9-2021

An Analysis of Domestic Violence Service Data from the Florida Department of Children and Families

Julio Montanez
University of Central Florida

Amy Donley
University of Central Florida

Amy Reckdenwald
University of Central Florida

Institute for Social and Behavioral Science

UNIVERSITY OF CENTRAL FLORIDA

An Analysis of Domestic Violence Service Data from the Florida Department of Children and Families

Julio Montanez
Graduate Research Assistant
Institute for Social and Behavioral Sciences
University of Central Florida

Amy Donley, PhD
Associate Professor
Director, Institute for Social and Behavioral Sciences
Department of Sociology
University of Central Florida

Amy Reckdenwald, PhD
Associate Professor
Department of Sociology
Violence Against Women Faculty Cluster
University of Central Florida

September 2021

Abstract

The present report briefly describes and visualizes state-wide domestic violence service data from the Florida Department of Children and Families. Specifically, it describes six indicators across a ten-year period: shelter nights, unmet shelter requests, hotline calls, information and referrals, and residential and non-residential safety plans.

Introduction

Domestic violence is a public health issue and social ill that requires consistent and urgent attention. The term domestic violence has multiple meanings. First, domestic violence can mean violence within the family or household: family violence. Second, it can mean, generally, violence between intimate partners (e.g., spouses). Third, it can represent a specific subtype of violence against intimate partners: battering.

The purpose of this report is to provide a descriptive look at monthly domestic violence service data. Due to the exploratory nature of the report, no hypotheses are tested. Rather, this "snapshot approach" synthesizes descriptive statistics and plotting to provide an overall look at trends in the data, both over time and aggregately (see Iyengar & Sabik, 2009).

Unmet service needs can spell danger for victims and survivors of domestic violence. A one-day census of United States (U.S.) domestic violence programs found that almost two-thousand emergency shelter requests went unmet: an unmet emergency shelter service need of 5.91 persons per 100,000 U.S. inhabitants (Iyengar & Sabik, 2009).

Method

The current report utilizes data from the Florida Department of Children and Families (DCF; n.d.a, n.d.b, n.d.c, n.d.d, n.d.e, n.d.f, n.d.g, n.d.h, n.d.i, n.d.j, n.d.k) and population data from Florida's Office of Economic and Demographic Research (n.d.). DCF provides information on domestic violence across Florida for every fiscal year (i.e., July 1st to June 30th). The current report analyzes data over a ten-year period (i.e., July 2009-June 2019). Specifically, the present research focuses on six indicators: shelter nights, unmet shelter request, crisis/hotline calls, information and referral, residential safety plans, and non-residential safety plans. First, the raw values of these variables are summed. Then the variable values—by month—are divided by the yearly total Florida inhabitant population; the resulting quotient is multiplied by 100,000 to obtain a rate.

Findings

Table 1 presents the total number of service units for shelter nights, unmet shelter requests, hotline calls, information and referrals, and residential/non-residential safety plans. Over ten years, there were almost six million shelter nights, 41 thousand unmet shelter requests, over 900,000 hotline calls, over five million information and referrals, and almost 600,000 residential and non-residential safety plans.

Table 1. Total aggregate frequencies for domestic violence services, July 2009-June 2019

Variable	N
Number of Shelter Nights	5,608,607
Number of Unmet Shelter Requests	40,609
Number of Hotline Calls	940,032
Number of Direct Service Information and Referrals	5,335,629
Number of Residential Safety Plans	569,121
Number of Non-Residential Safety Plans	563,795

Figure 1 presents plots of the values and moving average of the number of shelter nights per 100,000 inhabitants. As can be seen, the rate of shelter nights increased gradually throughout the first 90-or-so months of the 10-year period, with a downward trend afterward.

