



**PROYECTO FINAL**

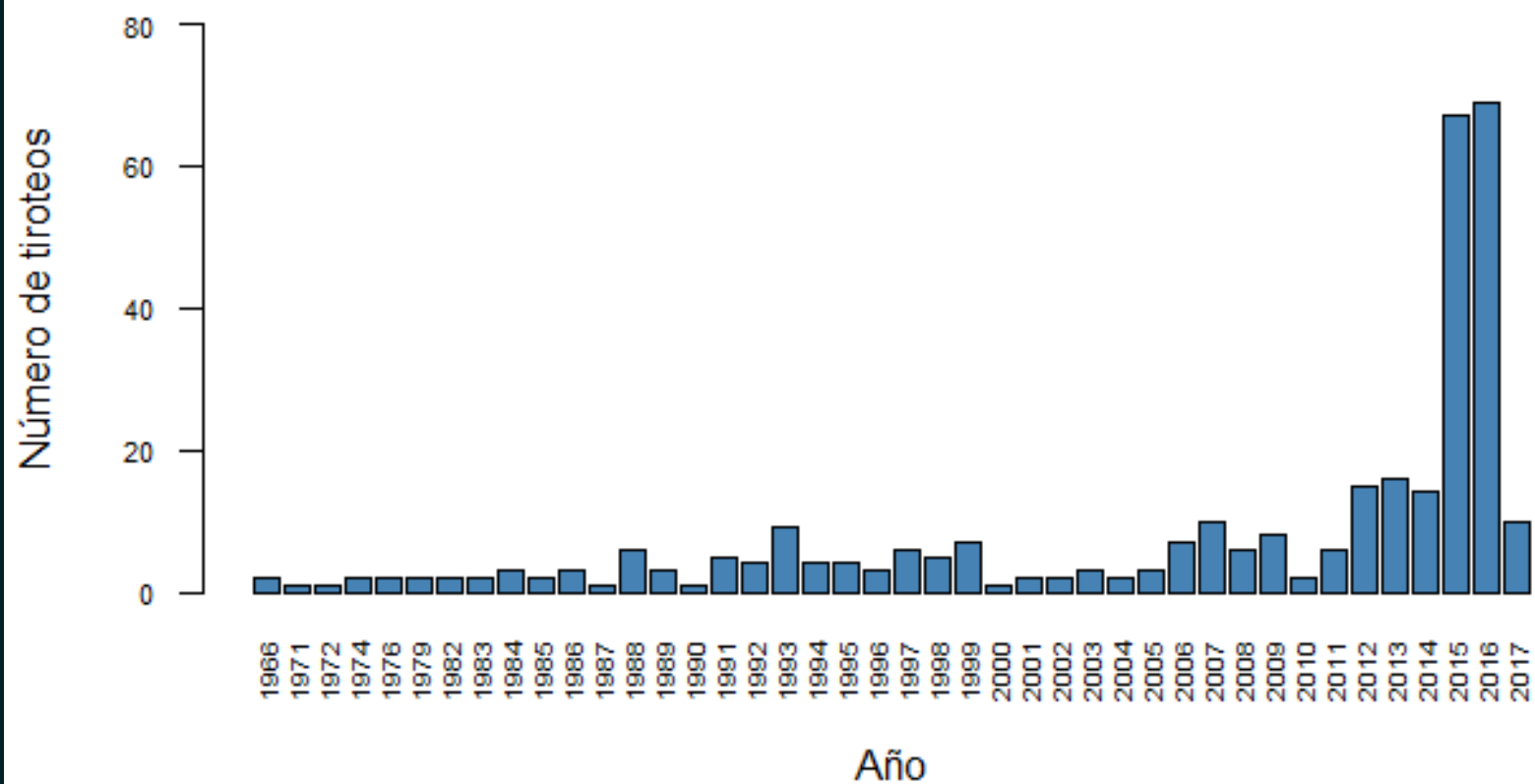
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**US MASS SHOOTINGS**

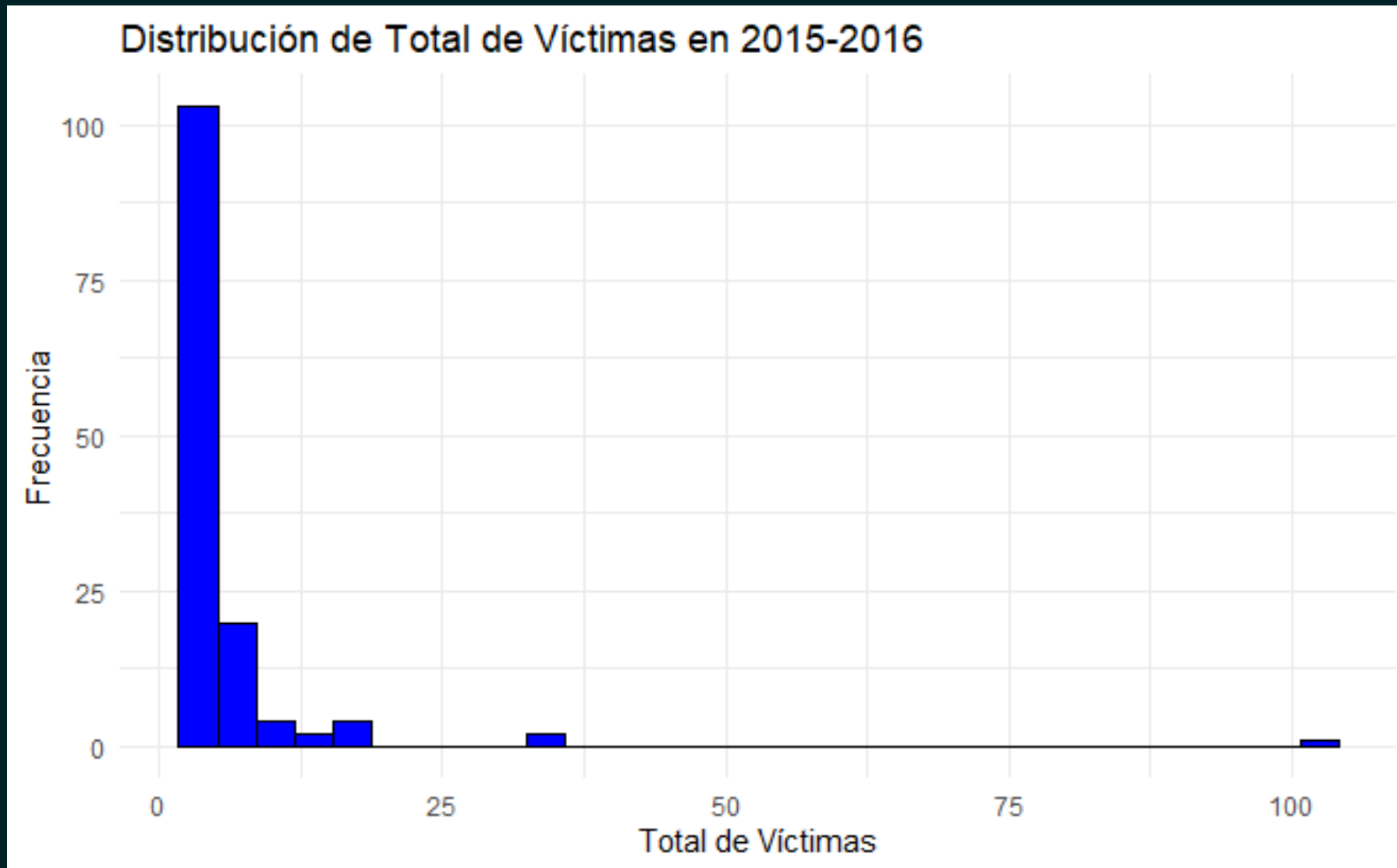
Laura Llorente Martínez  
3º MAIS

S.	Total.victims
Title	Policeman.Killed
Location	Age
Date	Employeed.Y.N.
Incident.Area	Employed.at
Open.Close.Location	Mental.Health.Issues
Target	Race
Cause	Gender
Summary	Latitude
Fatalities	Longitude
Injured	

## Número de tiroteos por año

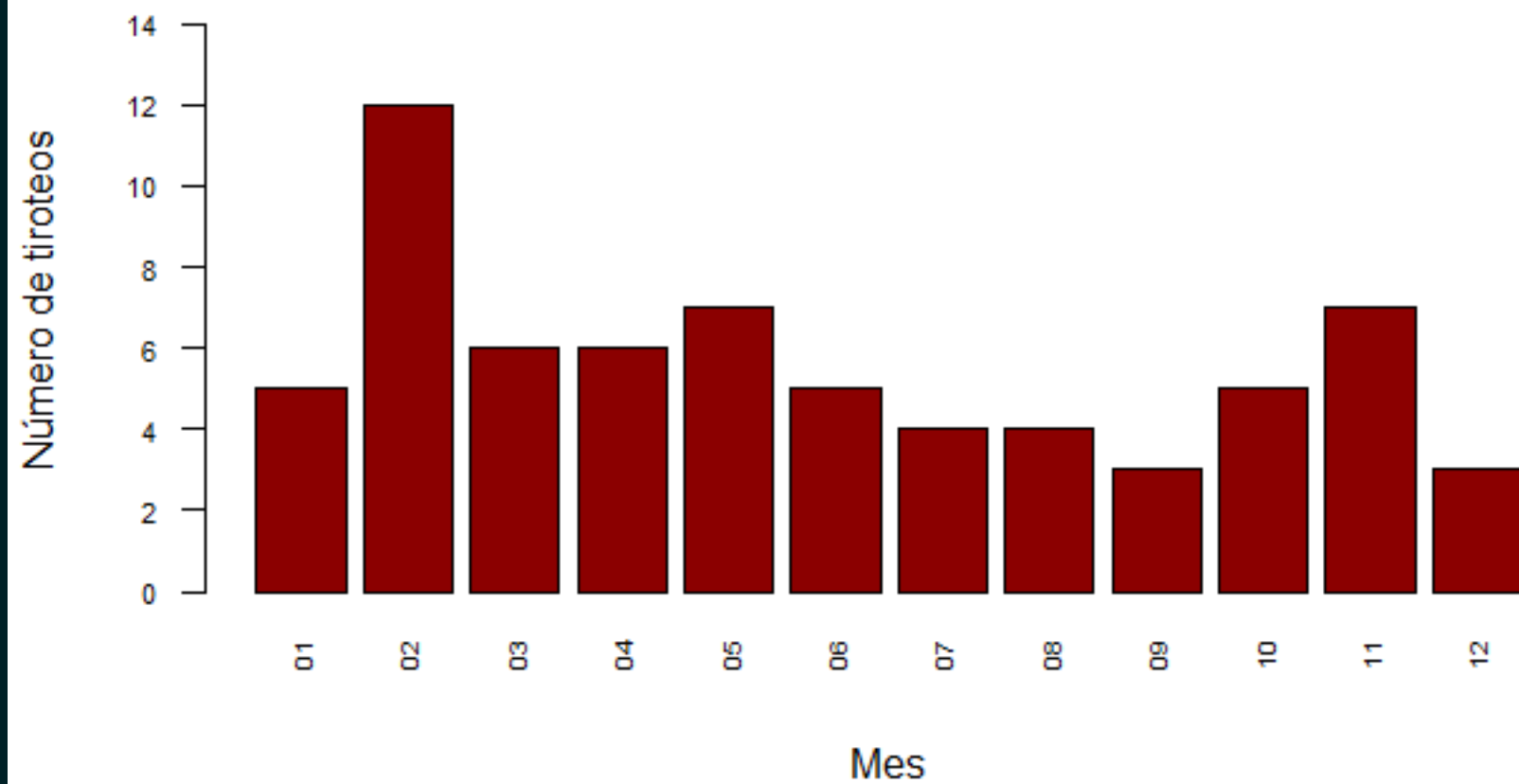




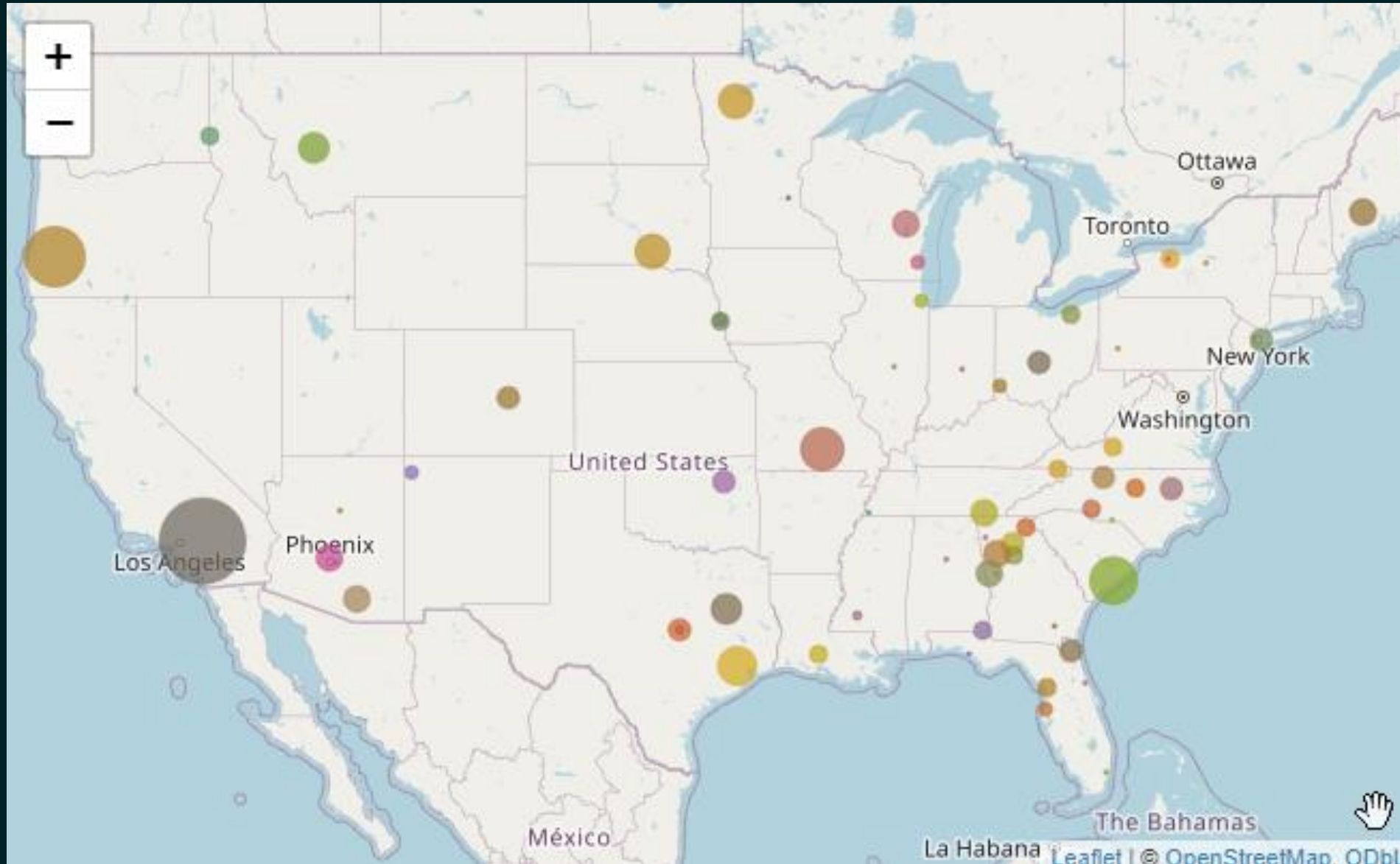


~ 100 víctimas → Omar Mateen, 12 junio 2016, 40 fatalidades,  
club nocturno Pulse, Orlando Florida

