

Wisconsin Institute for Law & Liberty

Family Matters: The Role of Family Structure in Opioid Use & Foster Care in Wisconsin

Natalie Goodnow
Research Fellow
Wisconsin Institute for Law & Liberty

Dr. Will Flanders
Research Director
Wisconsin Institute for Law & Liberty

July 2018



EXECUTIVE SUMMARY

Wisconsin has a crisis in both rising opioid usage and increasing strains on its foster care system. Our previous research examines how closely those two issues are connected (Goodnow & Flanders, 2018). This paper aims to clarify this crisis further, exploring the role family structure plays in communities' health and children's wellbeing.

With the opioid epidemic worsening, Wisconsin saw an increase of over 100% in emergency room visits for opioid overdoses from July 2016 through September 2017, according to the U.S. Centers for Disease Control and Prevention. The Midwestern region overall saw ER visits for opioid overdoses increase 70% in that time. Despite the fact that opioid prescriptions have gone down 20% since 2015 in Wisconsin, opioid abuse continues to rise (Wisconsin Department of Safety and Professional Services, 2018).

Concurrently the number of children in foster care both nationwide and in Wisconsin has been rapidly increasing over the last six years, in part due to the opioid crisis. The number of Wisconsin children removed from their homes because of caretaker drug abuse rose 119% from just 2011 to 2016.

As policymakers and child welfare advocates in Wisconsin work to improve opportunities and services for vulnerable children, this report seeks to provide them with information that will help tailor interventions and supports to be as effective as possible. This is useful as states prepare to implement the Family First Prevention Services Act (FFPSA), signed into federal law in February of 2018. FFPSA aims to change how states implement preventative services and find homes for children in foster care.

Using seven years of data, this paper builds on our previous research on opioids and foster care and examines at the county level how family structure, as well as factors such as education, and income, are related to foster care and opioid usage in Wisconsin. Understanding the relationship between these elements can help determine which populations and communities are at a higher risk for opioid abuse and an increase in the number of children in foster care, and where efforts should be focused.

Takeaways of Report

1. Our analysis finds that a primary indicator of opioid abuse in Wisconsin is family structure. Counties with more single-parent households are more likely to have higher rates of opioid hospitalizations.
2. Controlling for single-parent households, poverty was found to have no statistically significant relationship with the rate of opioid abuse in a county.
3. Therefore, counties with low income but traditional family structures, such as Rusk County and Grant County, tend to see lower rates of opioid abuse. Both of those counties have higher rates of marriage than counties with similar poverty rates, and lower opioid hospitalizations.
4. There is a statistically significant relationship between family structure and children in foster care. Counties with higher rates of single mothers are related to higher rates of children in foster care. But, counties with higher rates of single fathers do not have this relationship.
5. Lastly, counties with higher rates of married households have lower rates of poverty. Put another way, single-parent households are related to higher poverty rates.

BACKGROUND

There has been a rapid increase in both opioid usage and the number of children in foster care in the United States. Throughout the U.S. about 115 people die daily from opioid overdoses. The largest spike in overdose deaths has been in those from heroin and synthetic opioids, such as fentanyl (U.S. Centers for Disease Control and Prevention). Wisconsin follows national trends, seeing growth both in opioid abuse among the general population and the number of children in the foster care system. However, its rate of increase has exceeded the national rate. From 2000-2016 the number of overdose deaths in Wisconsin involving all types of opioids was seven times higher in 2016 than it was in 2000. Nationwide opioid overdose deaths were five times higher in 2016 than in 1999 (U.S. Centers for Disease Control and Prevention). Meanwhile, the number of children in foster care increased by 10% in the U.S. from 2012-2016, and by 20% in Wisconsin – double the national rate.

Our previous research found that in Wisconsin there is a very strong relationship between opioid use and the number of children in foster care (Goodnow & Flanders, 2018). Nationwide research from the U.S. Department of Health and Services (HHS) also found this connection (Ghertner et al. 2018; Radel et al. 2018). This paper builds on our earlier report and explores at the county level the relationship between family structure and both opioid use and the child welfare system. Family structure has changed significantly in the U.S. over the last several decades. According to the Pew Research Center, 25% of parents living with a child in the U.S. are unmarried, up from 7% in 1968 (Livingston, 2018).

