of Relevant Words

Einwanderer

Einwandererin

Einwanderung

Grenzkontrolle

Grenze

Grenzen

Einwanderungsland

Einwanderungsgesetze

Einwanderungsantrag

Einwanderungsstop

Einwandererfamilie

Immigrant

Immigrantin

Immigrantenfamilie

Zuwanderer

Zuwandererin

Gastarbeiter

Gastarbeiterin

Wanderarbeiter

Wanderarbeiterin

Wirtschaftsflüchtling

Arbeitsmigrant

Wanderarbeitskraft

Asylsuchende

Asylsuchender

Asylbewerber

Asylbewerberin

Asylwerber

Asylwerberin

Flüchtling

Flüchtlinge

Rechtsstellung

Flüchtlingslager

Armutsflüchtling

Flüchtlingsstatus

Asyl

Zuflucht

Wanderung

Migration

Abwanderung

Umzug

Auswanderung

Wanderungsstrom

Massenwanderbewegung

Flüchtlingsbewegung

Ausländer

Ausländerin

Ausländisch

Vertriebene

Vertriebener

Sicherheit

Bedrohung

Asylant

Umvolkung

Bevölkerungsaustausch

Asylindustrie

Flüchtlingswelle

Appendix 3: Regression Statistics

Regression for Frequency

Fig. 18

| CASUALTIES FROM MAJOR TERROR EVENTS vs. # OF TWEETS | | | |
|--|------------------|----------------|---------------|
| Handle(s) | R-Squared | p-value | Note |
| sum of all handles | 0.004041 | 0.629412 | |
| @AfD | 0.001669 | 0.756613 | |
| @AfDimEUParl | 0.038314 | 0.421919 | from Jun 2018 |
| @AfD_Bayern | 0.005198 | 0.5841 | |
| @AfD_Berlin | 0.072185 | 0.037923 | |
| @AfD_Bremen | 0.000274 | 0.900121 | |
| @AfD_Hessen | 0.089943 | 0.019909 | |
| @AfD_MV | 0.020185 | 0.278868 | |
| @AfD_RLP | 0.000289 | 0.904786 | from Sep 2015 |
| @AfD_LSA | 0.035714 | 0.155389 | from Mar 2015 |
| @AfD_LV_SH | 0.025326 | 0.274739 | from Dec 2015 |
| @AfD_Thuringen | 0.035412 | 0.149903 | |

Fig. 19

| CASUALTIES FROM GERMAN TERROR EVENTS vs. NUMBER OF TWEETS | | | |
|--|------------------|----------------|---------------|
| Handle(s) | R-Squared | p-value | Note |
| sum of all handles | 0.001217 | 0.791283 | |
| @AfD | 0.001429 | 0.77429 | |
| @AfDimEUParl | 0.049761 | 0.358629 | from Jun 2018 |
| @AfD_Bayern | 0.016532 | 0.327537 | |
| @AfD_Berlin | 0.025484 | 0.223082 | |
| @AfD_Bremen | 0.001157 | 0.796406 | |
| @AfD_Hessen | 0.018872 | 0.295236 | |
| @AfD_MV | 0.001367 | 0.779116 | |
| @AfD_RLP | 0.007814 | 0.533173 | from Sep 2015 |
| @AfD_LSA | 0.038174 | 0.141616 | from Mar 2015 |
| @AfD_LV_SH | 0.041922 | 0.158172 | from Dec 2015 |
| @AfD_Thuringen | 0.02606 | 0.21786 | |

Regressions for Score

Fig. 20

| AVERAGE MONTHLY SCORE REGRESSIONS - major terror | | |
|---|------------------|----------------|
| Handle(s) | R-Squared | p-value |
| average of all handles | 0.000565 | 0.85692 |
| @AfD | 0.001669 | 0.756613 |
| @AfDimEUParl | 0.00423 | 0.621526 |
| @AfD_Bayern | 0.002588 | 0.699482 |
| @AfD_Berlin | 0.001481 | 0.770361 |
| @AfD_Bremen | 0.003381 | 0.659003 |
| @AfD_Hessen | 0.002368 | 0.711941 |
| @AfD_MV | 0.016296 | 0.331043 |
| @AfD_RLP | 0.002234 | 0.719899 |
| @AfD_LSA | 0.024506 | 0.2323 |
| @AfD_LV_SH | 0.020725 | 0.27247 |
| @AfD_Thuringen | 0.00416 | 0.624424 |

Fig. 21

| AVERAGE MONTHLY SCORE REGRESSIONS - German terror | | |
|--|------------------|----------------|
| Handle(s) | R-Squared | p-value |
| average of all handles | 0.006226 | 0.549003 |
| @AfD | 0.001429 | 0.77429 |
| @AfDimEUParl | 0.0028 | 0.688 |
| @AfD_Bayern | 0.001712 | 0.753614 |
| @AfD_Berlin | 0.003182 | 0.668583 |
| @AfD_Bremen | 0.001102 | 0.801167 |
| @AfD_Hessen | 0.000155 | 0.924785 |
| @AfD_MV | 0.062582 | 0.053883 |
| @AfD_RLP | 0.000666 | 0.844784 |
| @AfD_LSA | 0.014538 | 0.358799 |
| @AfD_LV_SH | 0.01004 | 0.446222 |
| @AfD_Thuringen | 0.018114 | 0.305235 |

Regressions for Magnitude

Fig. 22

| AVERAGE MONTHLY MAGNITUDE REGRESSIONS - major terror | | |
|---|------------------|----------------|
| Handle(s) | R-Squared | p-value |
| average of all handles | 1.25E-06 | 0.993234 |
| @AfD | 0.001669 | 0.756613 |
| @AfDimEUParl | 0.007588 | 0.508089 |
| @AfD_Bayern | 0.000809 | 0.829245 |
| @AfD_Berlin | 0.015656 | 0.340811 |
| @AfD_Bremen | 0.000447 | 0.872655 |
| @AfD_Hessen | 0.001236 | 0.789722 |
| @AfD_MV | 0.02366 | 0.24063 |
| @AfD_RLP | 0.003328 | 0.661539 |
| @AfD_LSA | 0.01926 | 0.290284 |
| @AfD_LV_SH | 0.064428 | 0.050354 |
| @AfD_Thuringen | 0.006962 | 0.526204 |

Fig. 23

| AVERAGE MONTHLY MAGNITUDE REGRESSIONS - german terror | | |
|--|------------------|----------------|
| Handle(s) | R-Squared | p-value |
| average of all handles | 0.011599 | 0.412757 |
| @AfD | 0.001429 | 0.77429 |
| @AfDimEUParl | 0.005048 | 0.58956 |
| @AfD_Bayern | 0.001052 | 0.805626 |
| @AfD_Berlin | 0.048357 | 0.091361 |
| @AfD_Bremen | 0.003746 | 0.64224 |
| @AfD_Hessen | 0.011334 | 0.41817 |
| @AfD_MV | 0.022958 | 0.247817 |
| @AfD_RLP | 0.013099 | 0.383888 |
| @AfD_LSA | 0.025289 | 0.224884 |
| @AfD_LV_SH | 0.055818 | 0.069161 |
| @AfD_Thuringen | 0.0078 | 0.502209 |

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