## Número de tiroteos por mes en 2015



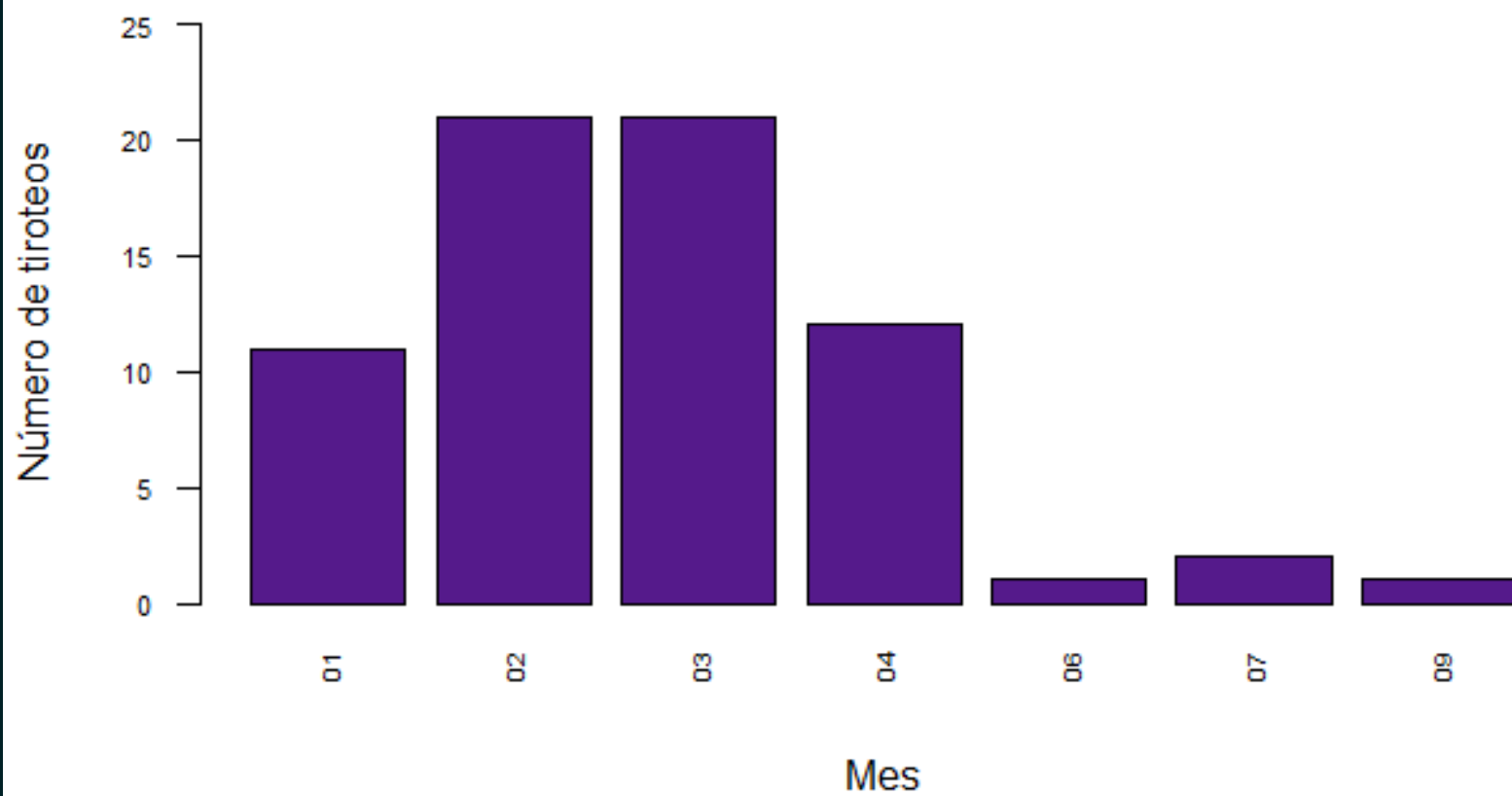
## Librería leaflet



Destacan círculos grandes en California (San Bernardino mass shooting terrorista) y Oregon



### Número de tiroteos por mes en 2016



## Librería leaflet



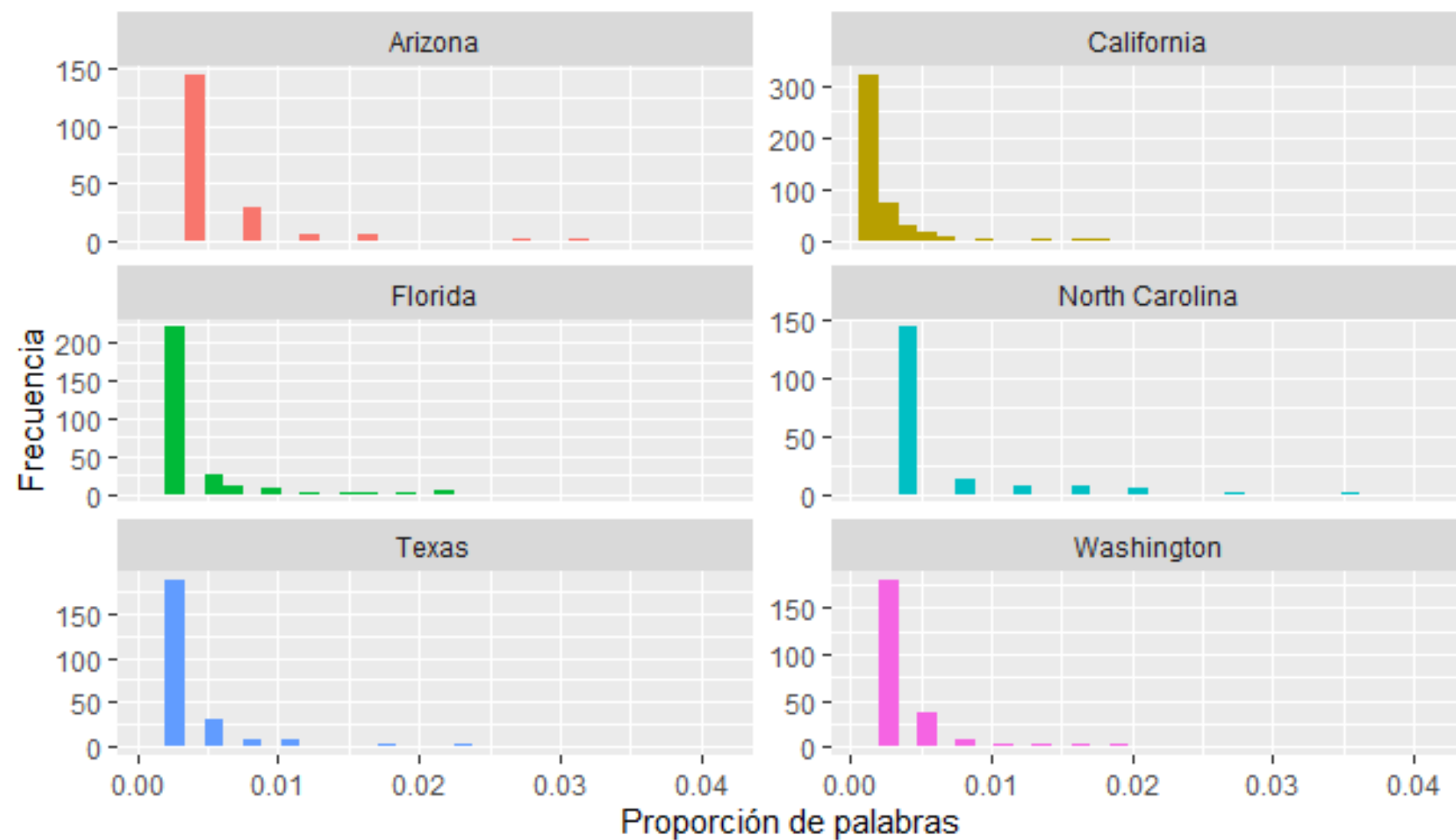
Orlando nightclub massacre → no latitud ni longitud