In addition to how opioid use affects the ability of families to care for their children, family itself could play a role in the increase of opioid use. One recent paper's findings suggest there is a connection in counties between higher rates of drug deaths and higher rates of divorce and single-parent homes (Monnat, 2018). The author, Dr. Shannon Monnat, points out that "Work and family are two of the most important arenas to which we assign meaning," and that "lacking or losing attachment to those institutions and the people in them can diminish meaning in our lives" (Watkins, 2018).

Wisconsin has been active in trying to combat the opioid crisis and improve the child welfare system. The HOPE agenda and the Governor's Task Force on Opioid Abuse are just two examples of efforts to stem the opioid tide. Furthermore, the Wisconsin legislature created a Foster Care Taskforce, which began in June 2017 and concluded in June 2018. The taskforce was created in response to the increase of children in care in Wisconsin—partially driven by the opioid crisis—and issues with the current child welfare system in the state. The taskforce's final report sums up the legislative victories achieved—11 bills out of the 13 in the Foster Forward package were signed into law—and also lists recommendations from the co-chairs, Representatives Snyder and Doyle, for future legislative action (Final Report, 2018). This report aims to help inform future efforts of legislators and local leaders in Wisconsin.

Examining the relationship between family structure, opioid use, and the child welfare system is also important as Wisconsin, along with other states, readies for the implementation of the Family First Prevention Services Act (FFPSA). Congress passed FFPSA in early 2018, making significant changes to funding for preventative services and congregate care in an effort to a) improve prevention efforts and reduce the number of children entering the foster care system and b) reduce the number of children

placed in congregate care.¹ Wisconsin has chosen to exercise the option to delay the implementation of FFPSA in the state by two years so it can have more time to determine opportunities and challenges (Memo, 2018).

METHODOLOGY

Of greatest interest to us was the role that family structure may play on several negative outcomes, primarily measures of opioid dependence and foster care rates. Our dependent variable of interest for foster care is the number of kids in foster care from the Wisconsin Department of Children and Families gathered for an earlier analysis. The number of kids in care in each county-year pair is divided by the population of the county in hundreds of thousands to create a rate of kids in care per 100,000 population. Our dependent variable in the opioid analysis is gathered from the Wisconsin Department of Health Services. This is the number of opioid-related hospital encounters in a county per 100,000 population. We chose to use opioid-related hospitalization rates as a proxy for opioid dependence as it captures better both licit and illicit opioid use than prescription rates. These dependent variables are combined with data on family structure from the U.S. Census Bureau.²

While census data differentiates between married households with children, male-led households with children and no wife, and female-led households with children and no husband, at the county level it does not provide a further breakdown on whether these male- and female-led households have a cohabiting partner present or why they are headed by one parent – such as divorce, death, etc.³ Nationwide in 2017 only 4% of children lived with unmarried but cohabitating parents, according to data from the U.S. Bureau. We refer to households with children led by a man or a woman with no spouse present as single-parent households.

Our analyses include several control variables that could also plausibly impact our outcomes of interest. These include education level, employment, median household income, poverty rate, the percentage of residents who are African American, the percentage of residents who are Hispanic, and total county population. An indicator variable for year is also included in the analysis to account for any variation that is explained by time. We look at data from the years 2010-2016.

FINDINGS

1. Single-parent households are significantly related to opioid hospitalization rates. Our analysis suggests that family structure is an indicator of opioid dependency to a much greater extent than poverty.

Nationally most children, 65%, live with their married biological parents, 21% live with just their mother, 4% with just their father (U.S. Census Bureau, 2017).⁴ When family structure was examined in relation to opioid use in Wisconsin counties, single-parent households were significantly related to opioid hospitalizations.