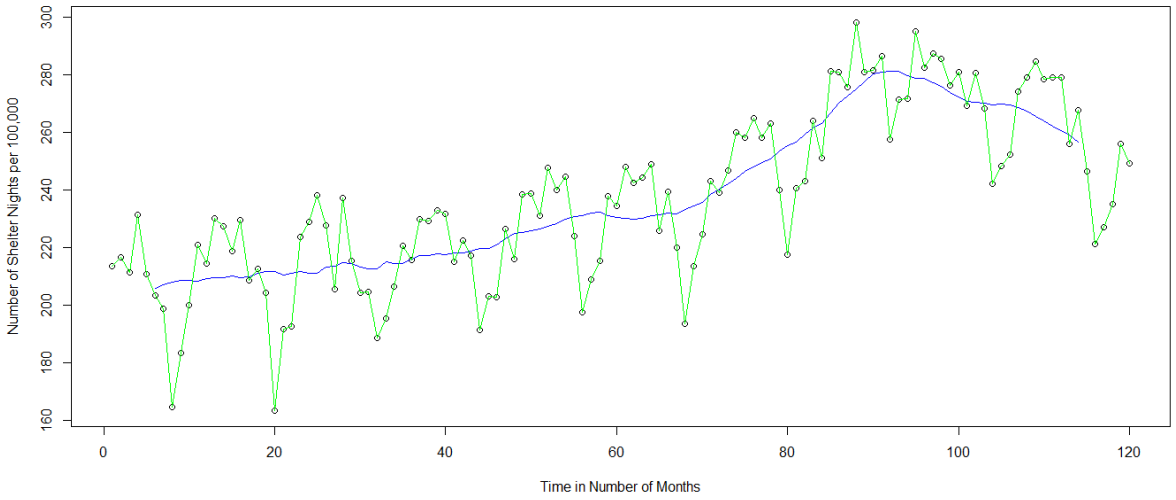

Figure 1. Shelter nights, July 2009-June 2019. One (1) month equates to July 2009. Twenty (20) months equate to February 2011. Forty (40) months equate to October 2012; Sixty (60) months equate to June 2014; Eighty (80) months equate to February 2016; one hundred (100) months equate to October 2017; one-hundred-and-twenty (120) months equate to June 2019.

Figure 2 presents the values and moving average of the number of unmet shelter requests per 100,000 inhabitants. As can be seen, the rate increased over time, then decreased to its lowest point in February 2013; then, with variation, the rate increased.

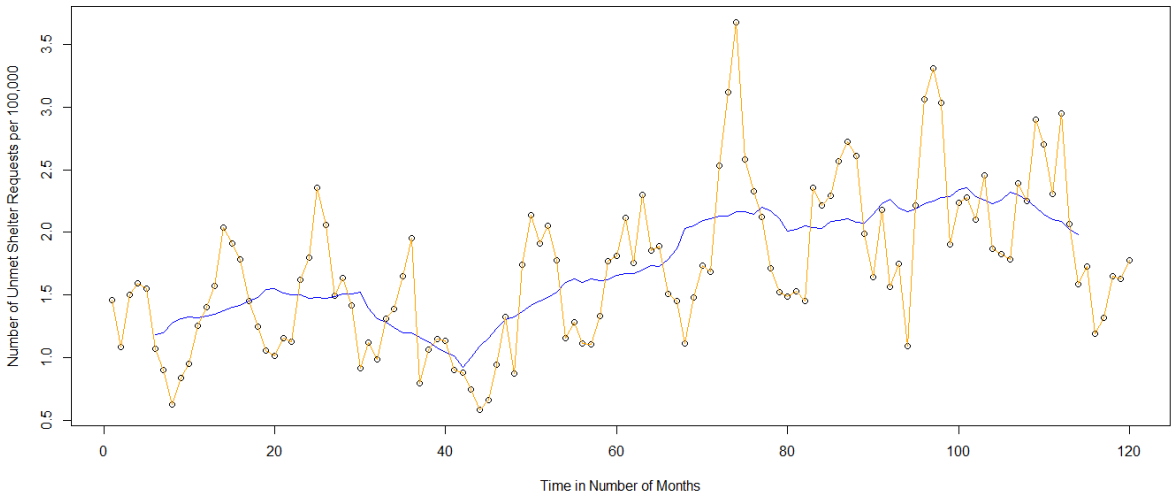

Fig 2. Unmet requests for shelter, July 2009-June 2019. One (1) month equates to July 2009. Twenty (20) months equate to February 2011. Forty (40) months equate to October 2012; Sixty (60) months equate to June 2014; Eighty (80) months equate to February 2016; one hundred (100) months equate to October 2017; one-hundred-and-twenty (120) months equate to June 2019.

