

# MENTAL HEALTH AND EMPLOYMENT IN TANF FAMILIES

by  
Catherine Marie Aprile

A capstone submitted to Johns Hopkins University in conformity with the requirements  
for the degree of Master of Science in Data Analytics and Policy

Baltimore, Maryland  
August 2021

© 2021 Catherine Aprile  
All Rights Reserved

## Abstract

One of the main goals of Temporary Assistance for Needy Families (TANF) is to return parents to work, yet parents receiving TANF experience various barriers to employment that are not easily remedied. One of those barriers is an increased incidence of mental health issues. Previous literature has established a strong connection between mental health and employment, but widespread rigorous studies have not yet determined that mental health care can improve employment outcomes. Using data from California's CalWorks program and multiple regression analysis, this paper demonstrates that for every six individuals from two-parent families referred for mental health services, an additional TANF recipient received a job three, six, nine, and twelve months later. The same results were not demonstrated for non-two-parent families and the TANF population as whole. With this information, states can use their block grant to spend more on mental health to better reach their goal of returning parents to employment.

## Table of Contents

<b>Abstract</b> .....	<b>ii</b>
<b>Introduction</b> .....	<b>1</b>
<b>Literature Review &amp; Theoretical Framework</b> .....	<b>3</b>
<b>Data &amp; Methods</b> .....	<b>10</b>
<b>Results</b> .....	<b>11</b>
<b>Future Research</b> .....	Error! Bookmark not defined.
<b>Conclusion</b> .....	<b>17</b>
<b>Bibliography</b> .....	<b>18</b>
<b>Curriculum Vita</b> .....	<b>21</b>

## Introduction

A major focus of welfare policy is getting parents, especially mothers, back into the workforce. In 1996, PRWORA restructured AFDC into TANF, a block grant that required work as a prerequisite for assistance. To be effective in getting women back to work, TANF administrators should examine all of the barriers poor women face in finding and keeping employment and work to reduce those barriers. One such barrier is poor mental health.

Multiple studies have shown a bi-directional relationship between mental health and employment - loss of employment leads to depression and anxiety, but poor mental health is also a barrier to obtaining and maintaining employment.<sup>1</sup> Other studies have found higher incidences of depression and other mental health issues in poor women, including women on TANF.<sup>2</sup> It therefore stands to reason that improving TANF recipient's mental health would be key to helping some women get and keep a job.

---

<sup>1</sup> Frijters, Paul, David W. Frijters, and Michael A. Shields. 2014. "The Effect of Mental Health on Employment: Evidence from Australian Panel Data." *Health Economics* 23 (9): 1058–71. <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eoh&AN=1459087&site=ehost-live&scope=site>.

Montoya, Isaac D., David C. Bell, John S. Atkinson, Carl W. Nagy, and Donna D. Whitsett. 2002. "Mental Health, Drug Use, and the Transition from Welfare to Work." *The Journal of Behavioral Health Services & Research* 29 (2): 144–56. doi:10.1007/BF02287701.

Veldman, Karin, Sijmen A. Reijneveld, Frank C. Verhulst, Josue Almansa Ortiz, and Ute Bültmann. 2017. "A Life Course Perspective on Mental Health Problems, Employment, and Work Outcomes." *Scandinavian Journal of Work, Environment & Health* 43 (4): 316–25. doi:10.5271/sjweh.3651.

<sup>2</sup> Montoya, Bell, Atkinson, Nagy, and Whitsett, "Mental Health, Drug Use, and the Transition from Welfare to Work."

Chandler, Daniel, Joan Meisel, Pat Jordan, Beth Menees Rienzi, and Sandra Naylor Goodwin. 2005. "Mental Health, Employment, and Welfare Tenure." *Journal of Community Psychology* 33 (5): 587–609. doi:10.1002/jcop.20070.