¹ Congregate care refers to group homes and residential treatment facilities. Congregate care may be necessary for some children based on the challenges they face. However, some children are in group homes because there are not enough foster homes available; this is what FFPSA seeks to avoid.

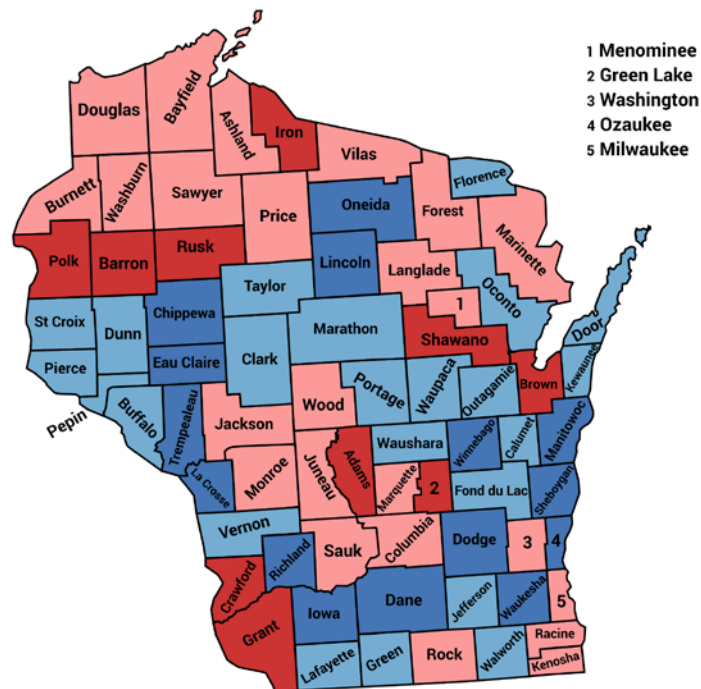
² This data, along with the data for the control variables, was gathered from the 5-year estimates of the American Community Survey from the U.S. Census Bureau.

³ This refers only to children under the age of 18. Families with adult children are not included.

⁴ This includes cases where the mother or father are widowed, divorced, separated, or never married. It does not include cases where parents are married but one spouse is absent.

In contrast, married households show no significant relationship to opioid-related hospitalizations. This appears to align with previous research that found adults who were divorced or never married had higher opioid overdose death rates than individuals who were married or widowed (Social Capital Project, 2017). It also corresponds with the findings from Monnat’s research, which found that higher rates of divorce and single-parent homes were closely related to counties with higher rates of drug deaths, even more so than certain economic factors such as dependence on public assistance (Monnat, 2018; Watkins, 2018).

- Low Hospitalizations, Low Marriage
- High Hospitalizations, Low Marriage
- Low Hospitalizations, High Marriage
- High Hospitalizations, High Marriage



As a robustness check, some other variables that we would expect to be related to opioid hospitalization rates are found to do so. For example, communities with higher rates of poverty ($p < .01$) tend to have higher rates of opioid hospitalization. Additionally, our variable for the share of the population that are high school graduates is negatively associated with hospitalizations. Among our variables of interest, both female and male single-parent households were found to be positively correlated with opioid hospitalization rates.