Figure 3 presents the values and moving average of the values and moving average of the number of hotline calls per 100,000 inhabitants. As can be seen, the hotline call rate has decreased over time.

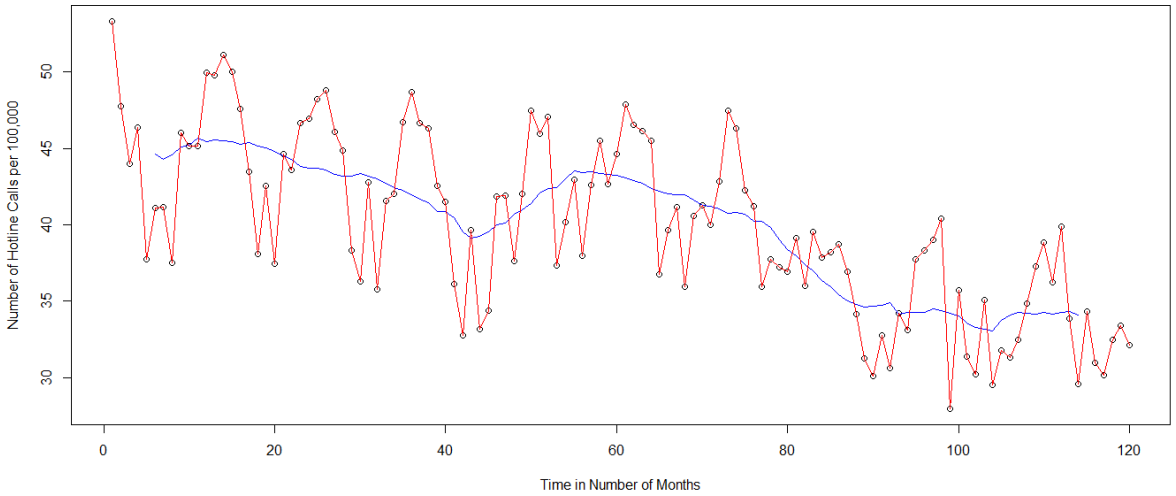

Fig 3. Hotline calls, July 2009-June 2019. One (1) month equates to July 2009. Twenty (20) months equate to February 2011. Forty (40) months equate to October 2012; Sixty (60) months equate to June 2014; Eighty (80) months equate to February 2016; one hundred (100) months equate to October 2017; one-hundred-and-twenty (120) months equate to June 2019.

Figure 4 presents the values and moving average of the number of hotline calls per 100,000 inhabitants. As can be seen, the information and referral rate seems to have decreased overtime, with a particularly steep decrease in 2015, subsequently experiencing a levelling effect toward the end of the 10-year time period