Daninger, Kalil, and Anderson, "Human capital, physical health, and mental health of welfare recipients." Derr, M.K., Douglas, S., & Pavetti, L. (2001). *Providing Mental Health Services to TANF Recipients: Program Design Choices and Implementation Challenges in Four States* (MPR: 8736-403) Retrieved from <https://www.mathamatica.org/-/media/publications/pdfs/providingmental.pdf>

However, states are spending less than 3% of their block grant on work supports like transportation assistance and supportive services like mental health care and domestic violence support.<sup>3</sup> The structure of the TANF block grant gives states leeway in how they spend the federal dollars, and some states including California, Florida, Oregon, Tennessee, and Utah have seen success using their dollars on mental health care.<sup>4</sup>

Using data from California's CalWorks program, the present study evaluates whether an increase in mental health referrals and services increases employment results three, six, nine, and twelve months later. The results showed the expected relationship only for two parent families - an increase in referrals led to an increase in employment for all future time periods measured. Other services like substance abuse support, domestic violence support, and transportation assistance also influenced future employment numbers.

Many TANF recipients also receive Medicaid, and therefore mental health treatment can be a referral that does not need to come out of TANF funds. Making these referrals where needed is an easy way to get people the services they need and alleviate suffering, all while working towards the goal of TANF to get people back to work.

---

<sup>3</sup>Ali Safawi and Liz Scott, "To Lessen Hardship, States Should Invest More TANF Dollars in Basic Assistance for Families," Center on Budget and Policy Priorities, January 12, 2021, <https://www.cbpp.org/research/family-income-support/to-lesser-hardship-states-should-invest-more-tanf-dollars-in-basic#:~:text=In%202019%20states%20spent%20%243.2,1%20percent%20to%2027%20percent>.

<sup>4</sup> Derr, M.K., Douglas, S., & Pavetti, L. (2001). *Providing Mental Health Services to TANF Recipients: Program Design Choices and Implementation Challenges in Four States* (MPR: 8736-403) Retrieved from <https://www.mathematica.org/-/media/publications/pdfs/providingmental.pdf>

## Literature Review & Theoretical Framework

The connection between mental health and employment has been well established in the literature. Numerous studies have shown that those who are unemployed have worse mental health than those who are employed.<sup>5</sup> Being employed is correlated with improved self-esteem, reduced psychological distress,<sup>6</sup> lower levels of depression, and lower risk of suicide.<sup>7</sup>

Previous literature has also established that mental illness, specifically depression and anxiety can interfere with functioning that is needed to hold down a job.<sup>8</sup> Mental illness is found to cause work impairment, absence, long-term disability,<sup>9</sup> loss of concentration, fatigue, and irritability that present issues with maintaining employment. Workers with depression have more loss of productivity,<sup>10</sup> absenteeism, and reduced

---

<sup>5</sup> Eric, Chinaeke, Gwynn Melanie, Hong Yuan, Zhang Jiajia, and Olatosi Bankole. 2020. "The Positive Association between Employment and Self-Reported Mental Health in the USA: A Robust Application of Marginalized Zero-Inflated Negative Binomial Regression (MZINB)." *Journal of Public Health* 42 (2): 340–52. doi:10.1093/pubmed/fdaa030.

Utzet, Mireia, Erika Valero, Isabel Mosquera, and Unai Martin. 2020. "Employment Precariousness and Mental Health, Understanding a Complex Reality: A Systematic Review." *International Journal of Occupational Medicine and Environmental Health* 33 (5): 569–98. doi:10.13075/ijomeh.1896.01553.

Perreault, Michel, El Hadj Touré, Nicole Perreault, and Jean Caron. 2017. "Employment Status and Mental Health: Mediating Roles of Social Support and Coping Strategies." *Psychiatric Quarterly* 88 (3): 501–14. doi:10.1007/s11126-016-9460-0.

<sup>6</sup> Jacobs, Anna W., Terrence D. Hill, Daniel Tope, and Laureen K. O'Brien. 2016. "Employment Transitions, Child Care Conflict, and the Mental Health of Low-Income Urban Women with Children." *Women's Health Issues* 26 (4): 366–76. doi:10.1016/j.whi.2016.05.003.

<sup>7</sup> Modini, Matthew, Sadhbh Joyce, Arnstein Mykletun, Helen Christensen, Richard A. Bryant, Philip B. Mitchell, and Samuel B. Harvey. 2016. "The Mental Health Benefits of Employment: Results of a Systematic Meta-Review." *Australasian Psychiatry* 24 (4): 331–36. doi:10.1177/1039856215618523.