Table 1. Household Structure and Opioid Abuse by County

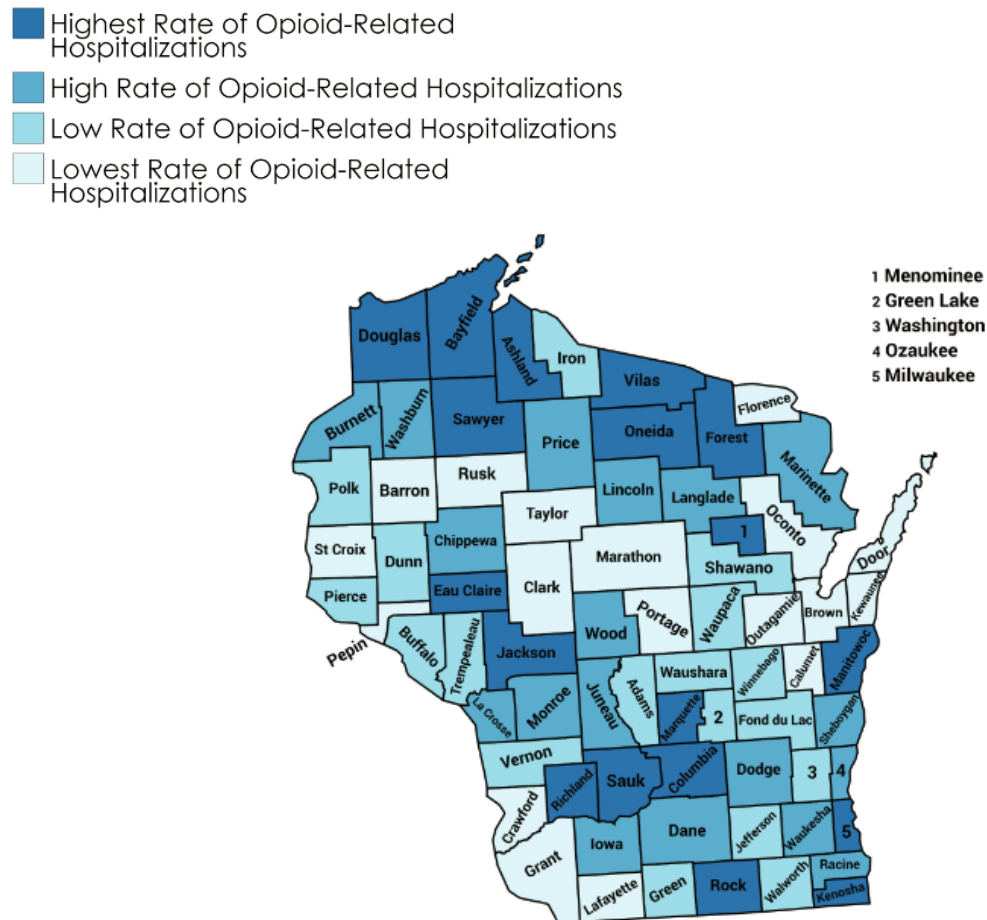
| VARIABLES | Hospitalization Rate |
|---------------------------------|----------------------|
| <i>Female Head of Household</i> | 1,157*** (174.2) |
| <i>Male Head of Household</i> | 1,301*** |

| | |
|------------------------|--------------------------|
| | (274.9) |
| <i>Black</i> | 0.000437 (0.000404) |
| <i>Hispanic</i> | 0.000297** (0.000116) |
| <i>High School</i> | -7.481*** (1.339) |
| <i>Population</i> | -0.000194 (0.000111) |
| <i>Employment Rate</i> | -246.4 (207.5) |
| <i>Poverty Rate</i> | -3.991 (2.363) |
| <i>Year</i> | 15.21*** (2.967) |
| Constant | -30,222*** (5,987) |
| Observations | 503 |
| R-squared | 0.403 |