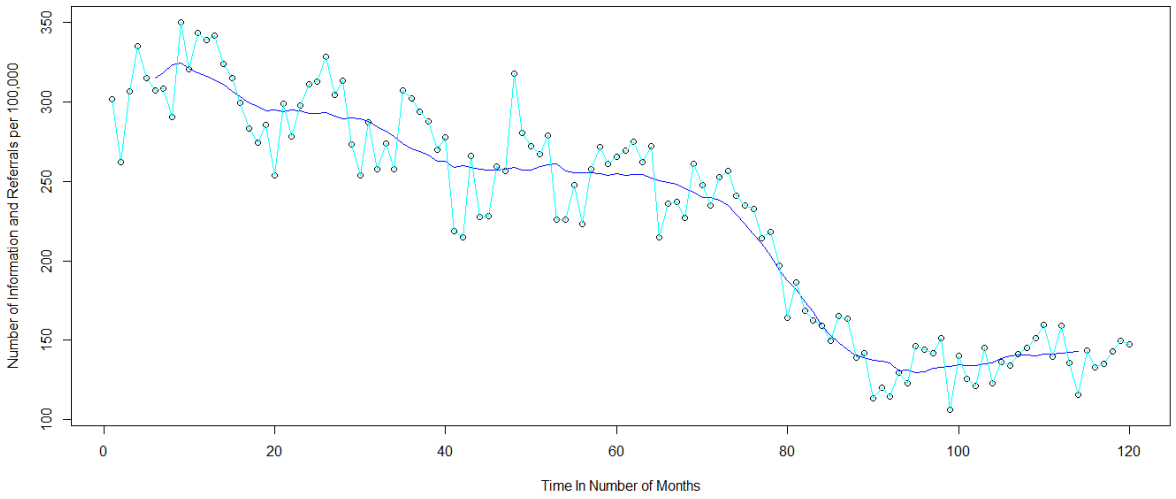

Fig 4. Direct service information and referrals, July 2009-June 2019. One (1) month equates to July 2009. Twenty (20) months equate to February 2011. Forty (40) months equate to October 2012; Sixty (60) months equate to June 2014; Eighty (80) months equate to February 2016; one hundred (100) months equate to October 2017; one-hundred-and-twenty (120) months equate to June 2019.

Figure 5 presents the values and moving average of the number of residential safety plans per 100,000 inhabitants. The residential safety plan rate was relatively unchanged and stable until about the 80th month, in which the rate started increasing.

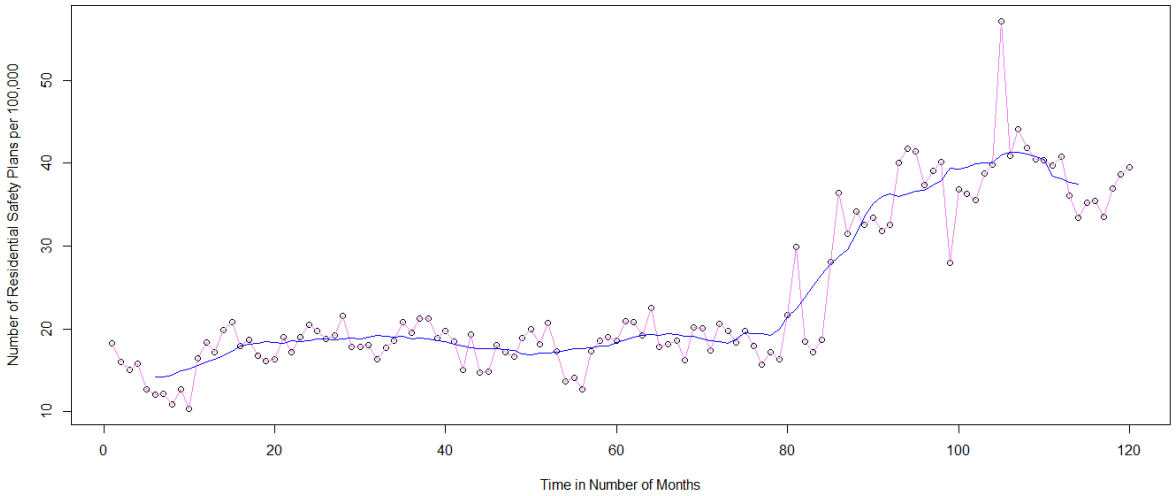

Fig 5. Residential safety plans, July 2009-June 2019. One (1) month equates to July 2009. Twenty (20) months equate to February 2011. Forty (40) months equate to October 2012; Sixty (60) months equate to June 2014; Eighty (80) months equate to February 2016; one hundred (100) months equate to October 2017; one-hundred-and-twenty (120) months equate to June 2019.

Figure 6 presents the values and moving average of the number of non-residential safety plans per 100,000 inhabitants. Over time, non-residential safety plan rate increased slightly, then decreased slightly, then increased, then experienced a trough, and then a crest.