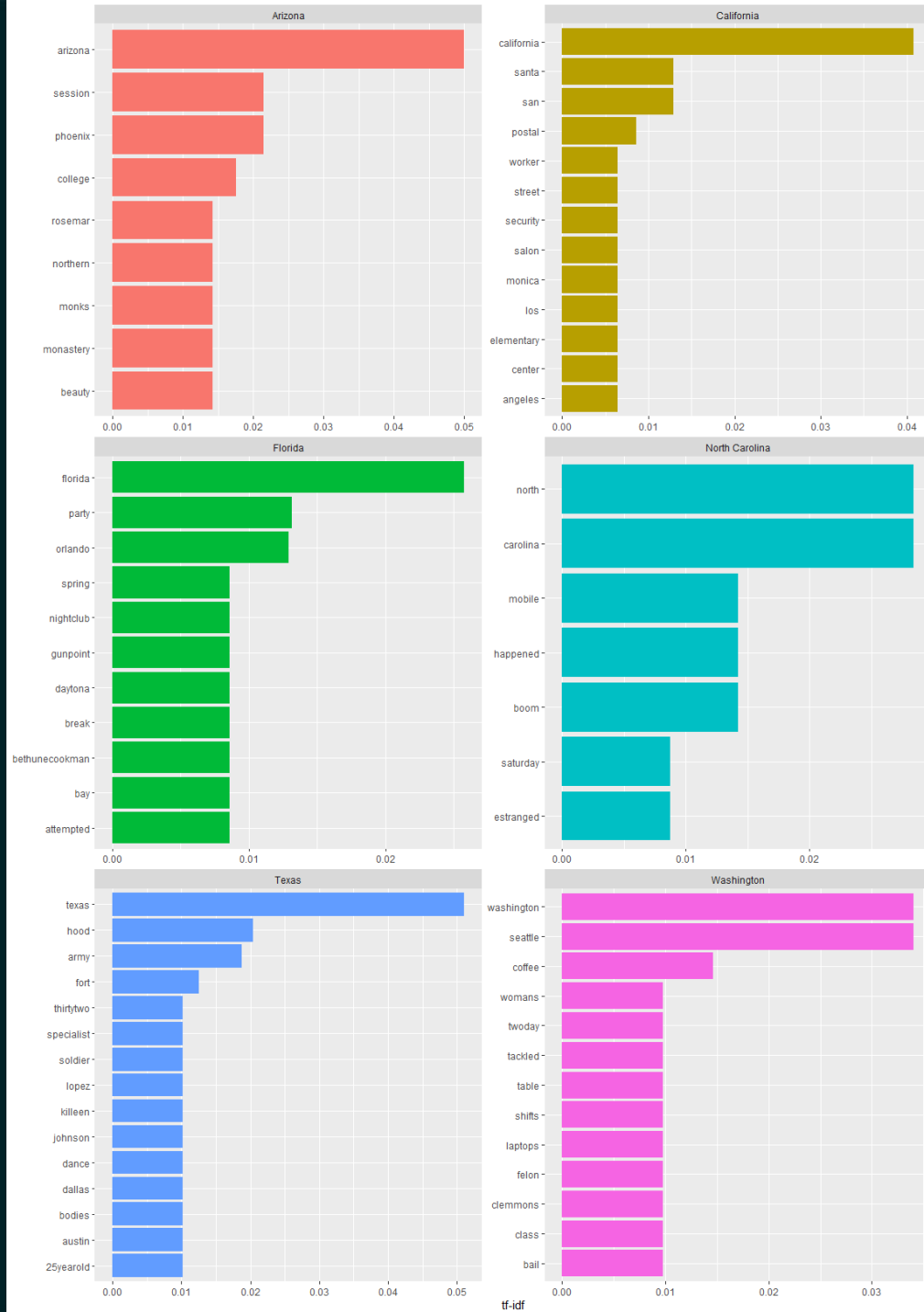
# LEY DE ZIPF

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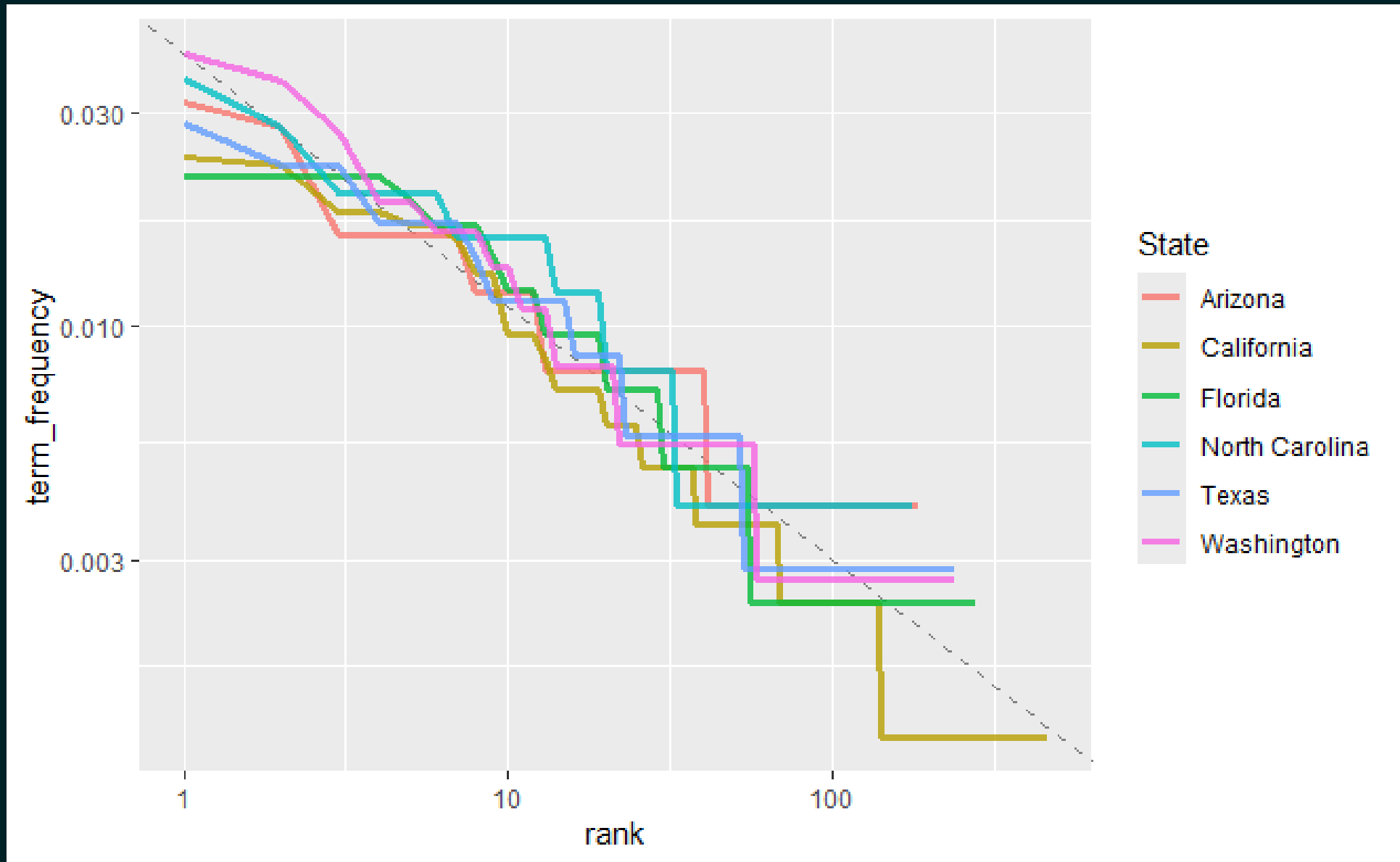
## Histograma de Proporción de Palabras por Estado



# CÁLCULO TF-IDF



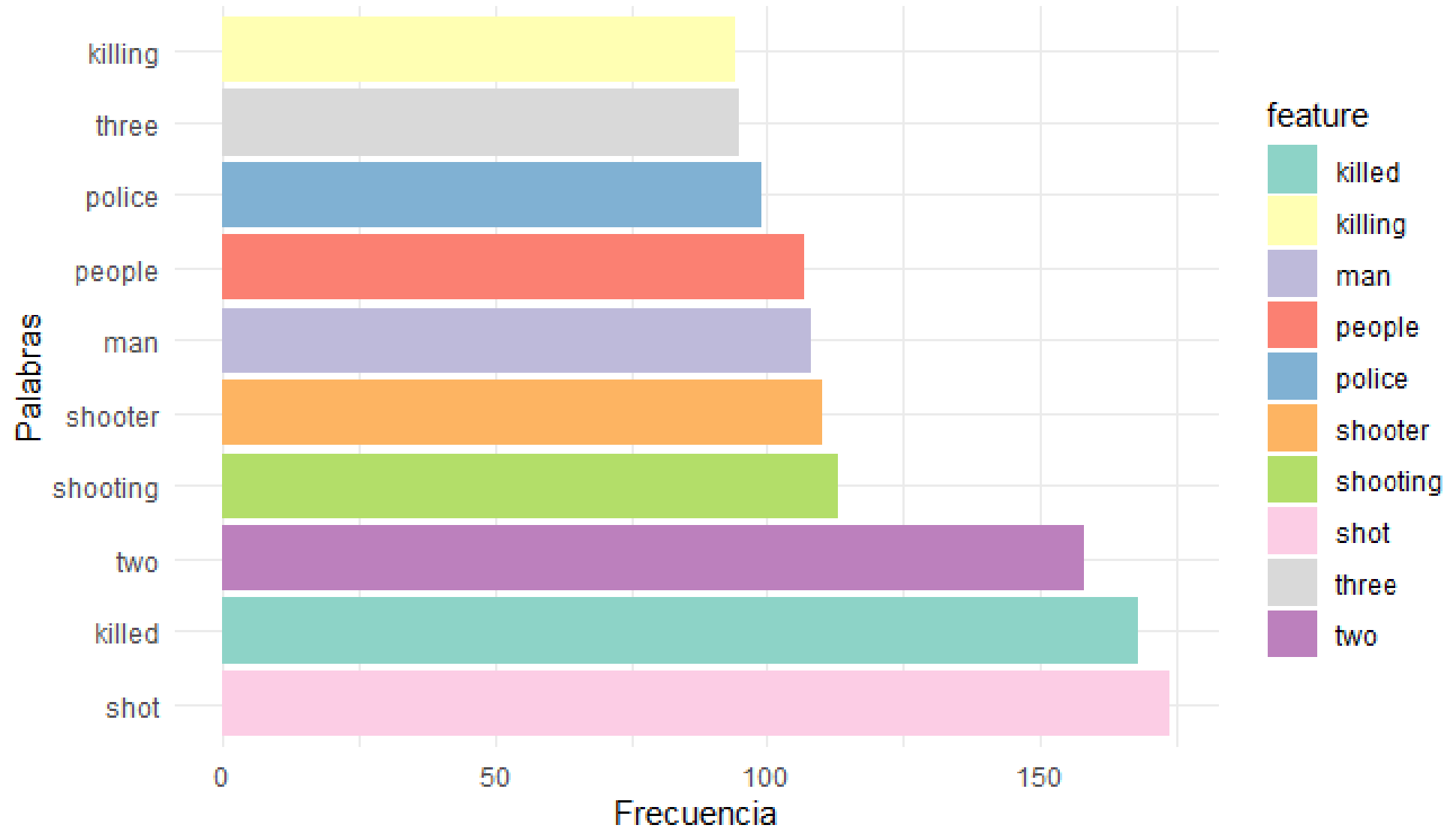




# **PALABRAS FRECUENTES**

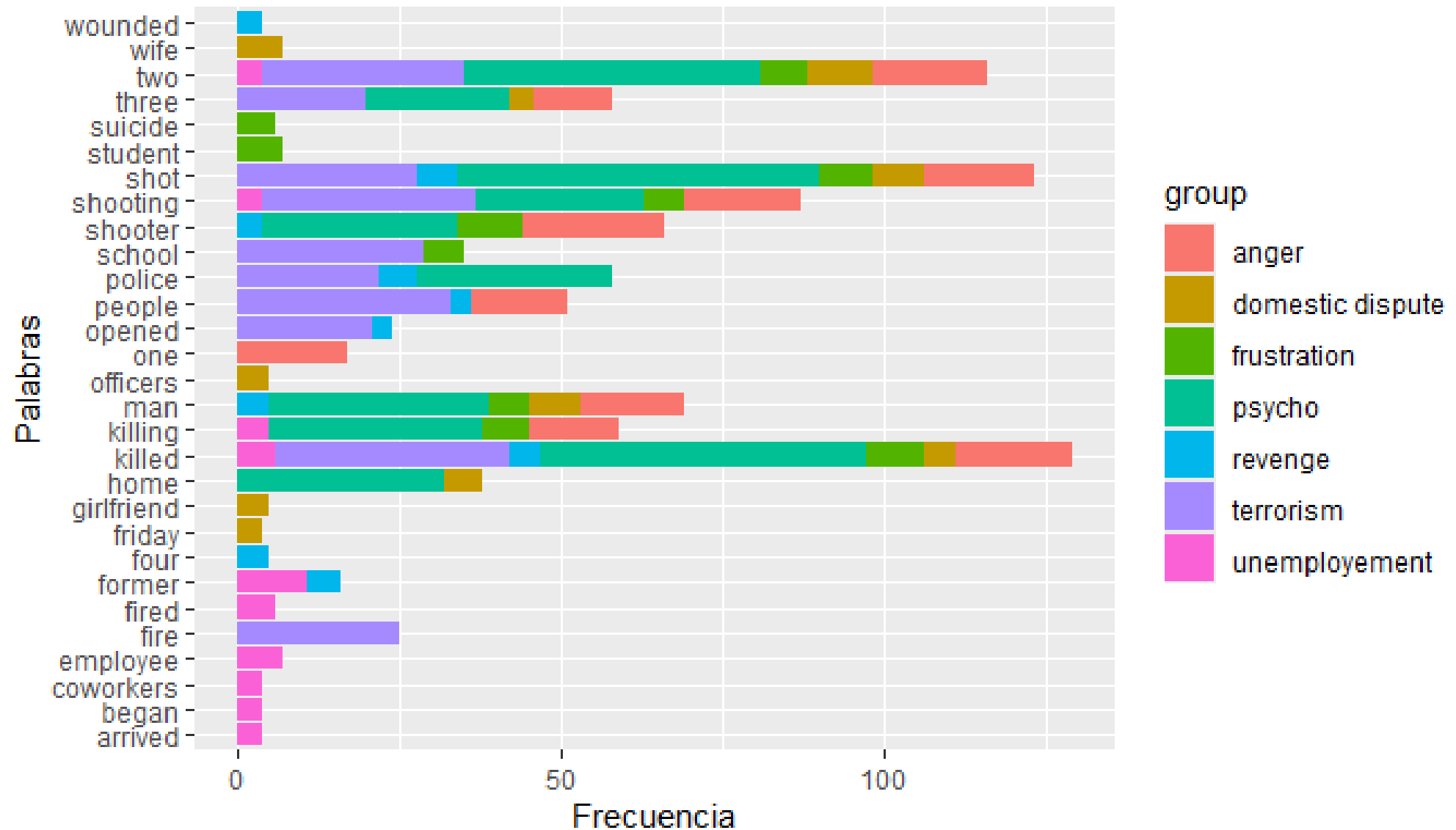
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## Frecuencia de Palabras en Resúmenes de Tiroteos





## Frecuencia de Palabras Agrupadas por Causas Más Comunes



apprehended committed workplace turning daughter november attack boyfriend city club gunman building sunday pulled parking employee high gun committing June outside former arrested early worked party office state others wounded fled returned members went including wounding university shooter two opened law six car four scene broke south head found home shot fire old five street california morning hours arrived next day restaurant police later another officer inside bus injured victims fired children away students entered campus several employees apartment saturday coworkers incident night unemployed

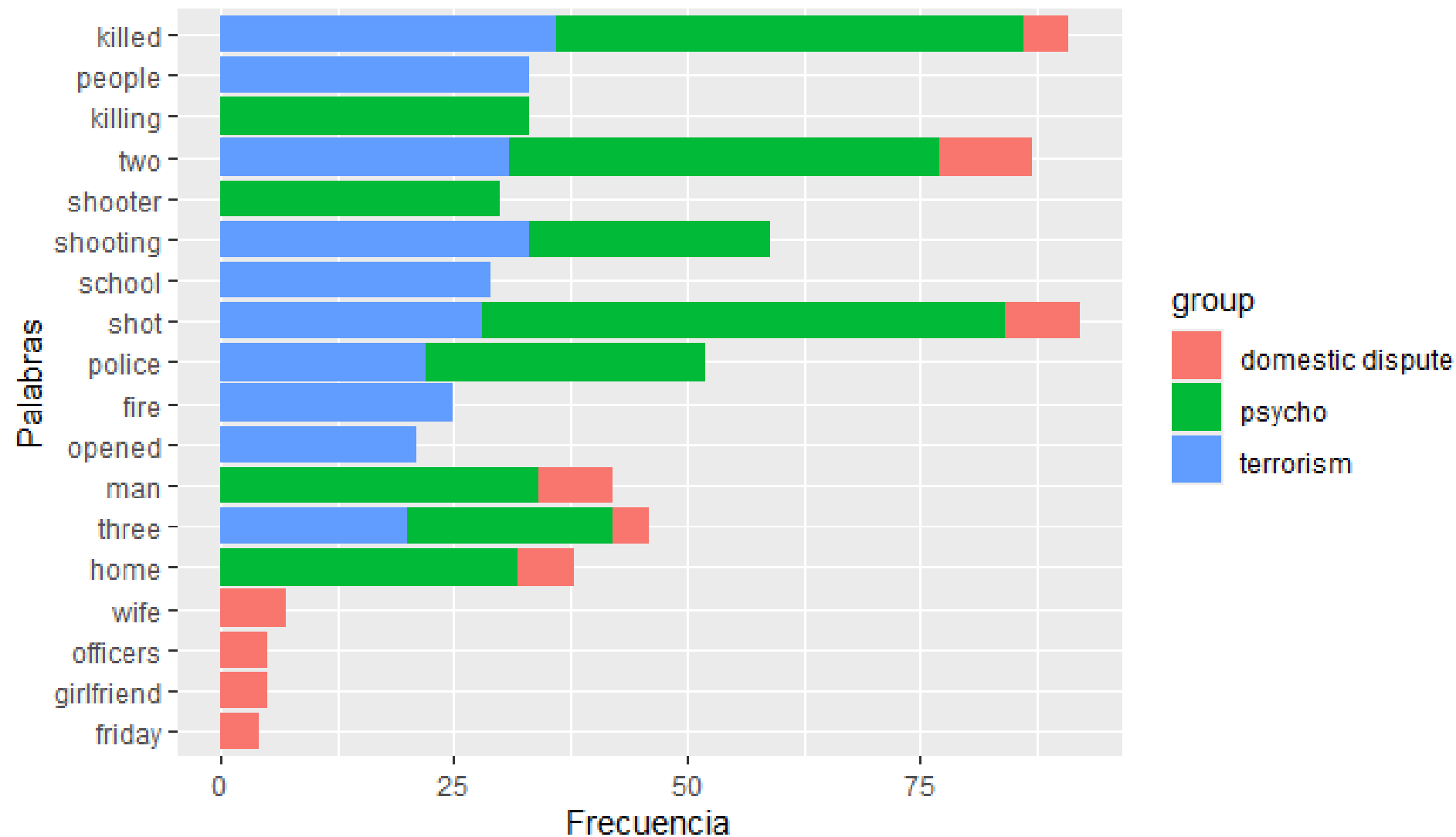
former workplace shooting killed apprehended police shooter later arrived campus 15-year-old student two wounding house party elementary school fleeing scene state university four others people wounded student entered estranged wife people including two students another man fire inside man shot fatally shot shot four parking lot man shot police officer wife two killing four turning gun two people old man police officer shot two arrived school killing one fled scene four people law enforcement three others killing six man opened wounded two 14-year-old student police officers injured another later shot killing three old former wounded another hours later six people five people committing suicide man entered shooter fired shot injured south carolina group people killed four three people post office shot injured wounded three two others killed two wounded four shooter shot killed three later arrested shooter killed shot three people shot committed suicide killed wife injuring three gunman shot wounding two started shooting people injuring five others two children shooting students shooting killing people killed arrested police