Berzins, Sandy, Wagner, Robbie Babins, and Kathleen Hyland. 2018. "Relationship of Employment Status and Socio-economic Factors with Distress Levels and Counselling Outcomes during a Recession." *Counselling & Psychotherapy Research* 18 (2): 122–32. doi:10.1002/capr.12164.

<sup>8</sup> Hastings, Julia F., and Lonnie R. Snowden. 2019. "Mental Health Treatment and Work among African American and Caribbean Black Welfare Recipients." *Cultural Diversity and Ethnic Minority Psychology* 25 (3): 342–49. doi:10.1037/cdp0000240.

<sup>9</sup> Modini et.al. "The Mental Health Benefits of Employment: Results of a Systematic Meta-Review."

<sup>10</sup> Frijters, Paul, David W. Frijters, and Michael A. Shields. 2014. "The Effect of Mental Health on Employment: Evidence from Australian Panel Data." *Health Economics* 23 (9): 1058–71. <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eoh&AN=1459087&site=ehost-live&scope=site>.

performance.<sup>11</sup> One study found that 59% of people with depression report high levels of functional impairment and difficulty fulfilling social obligations like holding down a job.<sup>12</sup>

A meta-analysis of studies examining the relationship between work and mental health found that unemployment caused symptoms of distress and impaired well being, especially in men, blue-collar workers, and the long-term unemployed.<sup>13</sup> This effect was found to be worse in countries that did not have a robust unemployment protection system. Another study found that even temporary work led to reduced mental health.<sup>14</sup> The theory behind these results is that lack of work reduces self-esteem, creates stress around income, and removes a sense of purpose in people's lives.

A job provides financial security, relationships, self-esteem, a sense of purpose and control, autonomy, status, acceptance by society, and personal development.<sup>15</sup> However, there are some mediators in the relationship between employment and mental health. In some cases where women are stuck between caring for a young child at home and employment, the conflict between the two roles can lead to more stress.<sup>16</sup> In this study, data from 1999 and a follow up in 2001 showed that those who obtained

---

<sup>11</sup> Reed, Kirk, and Halina Kalaga. 2018. "Focusing on Employment in Primary Mental Health Care: A Scoping Review." *Work* 59 (1): 3–13. doi:10.3233/WOR-172665.

<sup>12</sup> Hastings and Snowden, "Mental Health Treatment and Work among African American and Caribbean Black Welfare Recipients."

<sup>13</sup> Paul, K. L., & Moser, K. (2009). Unemployment impairs mental health: Meta-analysis. *Journal of Vocational Behavior*, 74, 264-282. <https://doi.org/10.1016/j.jvb.2009.01.001>.

<sup>14</sup> Moscone, F., E. Tosetti, and G. Vittadini. 2016. "The Impact of Precarious Employment on Mental Health: The Case of Italy." *Social Science & Medicine* 158 (June): 86–95. doi:10.1016/j.socscimed.2016.03.008.

<sup>15</sup> Jacobs, Hill, Tope, and O'Brien, "Employment Transitions, Child Care Conflict, and the Mental Health of Low-Income Urban Women with Children."

Modini et.al. "The Mental Health Benefits of Employment: Results of a Systematic Meta-Review."

<sup>16</sup> Jacobs, Hill, Tope, and O'Brien, "Employment Transitions, Child Care Conflict, and the Mental Health of Low-Income Urban Women with Children."

employment reported lower symptoms of mental distress and a greater reduction in symptoms of distress than those who remained unemployed.<sup>17</sup> However, for those who had difficulty obtaining childcare, getting a job is associated with an increase in distress and symptoms of depression and anxiety compared to those who remain unemployed.

A cross-sectional study of Montreal found the same result, but found the effect of employment on mental health was mediated by social support, less coping with drugs and medication, and coping with alcohol.<sup>18</sup> They used chi-squares and ANOVAs to compare groups who were employed and those who were not. Those employed full time reported lower levels of distress and depression symptoms and more coping with exercise and alcohol, whereas those who were unemployed reported coping with cigarettes and drugs or medication. Because this was a cross-sectional study and like many of the studies before it, the authors were not able to establish causation - were people depressed because they did not have jobs or did they not have jobs because they had poor mental health? The authors theorized that the effect went both ways – not having a job leads to lower self-worth and income anxiety, while depression and anxiety can interfere with the daily activities of living that are needed to keep a steady job.