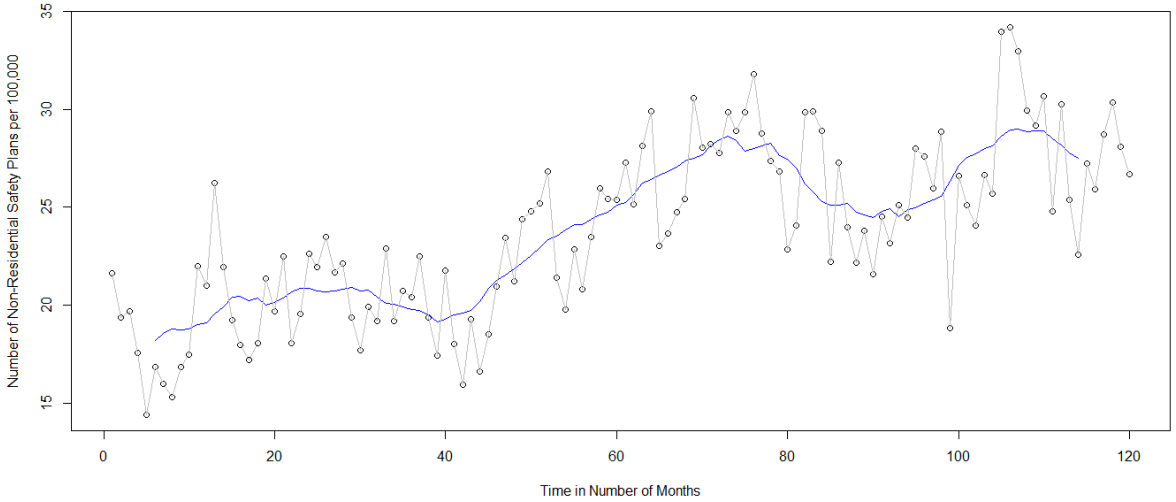

Fig 6. Non-residential safety plans, July 2009-June 2019. One (1) month equates to July 2009. Twenty (20) months equate to February 2011. Forty (40) months equate to October 2012; Sixty (60) months equate to June 2014; Eighty (80) months equate to February 2016; one hundred (100) months equate to October 2017; one-hundred-and-twenty (120) months equate to June 2019.

Limitations

An important limitation within the data is the lack of definitions within the sources used to construct the dataset. For example, based on the information provided, we are unable to know specific details on how "shelter nights" were measured (e.g., whether a mother with two children staying at a shelter constitutes one or three nights).

Discussion

The current paper aimed to describe a timeline of domestic violence service data. While some variable rates, in some way, increased over time (shelter nights, unmet shelter requests, residential safety plans, and non-residential safety plans) others decreased overall over time (hotline calls and information and referrals). However, the number of duplicate usages of services is unclear from these data. In any case, just as domestic violence prevalence must be monitored, the dynamics of domestic violence services should be surveilled as well.

References

Iyengar, R., & Sabik, L. (2009). The dangerous shortage of domestic violence services. *Health Affairs*, *28*(6), w1052-w1065.

Data Sources

Department of Children and Families. (n.d.a). *Domestic violence annual report 7/1/2009 - 6/30/2010*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/dv0910.pdf

_____. (n.d.b). *Domestic violence annual report 7/1/2010 - 6/30/2011*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/DVData2010_2011.pdf

_____. (n.d.c). *Domestic violence annual report 7/1/2010 - 6/30/2011*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/DVData2010_2011.pdf

_____. (n.d.d). *Domestic violence annual report 7/1/2011 - 6/30/2012*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/DVData2011_2012.pdf

_____. (n.d.e). *Domestic violence annual report 7/1/2012 - 6/30/2013*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/12-%2013AnnualStatisticsReport9-2013.pdf

_____. (n.d.f). *Domestic violence annual report 7/1/2013 - 6/30/2014*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/13%2014%20Annual%20Statistics%20Report%20FINAL.pdf

_____. (n.d.g). *Domestic violence annual report 7/1/2014 - 6/30/2015*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/14%2015%20Annual%20Statistics%20Report.pdf

_____. (h.d.h). *Domestic violence annual report 7/1/2015 - 6/30/2016*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/15%2016%20Annual%20Statistics%20Report.pdf

_____. (n.d.i). *Domestic violence annual report 7/1/2016 - 6/30/2017*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/2016-2017%20Annual%20Statistics.pdf