Standard errors in parentheses

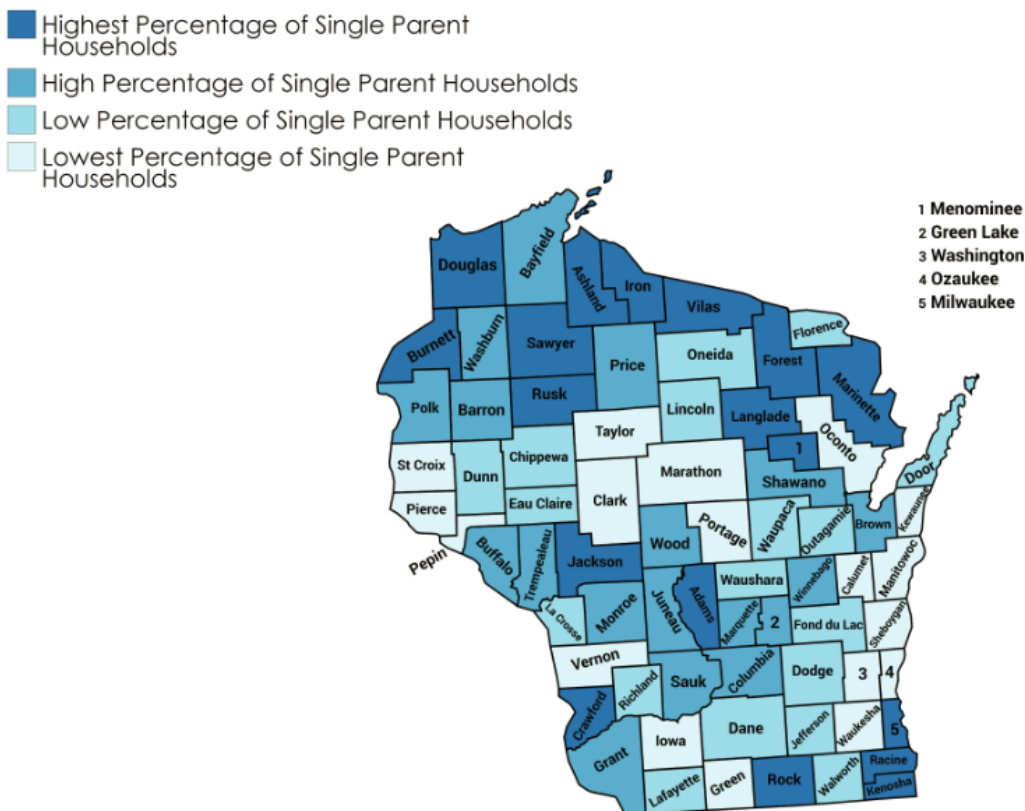
Moving from a hypothetical county with no female single parent households to one with 100% such households would be expected to increase opioid hospitalizations by 1,157 per 100,000 population. In the same situation with male-led households, the predicted rate of increase is even higher—1,363 per 100,000 population.

One may perhaps note with interest the insignificance of the poverty variable in this analysis, and the reversed sign on high school completion relative to what one might expect. These two variables highlight the important role that family structure plays in opioid usage. If we remove the two measures of single parent households from the analysis, poverty becomes a significant positive predictor of hospitalization, and high school completion reverses sign and becomes a negative predictor. While single-parent households are highly correlated with rates of poverty ($p < .01$), this finding suggests that family structure is the driver of opioid dependency to a much greater extent than poverty. In other words, areas with low income but traditional family structure see far lower rates of opioid abuse.



2. Single-mother households are positively related to the rate of children in foster care, while married households are negatively related to the rate of children in care.

When it comes to the relationship between family structure and the number of children in the child welfare system, there is again a connection. We compare family structure with the rate of kids in the foster care system in Wisconsin counties per 100,000 population. Single-mother households are significantly related to the rate of children in foster care, while single-father households with children are not. Married households with children under the age of 18 are very significantly negatively related to the rate of children in foster care. So as the share of married households increases in a county, the rate of children in foster care decreases.



While we cannot explain why there would be this difference between single-mother and single-father households, there are a few possibilities about why this might be the case, though further research needs to be done on this subject.⁵

- One possibility is that nationally male-led households are twice as likely to have a cohabiter that is not their child's parent, which could mean they have additional help parenting. Though female-led households are almost 40% more likely to have a relative help them (Coles, 2015).
- According to national data, female-led households appear to be more likely to have multiple children to care for than male-led households, so there is additional strain (Coles, 2015).
- While all single-parent-led households are still shown to be significantly related to poverty in Wisconsin, male-led households are less likely to be related to poverty than female-led households, as discussed further below.

So while single-parent households are both significantly related to opioid use, only single-mother households are significantly related to the rate of children in care (so as the number of single-mother households increases in a county, the rate of children in care increases).