# **WORDCLOUDS POR CAUSA**

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## Frecuencia de Palabras Agrupadas por Causas de Interés

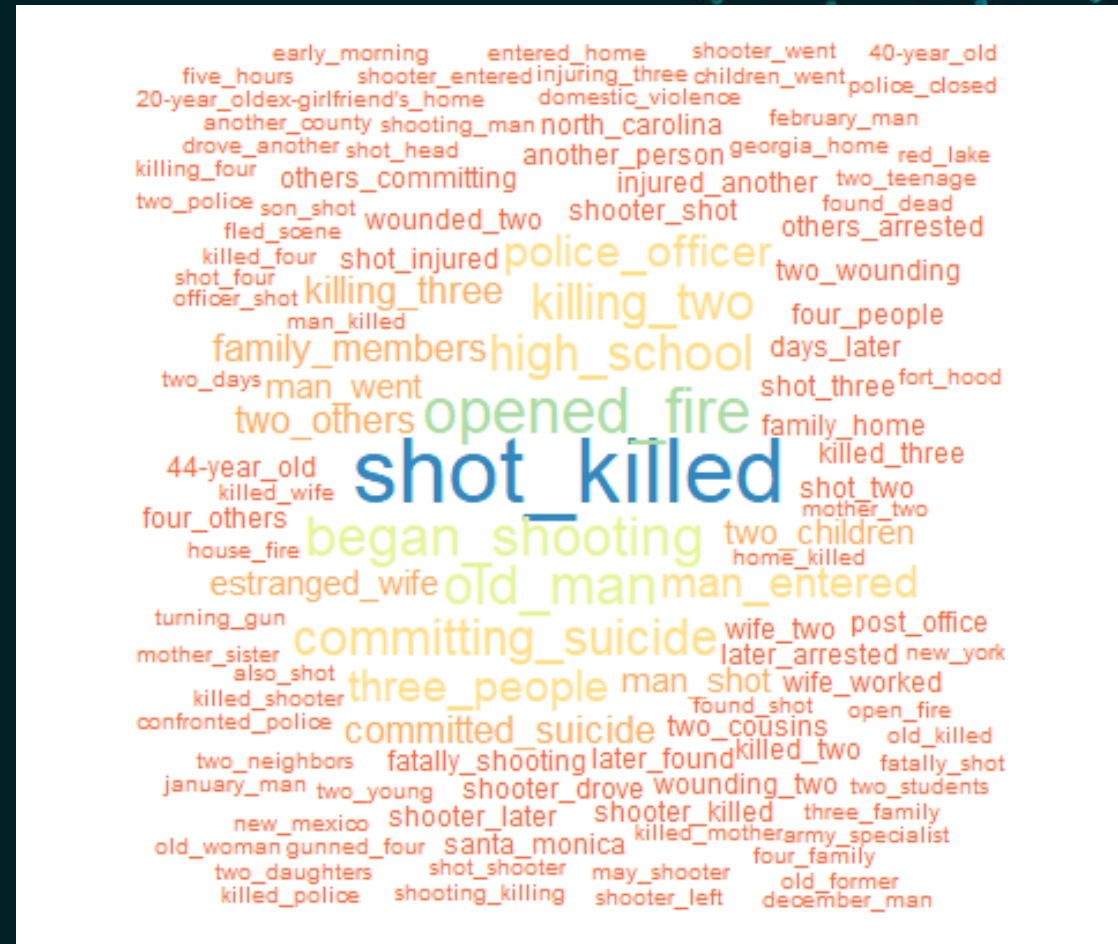
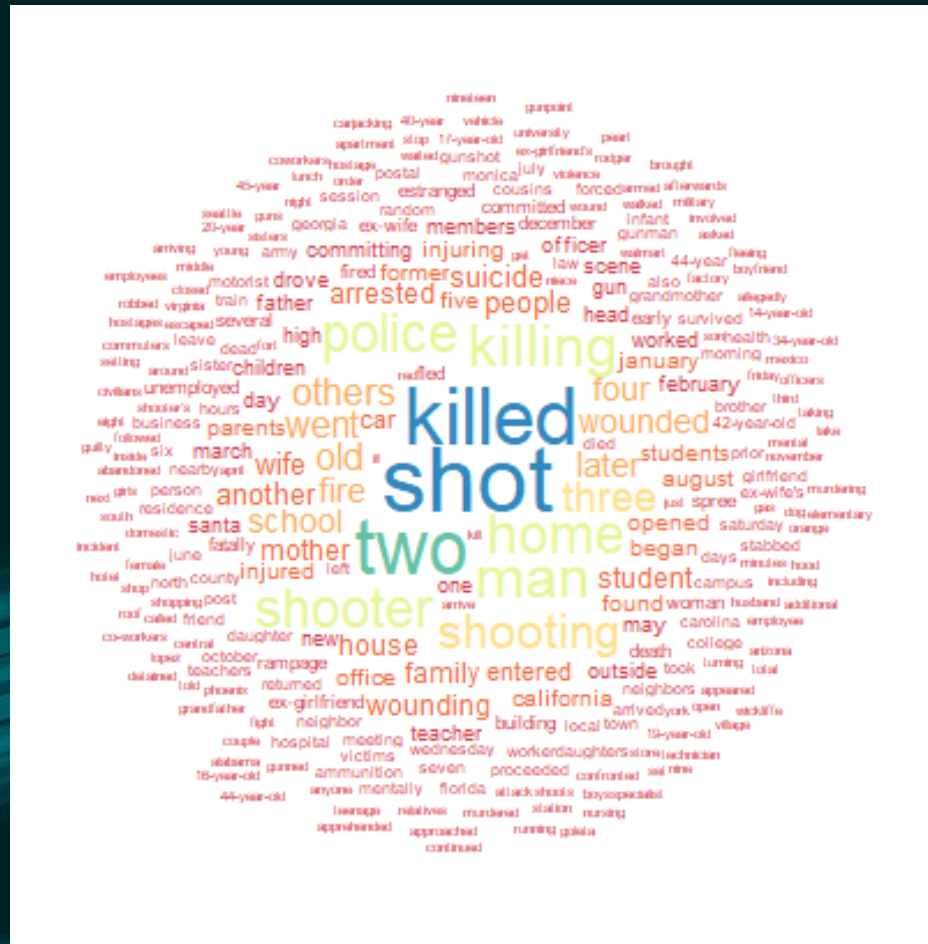


# TERRORISM

steven unemployed  
custody auburn seriously shots happened  
found county upon floor mass members afternoon 15-year-old  
thirty-two target suspected group custodian enforcement kazmierczak  
commencing inland elementary critically november 16-year-old  
18-year-old cleveland scene hall morning including celn mother  
beauty backyard south scene officer held men students outside employees meeting  
ended clinic get wounding shooters follow ohio chardon  
lecture day health student opened another left officers team sunday  
library state gun complex  
life death four three school set victims seattle  
regional april fled three car high department  
open drop former law fired told alabama opening mayor  
waiting young shooter shooting arrived classroom  
turning street killing six house five february incident club  
shootout injuring killed police ten october staff around  
graduate 24-year-old injured worker city nearby  
bus twelve thought thirteen university people fire man fatally council  
window propane california home several streets later old party saturday  
church hours gunmen others two shot gunman went third  
teachers conference inside women wounded entered children taking  
rounds night wife early wounded entered campus just  
classmates woman began arrested suicide rifle college leaving  
planned bedroom texas fort center died taken walking  
austin army school's december building committing occurred  
thursday shootings room seven teacher january planning  
chicago pregnant apartment september washington  
months identified encounter june  
principal football rose-mar central

children waiting cleveland elementary  
rose-mar college kazmierczak opened  
later arrested injuring three killing one  
university texas regional center killing wounding taken custody  
entered conference pregnant woman school shooting  
college beauty inland regional student entered people injuring  
city hall two students people wounded shooting wounded  
two shooters fired rounds shooter killed law enforcement  
conference room five people killed police killed two 15-year-old student  
three victims two people two others shooting students  
turning gun fled scene three people clinic shot  
injured another five wounding critically wounded  
wounding six began shooting one suspected  
wounding two fired upon shooter fired  
others wounded state university  
shootout police five others  
officer injured killing twelve  
fire lecture early morning  
killed five shot killed two gunmen  
18-year-old high school three people killed students killed  
22-year-old high school shots fired  
hall shot killing five fatally shot fire inside  
victims shot committing suicide police officer  
shooting occurred elementary school killed three ages arrived  
los angeles people including people injured taking life  
seven people police arrived wounded shooting council members  
school began told people arrived school opening fire shooting classmates  
three others saturday afternoon morning april  
wounded shooter gunman opened man entered  
morning january arrested outside  
steven kazmierczak

red\_home shooter\_went 40-year\_old  
injuring\_three children\_went police\_closed  
domestic\_violence  
north\_carolina february\_man





# DOMESTIC DISPUTE

wounded  
first officer following  
gunman family apartment  
dead morning daughter boyfriend  
walked floor home wife suicide  
holed domestic shot girlfriend's  
lived girlfriend two man three sister  
incident victims house man Friday kill  
shooting killed officers violence  
former inside young outside  
others shooter front  
suspected fire  
people dispute

man\_flushed tear\_gas shoot\_girlfriend help\_girlfriend  
phoned\_officer included\_stint suffered\_post-traumatic  
near\_iuka disorder\_following former\_soldier next\_man  
shot\_family stint\_iraq man\_shot rural\_alabama bystander\_trying  
around\_9am two\_boys inside\_residence daughter\_injure  
year\_old boys\_turned girlfriend's sister career\_included  
man\_shoot shooting\_wife domestic\_violence 9am\_friday  
soldier\_fatally young\_children three\_others sons\_home  
turned\_gun first floor shot\_killed initially\_shot  
fatally\_shot man\_killed friday\_morning victims\_initially  
dispute\_led two\_young killed\_wife s\_home kill\_next  
husband\_murders sons\_friday wife\_two family\_s trying\_help  
home\_three morning\_family  
shot\_inside man\_suspected explanation\_offered  
suspected\_shooting two\_sons suicide\_explanation  
wife\_injures three\_victims dead\_three led\_man  
shot\_wife domestic\_dispute committing\_suicide  
children\_set shot\_girlfriend children\_committing  
fire\_killing set\_house sister\_boyfriend commits\_suicide  
office\_say residence\_shotgun murders\_wife two\_children roof\_shot  
following\_military injures\_two home\_rural military\_career  
left\_one girlfriend\_kill alabama\_commits stress\_disorder  
man\_phoned killing\_suffered post-traumatic\_stress like\_six  
going\_kill kill\_daughter injure\_bystander

# TOPIC MODEL

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Topic 1

campus children  
student  
high california one  
entered injuring  
arrested opened later  
began another old scene  
wounding former went  
five man fire office  
students home wounded  
gun others suicide  
committing officer  
arrived fired wife

Topic 2

campus  
fired injuring  
teacher students  
another entered children  
wounded went  
man gun old arrested fire  
suicide later school five office  
began student arrived officer  
former others committing  
one opened high  
california wife  
police scene  
wounding

Topic 3

fired children  
gun officer scene  
five wounding high  
later teacher arrested  
arrived committing former  
began wounded office  
school students entered  
opened fire others old  
student man another  
injuring police wife home  
one california went  
campus suicide

Topic 4

home officer  
entered man another  
wounded  
campus wife school  
high others injuring  
later fire went old gun arrived  
office five student students  
fired one suicide police  
children opened teacher  
wounding arrested scene  
committing began  
california former

Topic 5

opened  
campus children  
suicide california  
officer arrested another five  
wounded others former arrived  
entered police later scene  
one fire old  
students gun school wife  
office student fired went  
injuring teacher high  
man began  
wounding home  
committing