_____. (n.d.j). *Domestic violence annual report 7/1/2017 - 6/30/2018*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/2017-2018%20DV%20Service%20Report.pdf

_____. (n.d.k). *Domestic violence annual report 7/1/2018 - 6/30/2019*. Retrieved from https://www.myflfamilies.com/service-programs/domestic-violence/docs/2018-2019%20DV%20Service%20Report.pdf

Office of Economic and Demographic Research. (n.d.). *Total county population: April 1, 1970-2045**. Retrieved from http://edr.state.fl.us/content/population-demographics/data/CountyPopulation_2019.pdf

Coding Guidance Sources

Ch -- 2 Statistical background for forecasting -- Computing in R. [Word processing document file]. Winona State University.

Homes, E. E., Sheuerell, M. D., & Ward, E. J. (2020, February 3). *Applied time series analysis for fisheries and environmental sciences*. Seattle, WA: NOAA Fisheries, Northwest Fisheries Science Center.

Murphy, P. (2018, April 9). Simple time series in R. *RPubs by RStudio*. Retrieved from http://rpubs.com/pjmurphy/381487

Needham, M. (2014, September 19). R: Calculating rolling or moving averages. *DZone*. Retireved from https://dzone.com/articles/r-calculating-rolling-or

Appendix:

R Code

Upload Data

data <- read.csv([Path])

View Data

data

View Variable Names

names(data)

Make Data Readily Available for Prospective Code

attach(data)

Plot Variable "planrate"

plot(planrate, type = "p", xlab = "Time", ylab = "Number of Residential Safety Plans per 100,000")

Create Moving Average Calculation

mav<-filter(planrate, rep(1/12, 12))

Create Moving Average Line

lines(mav, lty = 1, col = "blue")

Create Line Connecting "planrate" Plot Points

lines(planrate, lty = 1, col = "grey")

Plot Variable "shelterrate"

plot(shelterrate, type = "p", xlab = "Time", ylab = "Number of Shelter Nights per 100,000")

Create Moving Average Calculation

mav2<-filter(shelterrate, rep(1/12, 12))

Create Moving Average Line

lines(mav2, lty = 1, col = "green")

Create Line Connecting "shelterrate" Plot Points

lines(shelterrate, lty = 1, col = "grey")

Plot Variable "unmetrate"

plot(unmetrate, type = "p", xlab = "Time", ylab = "Number of Unmet Requests for Shelter per 100,000")

Create Moving Average Calculation

mav3<-filter(unmetrate, rep(1/12, 12))

Create Moving Average Line

lines(mav3, lty = 1, col = "orange")

Create Line Connecting "unmetrate" Plot Points

lines(unmetrate, lty = 1, col = "grey")

Plot Variable "hotlinerate"

plot(hotlinerate, type = "p", xlab = "Time", ylab = "Number of Hotline Calls per 100,000")

Create Moving Average Calculation

mav4<-filter(hotlinerate, rep(1/12, 12))

Create Moving Average Line

lines(mav4, lty = 1, col = "red")

Create Line Connecting "hotlinerate" Plot Points

lines(hotlinerate, lty = 1, col = "grey")

Plot Variable "inforate"

plot(inforefrate, type = "p", xlab = "Time", ylab = "Number of Information-and-Referrals per 100,000")

Create Moving Average Calculation

mav5<-filter(inforefrate, rep(1/12, 12))

Create Moving Average Line

lines(mav5, lty = 1, col = "cyan")

Create Line Connecting “inforate” Plot Points

lines(inforefrate, lty = 1, col = "grey")

Plot Variable “nonresplanrate”

plot(nonresplanrate, type = "p", xlab = "Time", ylab = "Number of Non-Residential Safety Plans per 100,000")

Create Moving Average Calculation

mav6<-filter(nonresplanrate, rep(1/12, 12))

Create Moving Average Line

lines(mav6, lty = 1, col = "violet")

Create Line Connecting “nonresplanrate” Plot Points

lines(nonresplanrate, lty = 1, col = "grey")