⁵ It is more common for mothers to have custody of a child than a father. This could be due in part to a combination of factors, such as some men may be less willing to be a single-parent for a variety of reasons, or, as some research suggests, there can be a bias towards mothers when awarding custody of children as they may be seen as the more capable, safe, or nurturing parent. See for example the work of L. E. Stamps: <http://aja.ncsc.dni.us/courtrv/cr38-4/CR38-4Stamps.pdf>. Because of this, it could be possible that many men who become single fathers have a particularly strong desire to be the primary parent or have greater means to care for their child. Of course, this is a complicated matter and more research is required.

In this section, once again as a robustness check, we see that the poverty rate is highly predictive of the number of kids in foster care ($p < .01$). In this case, we find that single parent households led by females ($p < .01$) only are associated with higher rates of children entering the foster care system. Moving from a hypothetical county with no female heads of household to one with all female heads of household would be predicted to increase the rate of kids in foster care by 547.1 per 100,000 residents.

Table 2. Household Structure and Foster Care by County

| VARIABLES | Rate of Kids in Care |
|---------------------------------|-------------------------|
| <i>Female Head of Household</i> | 547.1*** (82.61) |
| <i>Male Head of Household</i> | 119.0 (130.2) |
| <i>Black</i> | -0.000266 (0.000192) |
| <i>Hispanic</i> | 1.91e-05 (5.52e-05) |
| <i>High School</i> | -1.116 (0.635) |
| <i>Population</i> | 2.68e-05 (5.26e-05) |
| <i>Employed</i> | -261.4*** (98.16) |
| <i>Poverty Rate</i> | 5.628*** (1.121) |
| <i>Year</i> | 1.603 (1.407) |
| Constant | -3,148 (2,839) |
| Observations | 504 |
| R-squared | 0.486 |

Standard errors in parentheses

3. Single-parent households are significantly related to poverty. Education also has a significant negative relationship with single-mother households, but not with single-father households.

As anticipated, family structure is significantly related to poverty in Wisconsin counties. Married households with children have a very strong negative relationship with poverty, which means that as the number of married households increases the percent of people living in poverty decreases. Single-parent households are significantly related to poverty. However, there is a greater negative relationship between single-mother households ($p < .01$) and poverty than single-father households ($p < .01$).

In addition, education is negatively related to single-mother households, meaning that as the number of high-school graduates increases the number of single-mother households decreases. Similar to Finding

2, there is a split between single-mother and single-father households, and there is no significant relationship between single-father households and education levels.

While it is unclear in this analysis which factor causes the other, it is clear that areas typified by a large number of single parents are likely to have greater rates of poverty than those areas with traditional family structures.

Table 3. Family Structure and Poverty by County

| VARIABLES | Poverty Rate |
|---------------------------------|----------------------------|
| <i>Female Head of Household</i> | 36.75*** (2.871) |
| <i>Male Head of Household</i> | 16.23*** (5.168) |
| <i>Black</i> | 2.56e-05*** (7.59e-06) |
| <i>Hispanic</i> | 6.77e-07 (2.21e-06) |
| <i>High School</i> | -0.0156 (0.0255) |
| <i>Population</i> | -6.21e-06*** (2.09e-06) |
| <i>Employed</i> | -23.64*** (3.790) |
| <i>Year</i> | -0.0419 (0.0564) |
| Constant | 100.0 (113.8) |
| Observations | 504 |
| R-squared | 0.646 |

Standard errors in parentheses

As previously mentioned, opioid-related hospitalizations are significantly related to poverty, indicating that as poverty increases so do rates of opioid hospitalizations. Both high school and college graduations have a significant negative relationship with opioid-related hospitalizations, with college graduations more negatively related than high-school graduations. So as people's educational attainment and economic status increase, opioid-related hospitalizations decrease.

CONCLUSION

Family structure and stability are clearly important elements to consider when tackling the opioid crisis, and speak to the underlying social health of a community. As policymakers and local advocates and authorities seek to reverse the tide of the opioid crisis in their cities and states, families should be a priority. Proactive measures that seek to strengthen families are key.