Topic 6

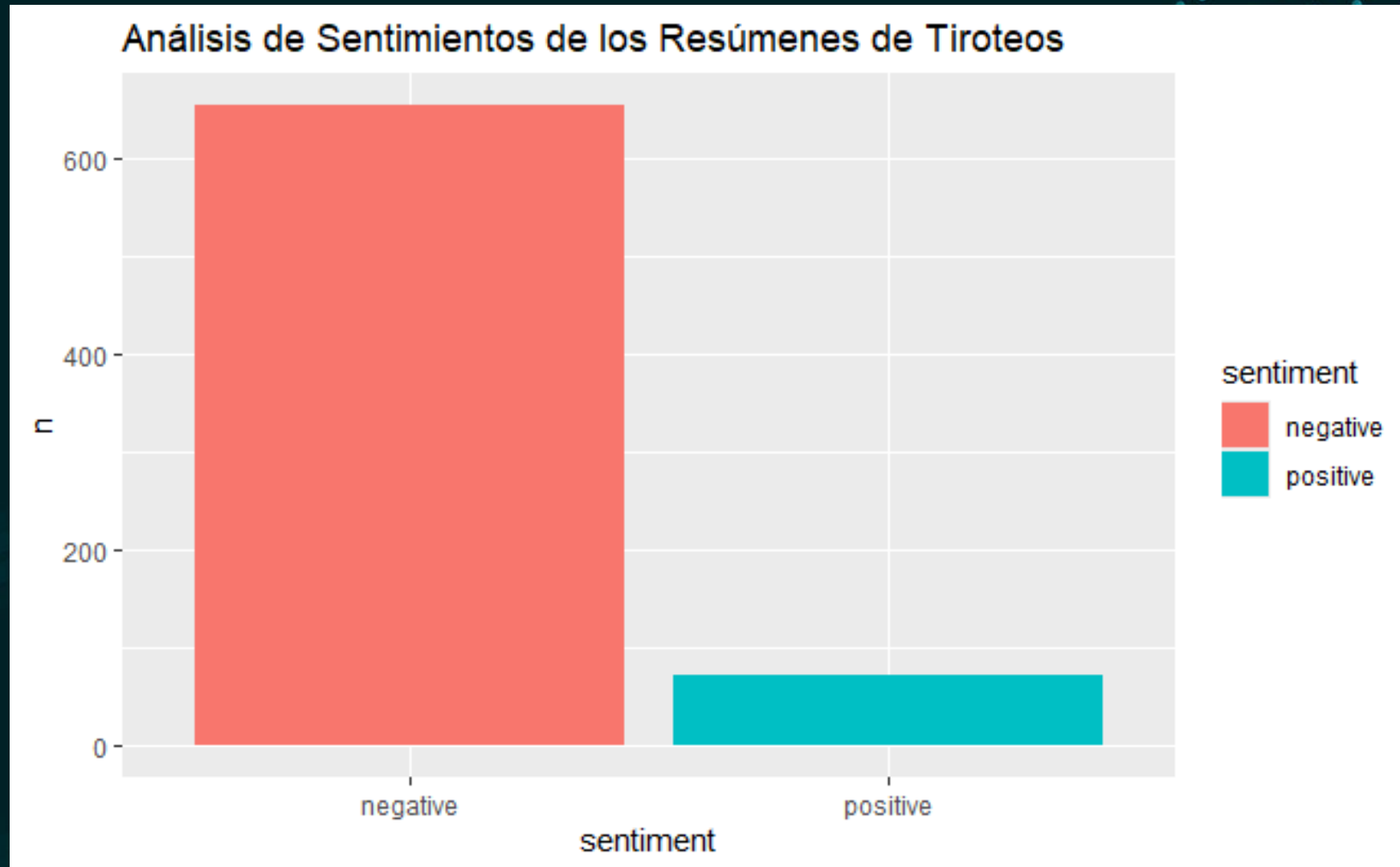
officer  
wounding injuring  
others wounded  
suicide five police california  
teacher man arrested went  
office later former one high  
scene students school another  
wife gun entered children  
arrived began fire fired  
campus students  
committing old



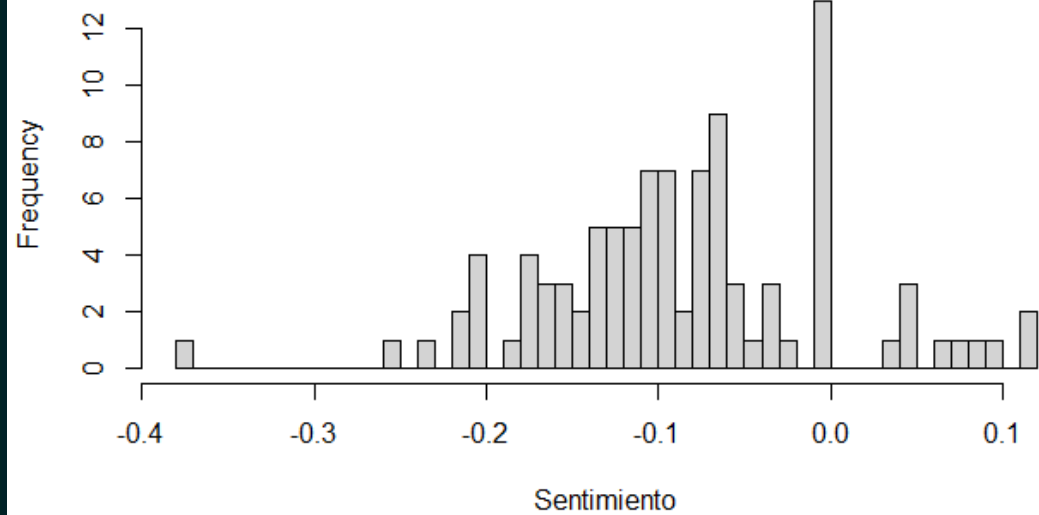
# **SENTIMENT ANALYSIS**

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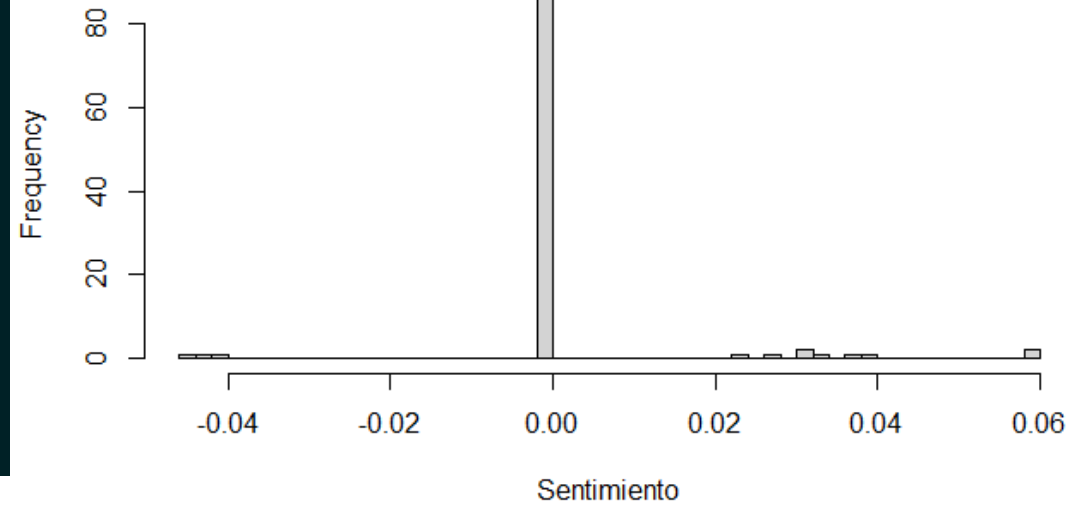
# GENERAL



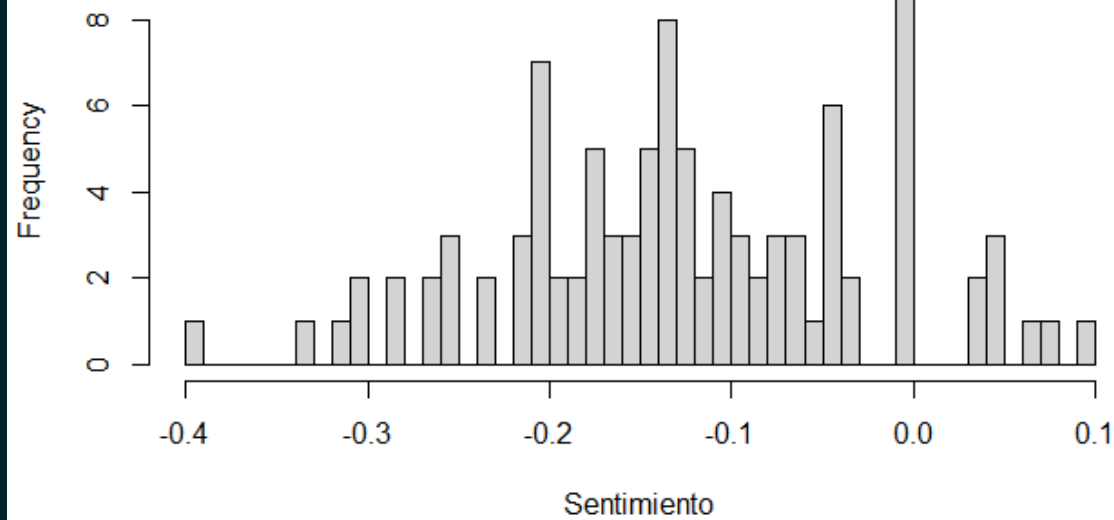
**Distribución del Sentimiento QDAP**



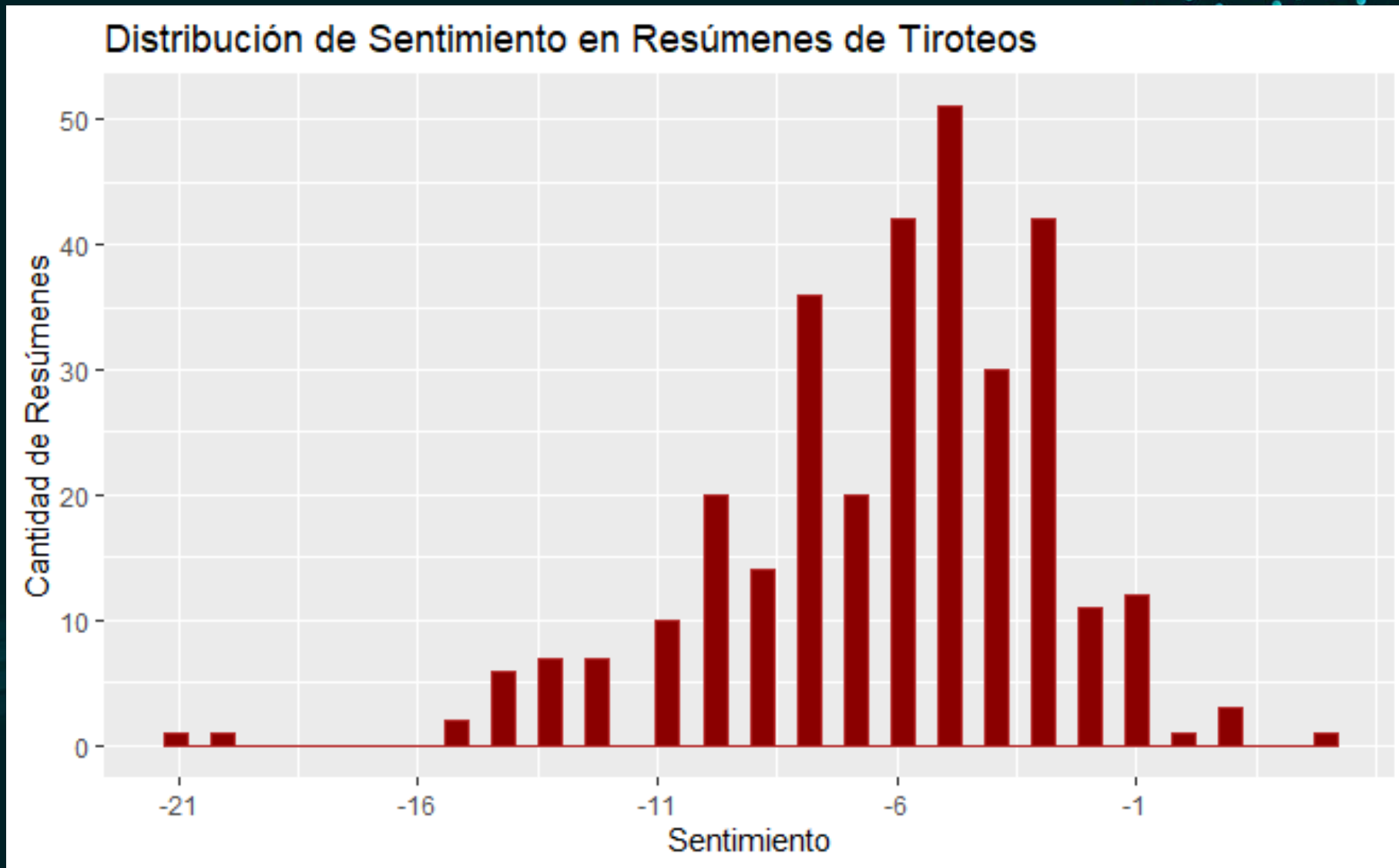
**Distribución del Sentimiento Harvard IV-4**