This aligns with studies by researchers such as W. Bradford Wilcox, Wendy Wang, Isabel Sawhill, and Ron Haskins which suggest that completing high school, getting married before having children, and working full-time help people flourish (Wilcox & Wang, 2017; Sawhill, 2018). Strong families and economic stability are critical in protecting communities from the effects of the opioid crisis and keeping children in their homes.

Three things Wisconsin policymakers and local leaders in schools, nonprofits, and business should focus on are:

1. Reducing the number of out-of-wedlock births and educating young people on healthy relationships⁶
2. Ensuring students complete high school and are equipped for the workforce or college
3. Encouraging work among adults and finding ways to engage more adults in the labor force to help achieve greater economic stability and lower the number of people in poverty

Of course, while legislation plays a critical role in all this, it cannot weave social fabric. The onus is also on neighbors, churches and faith communities, and other social institutions to combat the isolationism this country has become plagued with and to work to rebuild the stability and connectedness of their communities.

As Yuval Levin has said, the opioid crisis exists because people are taking drugs “to provide relief from pain. And not just physical pain, but also relief from despair.... And a key part of the reason for that kind of pain does seem to be social breakdown, a loss of family and community networks, and a loss of work” (2018). This means that long-term commitment is required to successfully fight back. He adds that while actions like changing the rules around prescribing medicine can help, more needs to be done. “[I]f the problem is too many people are living in circumstances where the essential prerequisites for thriving—family, faith, community, and work—are not there, to fix that problem really requires community building. And that means it requires a commitment both from government and from civil society and from all of us individually that’s going to take a long time to work itself out.”

Reversing the course of the opioid crisis, strengthening communities, and providing more children with stable and loving homes, are large tasks that require coordinated efforts from public, private, and personal arenas. One of the best places to start is by building up families.

⁶ One example of this can be found in the work of Marline Pearson. <https://www.dibbleinstitute.org/marline-pearson-author/>.

REFERENCES

- Coles, R. L. (June, 2015). Single-Father Families: A Review of the Literature. *Journal of Family Theory & Review*, Vol. 7, No. 2. Retrieved from https://epublications.marquette.edu/cgi/viewcontent.cgi?article=1154&context=socs_fac.
- Final Report of the Speaker's Task Force on Foster Care. (June, 2018). Wisconsin State Assembly.
- Ghertner, R., Baldwin, M., Crouse, G., Radcl, L., & Waters, A. (March, 2018). The Relationship between Substance Abuse Indicators and Child Welfare Caseloads. United States Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from <https://aspe.hhs.gov/system/files/pdf/258831/SubstanceUseCWCaseloads.pdf>.
- Goodnow, N. and Flanders, W. (February, 2018). Flooding the System: Opioids and Out-of-Home Care in Wisconsin. Wisconsin Institute for Law & Liberty. Retrieved from http://www.will-law.org/wp-content/uploads/2018/02/flooding-the-system_opioids-and-ohc_final-1.pdf.
- Levin, Y. (March, 2018). Remarks at the Event 'Interpreting "The Numbers Behind the Opioid Crisis"'. The American Enterprise Institute. Retrieved from <http://www.aei.org/events/interpreting-the-numbers-behind-the-opioid-crisis-remarks-from-sen-mike-lee-r-ut/>.
- Livingston, G. (April, 2018). The Changing Profile of Unmarried Parents. *Pew Research Center*. Retrieved from <http://www.pewsocialtrends.org/2018/04/25/the-changing-profile-of-unmarried-parents/>.
- Memo on Federal Family First Prevention Services Act. (June 2018). Wisconsin Department of Children and Families. Retrieved from <https://dcf.wisconsin.gov/files/cwportal/policy/pdf/memos/2018-24i.pdf>.
- Monnat, S. M. (May, 2018). Factors Associated With County-Level Differences in U.S. Drug-Related Mortality Rates. *American Journal of Preventive Medicine*, Volume 54, Issue 5.
- Monnat, S. M. (Spring 2018). Drug Overdose Rates Are Highest in Places with the Most Economic and Family Distress. *University of New Hampshire, Carsey School of Public Policy*, Issue 134. Retrieved from <https://scholars.unh.edu/cgi/viewcontent.cgi?article=1339&context=carsey>.
- Radcl, L., Baldwin, M., Crouse, G., Ghertner, R., & Waters, A. (March, 2018). Substance Use, the Opioid Epidemic, and the Child Welfare System: Key Findings from a Mixed Methods Study. United States Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. Retrieved from <https://aspe.hhs.gov/system/files/pdf/258836/SubstanceUseChildWelfareOverview.pdf>.
- Sawhill, I. V. (May, 2018). Why Does the Success Sequence Work? Cato Institute. *Cato Unbound: A Journal of Debate*. Retrieved from <https://www.cato-unbound.org/2018/05/11/isabel-v-sawhill/why-does-success-sequence-work>.
- Social Capital Project. (October, 2017). The Numbers Behind the Opioid Crisis. Retrieved from <https://www.lee.senate.gov/public/index.cfm/2017/10/the-numbers-behind-the-opioid-crisis>.
- Stamps, L. E. (Winter, 2002). Age Differences Among Judges Regarding Maternal Preference in Child Custody Decisions. American Judges Association. *Court Review*, Volume 54, Issue 1. Retrieved from <http://aja.ncsc.dni.us/courtrv/cr38-4/CR38-4Stamps.pdf>.
- United States Census Bureau. 5-Year Estimates of the American Community Survey from 2010-2017.