**Distribución del Sentimiento General Inquirer**



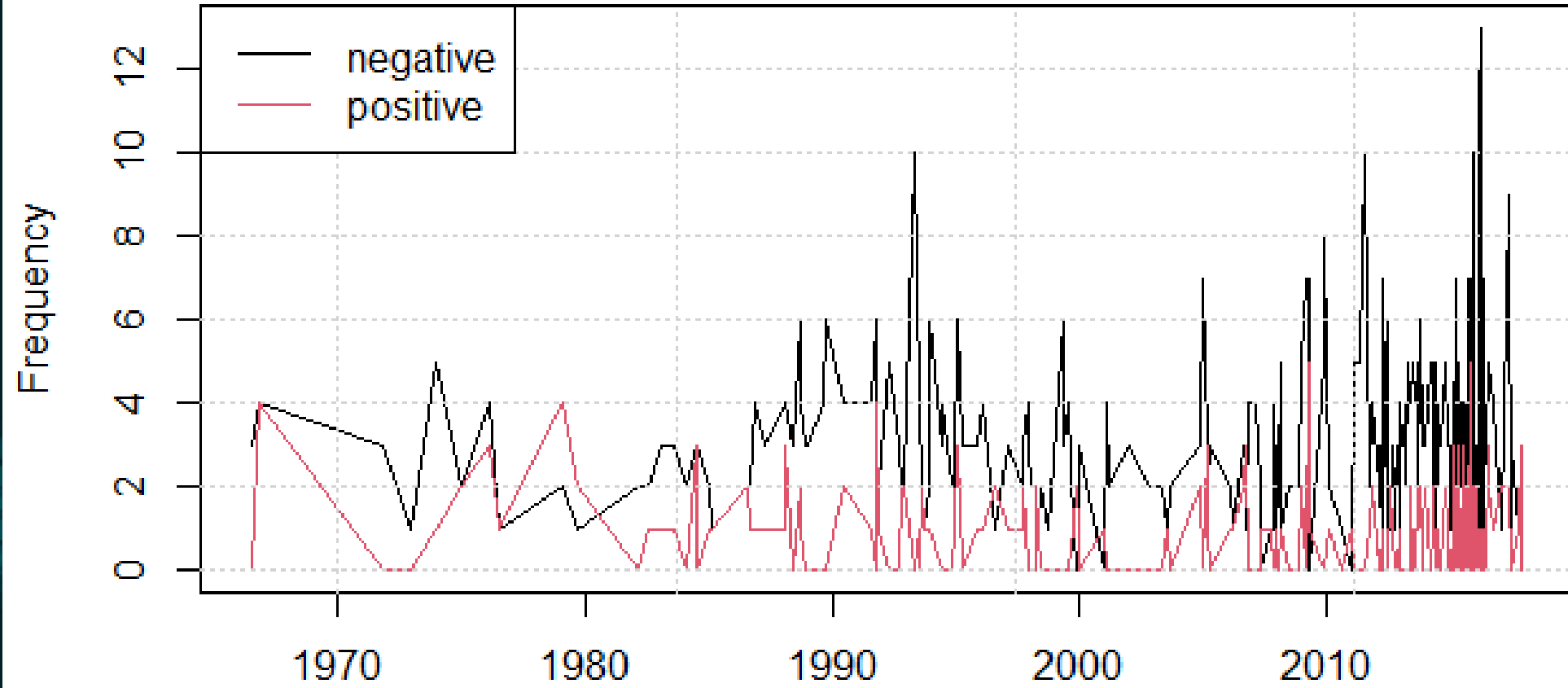




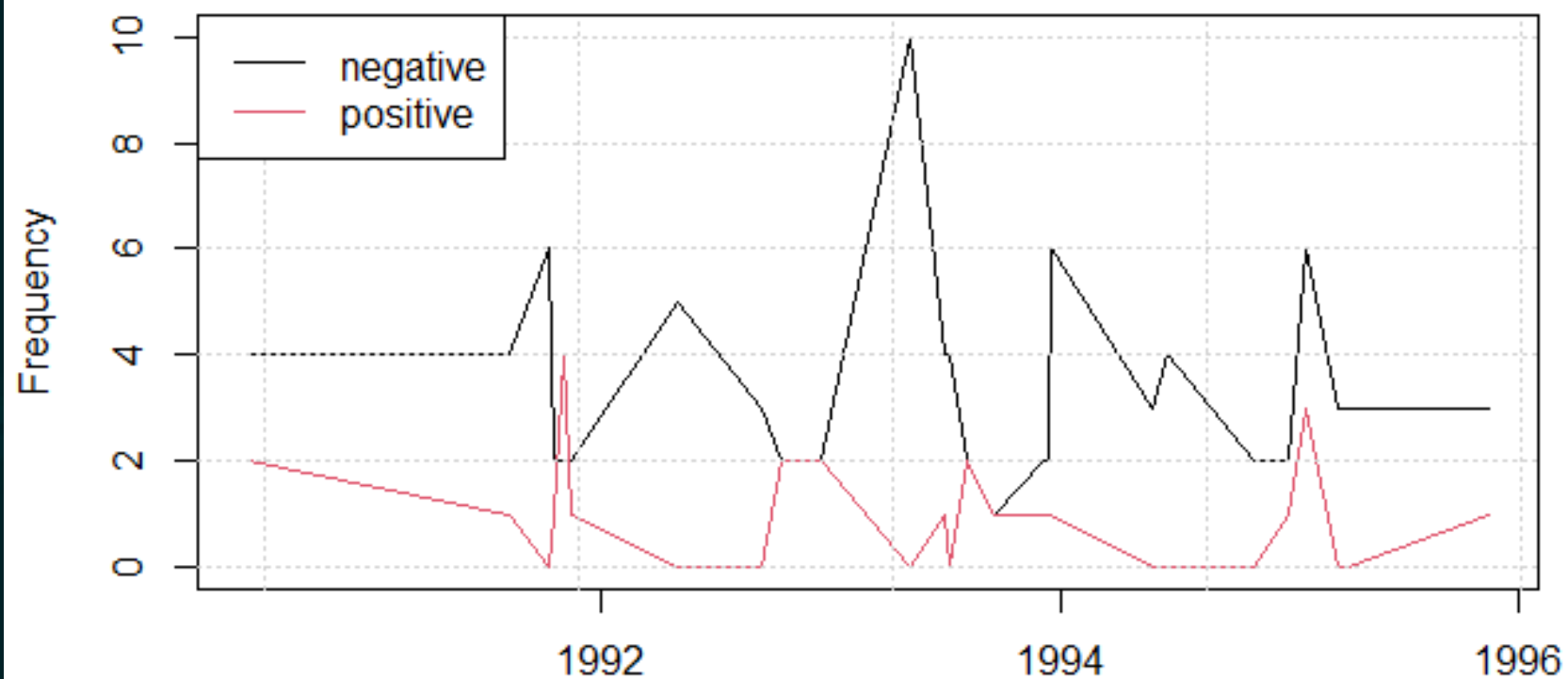
-21 → 10 marzo 2009, Geneva, Alabama, trabajador 28 años

-20 → Fresno, California, Kori Ali Muhammad, no vínculos terroristas

+3 → 14 agosto 2013, hombre obsesionado patológicamente con Selena Gómez

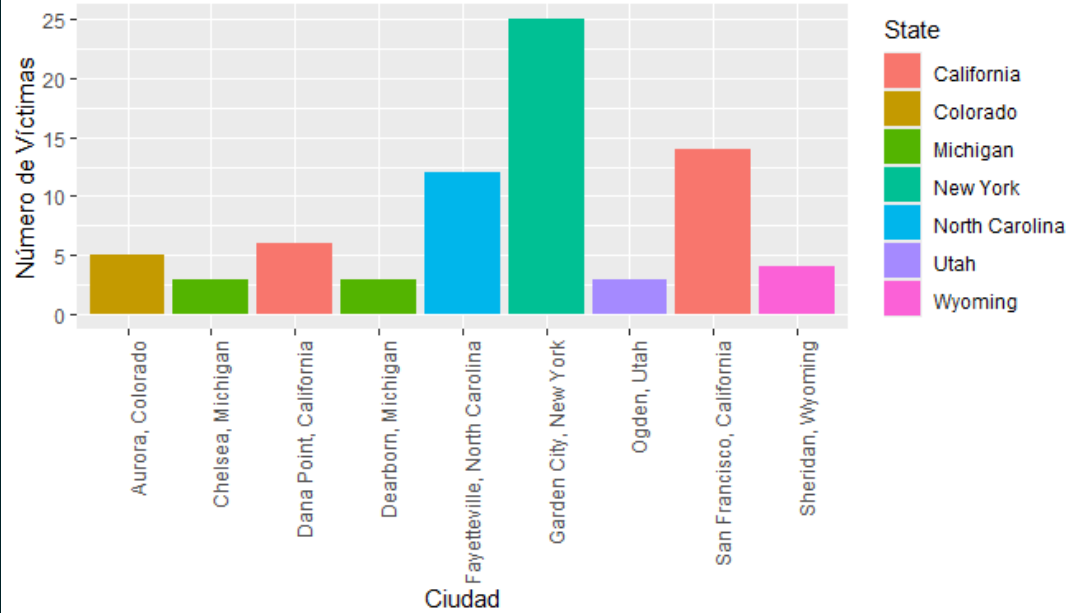


# Sentiment Analysis 1990-1995

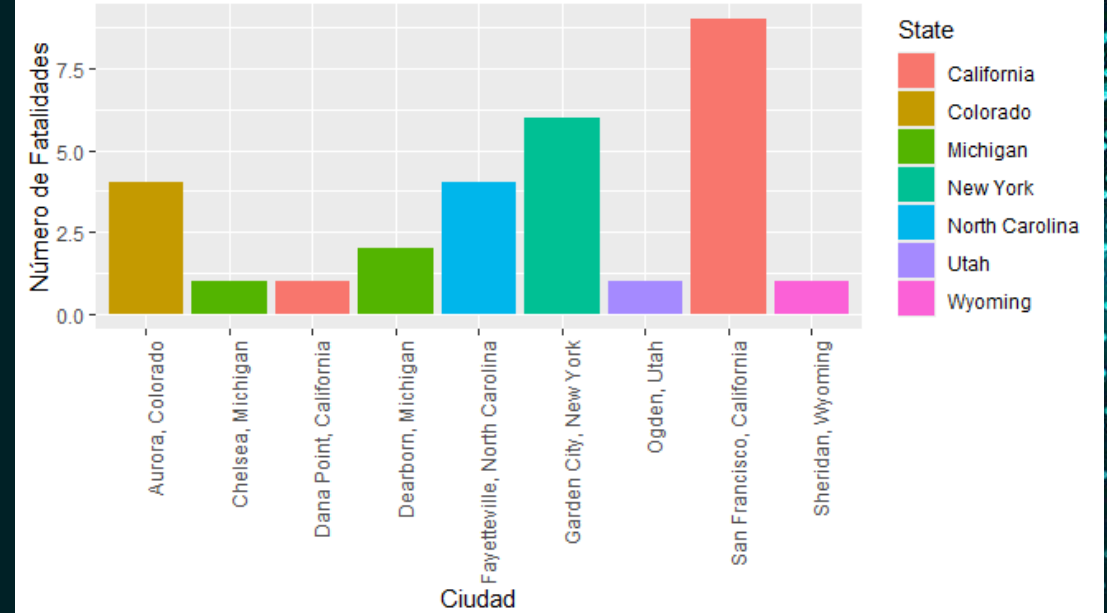




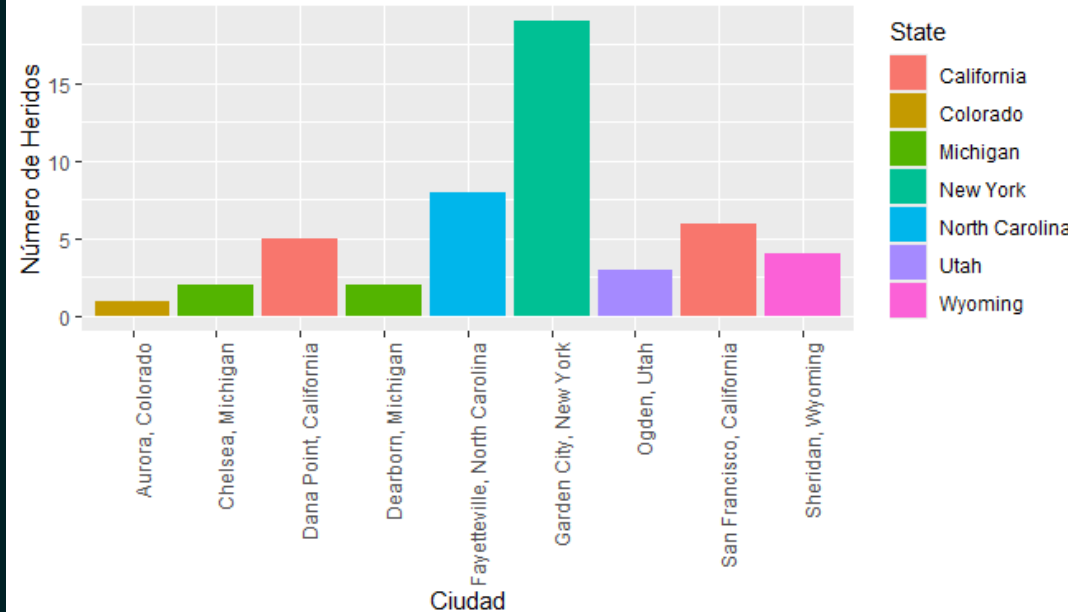
Número de Víctimas por Ciudad y Estado en 1993



Número de Fatalidades por Ciudad y Estado en 1993



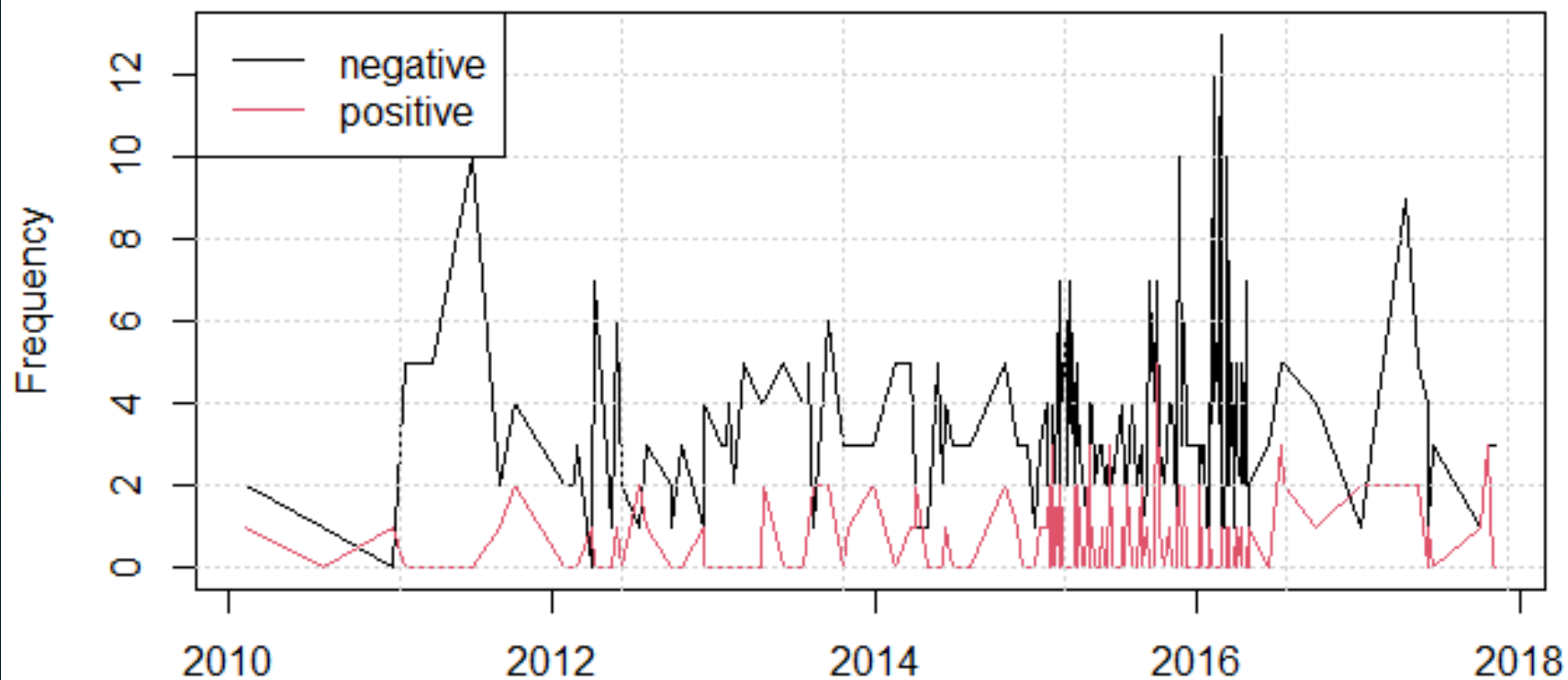
Número de Heridos por Ciudad y Estado en 1993

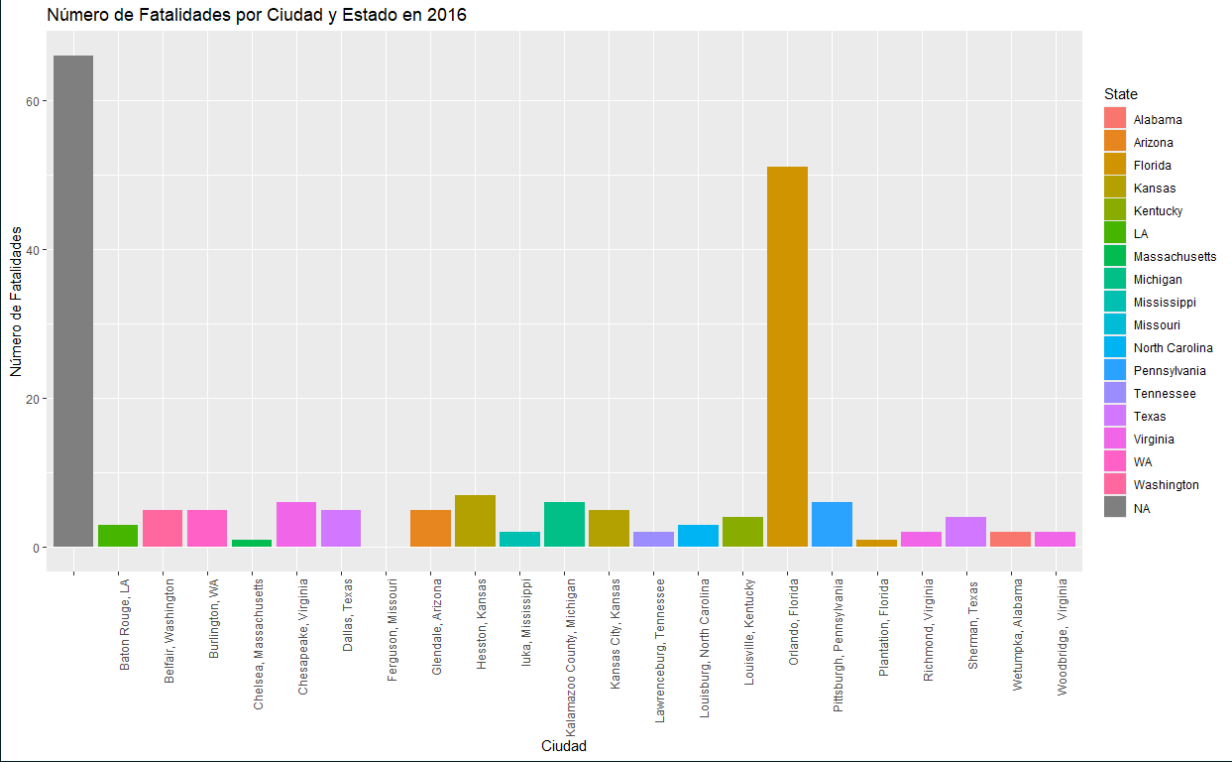
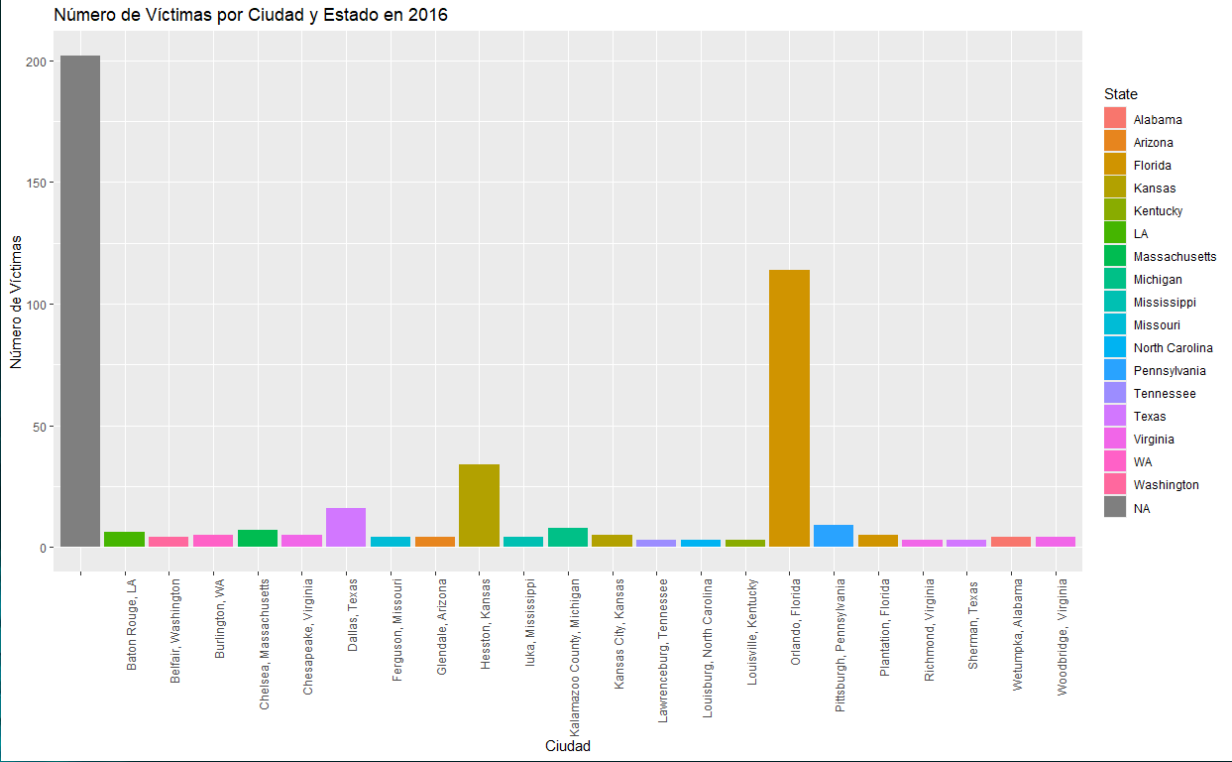


Nueva York

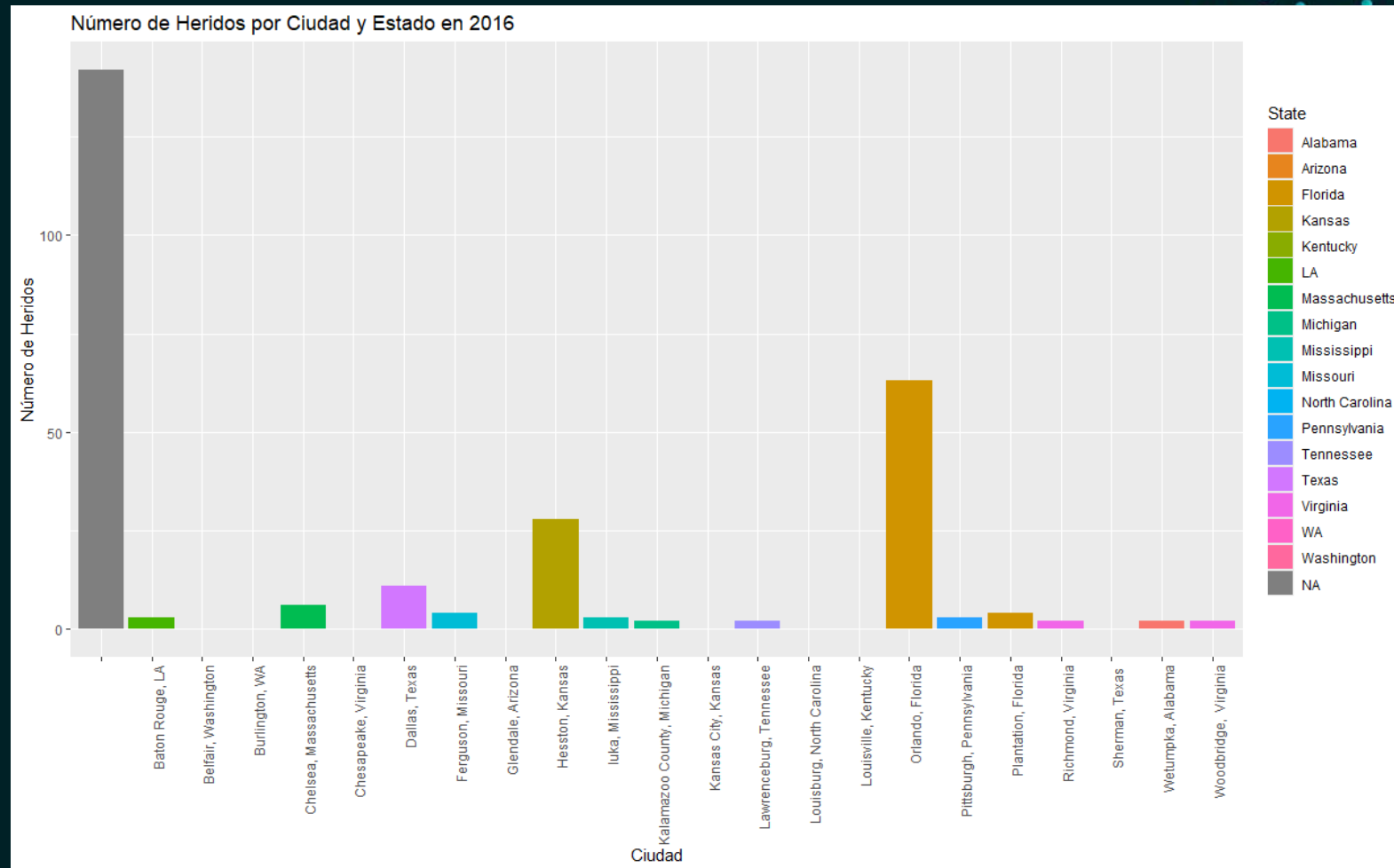
7 diciembre 1993  
Colin Ferguson  
Pasajeros tren Long  
Island Rail Road  
6 fatalidades, 19  
heridos y 25 víctimas