- United States Census Bureau. America's Families and Living Arrangements: 2017; Table C3. Retrieved from <https://www.census.gov/data/tables/2017/demo/families/cps-2017.html>.
- United States Centers for Disease Control and Prevention. Opioid Data Analysis. Retrieved from <https://www.cdc.gov/drugoverdose/data/analysis.html>.
- United States Centers for Disease Control and Prevention. Drug Overdose Death Data. Retrieved from <https://www.cdc.gov/drugoverdose/data/statedeaths.html>.
- United States Centers for Disease Control and Prevention. Vital Signs: Trends in Emergency Department Visits for Suspected Opioid Overdoses in the United States, July 2016-September 2017. Retrieved from <https://www.cdc.gov/mmwr/volumes/67/wr/mm6709e1.htm>.
- Watkins, D. (March 2018). Drug Deaths Are Highest in Regions with More Divorce and Single-Parent Families. *Vice*. Retrieved from https://tonic.vice.com/en_us/article/kzxwdm/us-drug-deaths-map-county-by-county.
- Wilcox, W. B. and Wang, W. (June, 2017). The Millennial Success Sequence: Marriage, Kids, and the 'Success Sequence' Among Young Adults. American Enterprise Institute and Institute for Family Studies. Retrieved from <http://www.aei.org/publication/millennials-and-the-success-sequence-how-do-education-work-and-marriage-affect-poverty-and-financial-success-among-millennials/>.
- Wisconsin Department of Safety and Professional Services. (2018). Controlled Substances Board: Report 3, January 1 – December 31, 2017. Retrieved from <https://pdmp.wi.gov/Uploads/2017%20Yearly%20CSB.pdf>.

APPENDIX: Additional Tables

This table shows the relationship between the rate of children in foster care and married households with children. This includes the control variables used in the other analyses, which are not included in this table for ease of reading.

A1. Rate of Kids in Care and Married Households by County

| VARIABLE | Rate of Kids in Care |
|--------------------------------|-----------------------|
| <i>Married w/ kids Share</i> | -417.50*** (60.19) |
| Standard errors in parentheses | |

This tables shows the relationship between single-mother households and both education and poverty. This includes the control variables used in the other analyses, which are not included in this table for ease of reading.

A2. Female Head of Household and Education by County

| VARIABLES | Female Head of Household |
|--------------------------------|---------------------------|
| <i>High School Graduates</i> | -0.00175*** (0.000292) |
| <i>Poverty Rate</i> | 0.00705*** (0.000520) |
| Standard errors in parentheses | |