# Sentiment Analysis 2010-2017









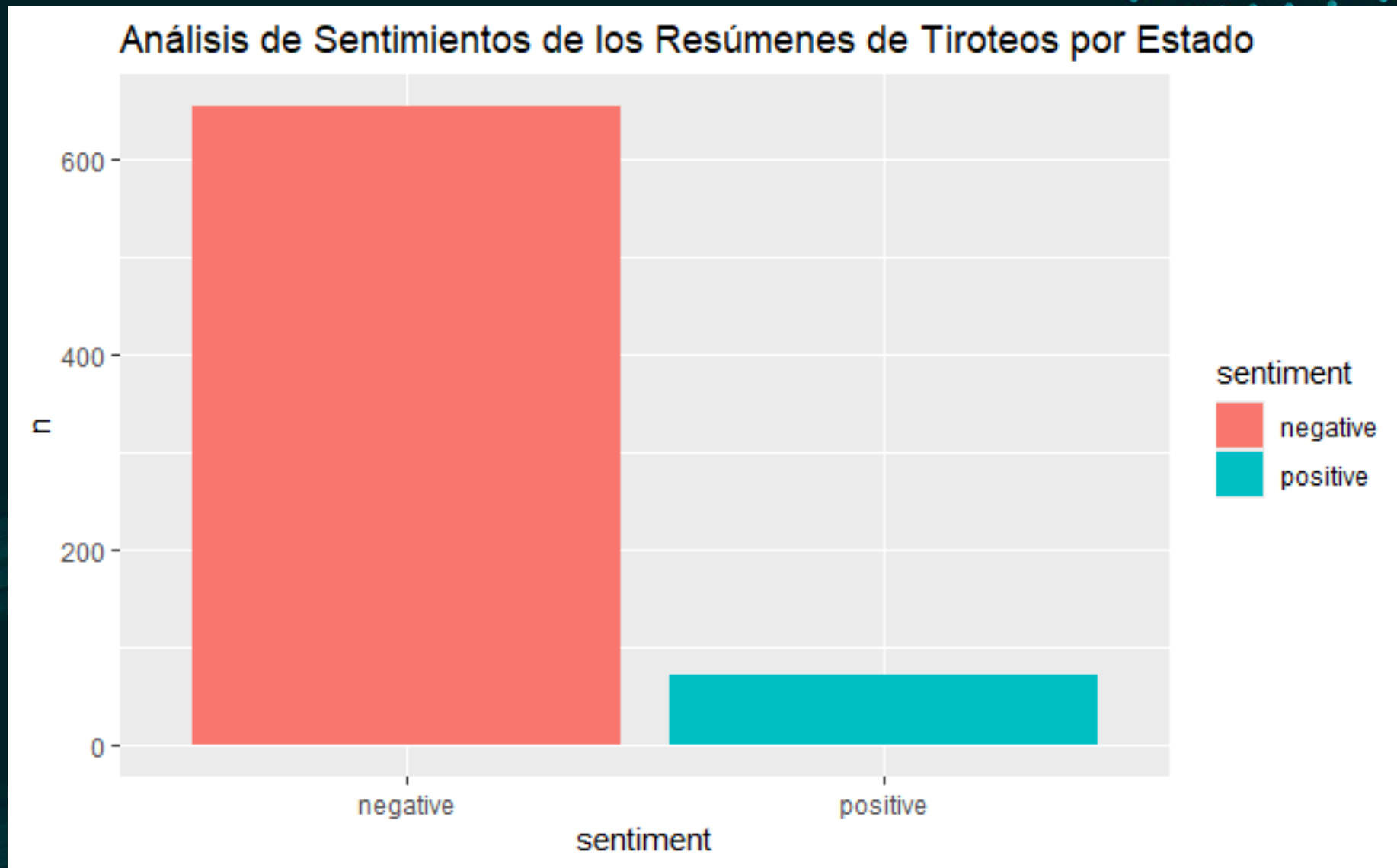
## Florida

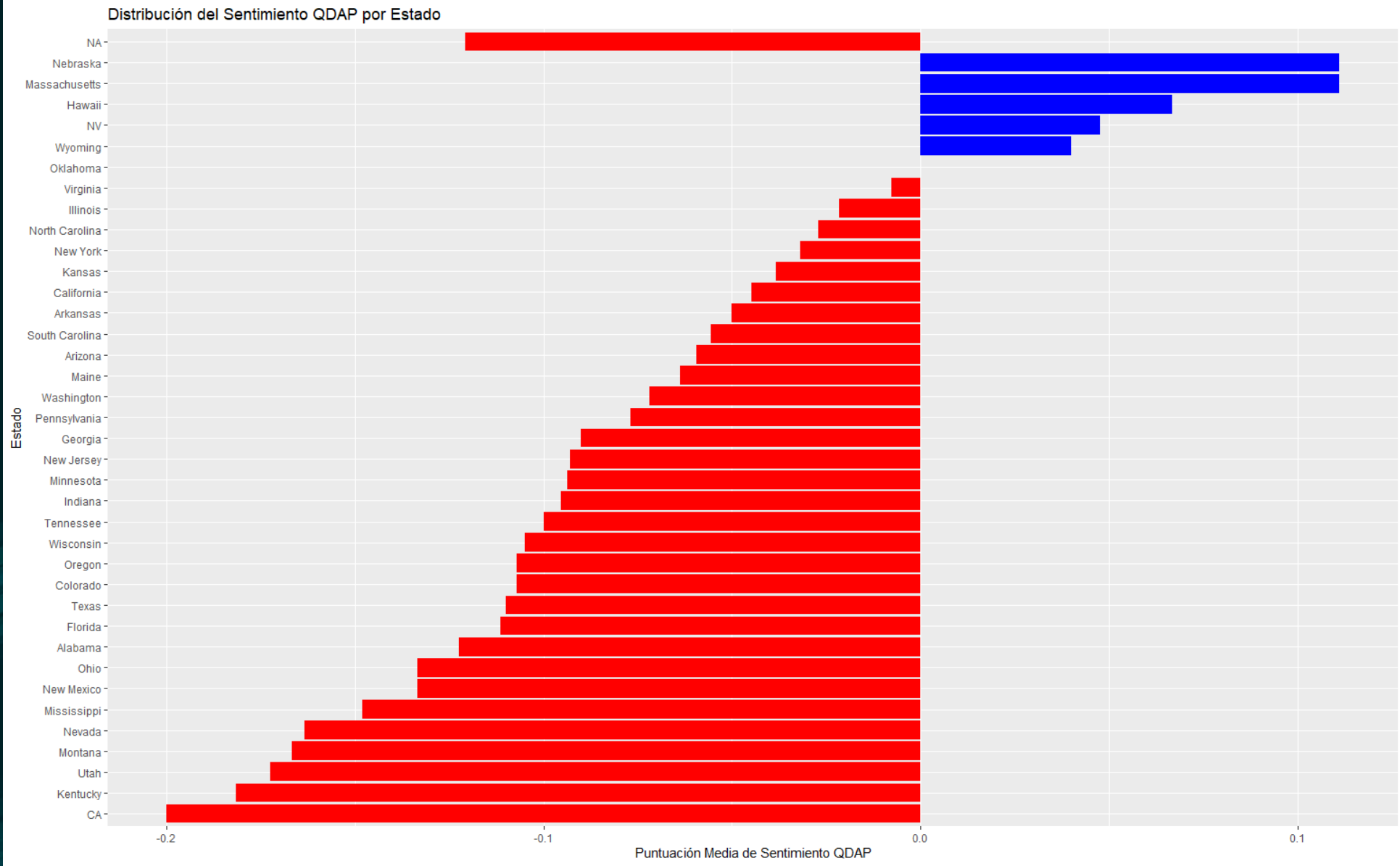
12 junio 2016

Omar Mateen

Tiroteo masivo en club nocturno Pulse, en Orlando, Florida  
49 fatalidades, 53 heridos y 102 víctimas

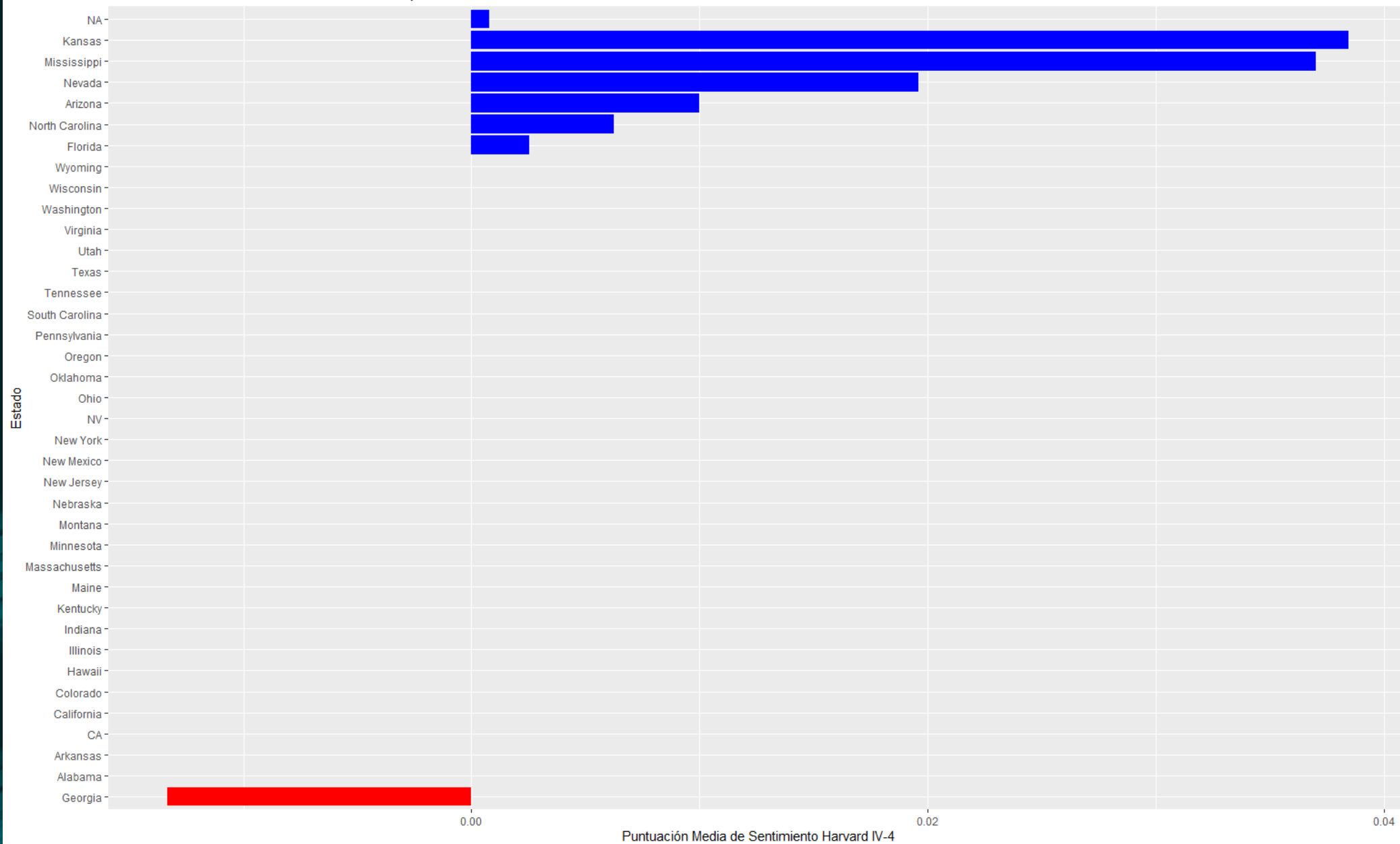
# STATE



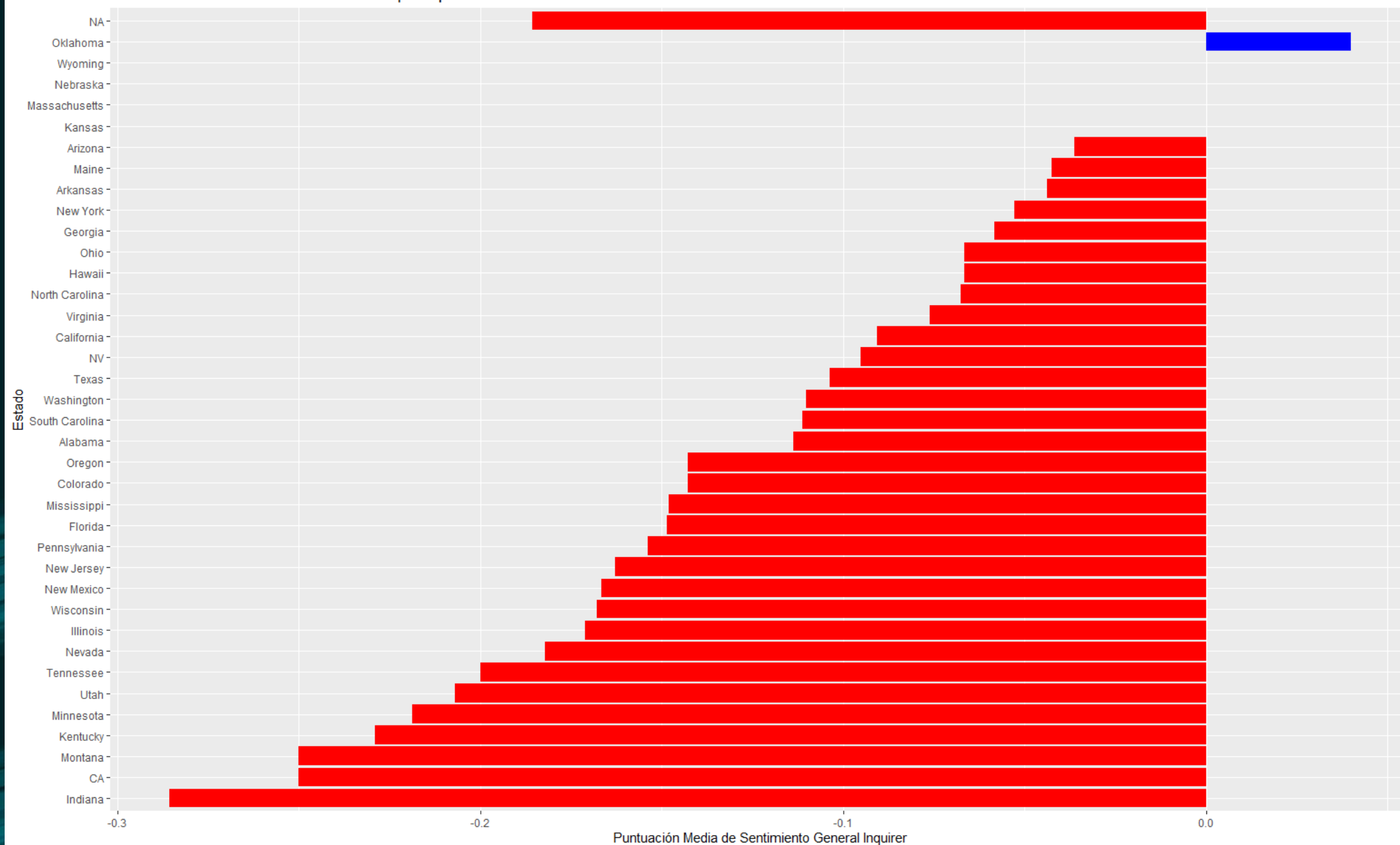




Distribución del Sentimiento Harvard IV-4 por Estado



Distribución del Sentimiento General Inquirer por Estado



Distribución de Sentimiento en Resúmenes de Tiroteos por Estado