A few studies establish this causality using longitudinal study models. Frijters, Johnston, and Shields used ten waves of panel data and an instrumental variable model to show that one standard deviation decrease in mental health leads to a 30% drop in employment - equivalent to twice the effect of having a degree versus dropping out of

---

<sup>17</sup> Jacobs, Hill, Tope, and O'Brien, "Employment Transitions, Child Care Conflict, and the Mental Health of Low-Income Urban Women with Children."

<sup>18</sup> Perreault, Touré, Perreault, and Caron, "Employment Status and Mental Health."

high school.<sup>19</sup> For women, the drop in employment was three times the effect of having an advanced degree versus no degree at all. They also found that unemployment due to mental illness was an issue of people taking themselves out of the job market, not getting fired, and that these effects were larger for low-skill occupations and the private sector. They theorized that people who suffer from depression and anxiety cannot handle the stress and daily tasks of a job, so they leave voluntarily.

Severe mental illnesses may influence employment, but how about mental wellbeing such as self-esteem, hope for the future, and motivation to succeed? A 1983 study of business students measured self-esteem in the last year of school and compared it to how the students later did in the job market.<sup>20</sup> They found that self-esteem was predictive of satisfaction with the job search, evaluations of interviews, number of offers, acceptance of an offer, and length of intended time at the accepted job. Self-esteem accounted for 20% of the variance in interview evaluations by recruiters for the students. The authors theorized that the effect came from the students being more motivated in their search and carrying themselves with more confidence in interviews and interactions with recruiters.

With a similar model, a 1961 cohort of “hard to reach” adolescent boys were treated with a combination of psychotherapy, education, and job placement.<sup>21</sup> After a year in the programs, the researchers found significant improvements in relating to

---

<sup>19</sup> Frijters, Frijters, and Shields, “The Effect of Mental Health on Employment: Evidence from Australian Panel Data.”

<sup>20</sup> Ellis, Rebecca A., and M. Susan Taylor. 1983. “Role of Self-Esteem Within the Job Search Process.” *Journal of Applied Psychology* 68 (4): 632–40. doi:10.1037/0021-9010.68.4.632.

<sup>21</sup> Shore, Milton F., and Joseph L. Massimo. 2014. “Fifteen Years after Treatment: A Follow-up Study of Comprehensive Vocationally-Oriented Psychotherapy.” *American Journal of Orthopsychiatry* 84 (6): 619–23. doi:10.1037/h0100166.

others, guilt, use of words over aggression, and looking forward to the future. They also found that these results held in a five year follow up. In another longitudinal study of adolescents, those with internalizing issues (anxiety or depression) in adolescence worked fewer hours than those with externalizing problems (aggressive or delinquent behavior), had lower income, and found less meaning and satisfaction in their work twelve years later.<sup>22</sup>

Studies of adolescents may provide interesting context, but this study looks at women living in poverty, specifically those on welfare programs like TANF. Studies show that women on TANF are at a higher risk of mental illness. They tend to live in more resource-poor areas where they are more likely to be precariously employed and struggle to find consistent child-care.<sup>23</sup> Additionally, women are at higher risk for mental illnesses<sup>24</sup> and poor and unemployed women have higher incidences of depression than women in general.<sup>25</sup> Various sources show that about one-third of women on TANF are suffering from a mental illness.<sup>26</sup> They also have higher-than-average incidences of

---

<sup>22</sup> Veldman, Karin, Sijmen A. Reijneveld, Frank C. Verhulst, Josue Almansa Ortiz, and Ute Bültmann. 2017. "A Life Course Perspective on Mental Health Problems, Employment, and Work Outcomes." *Scandinavian Journal of Work, Environment & Health* 43 (4): 316–25. doi:10.5271/sjweh.3651.

<sup>23</sup> Jacobs, Hill, Tope, and O'Brien, "Employment Transitions, Child Care Conflict, and the Mental Health of Low-Income Urban Women with Children."

<sup>24</sup> Danzinger, S. K., Kalil, A., & Anderson, N. J. (2002). Human capital, physical health, and mental health of welfare recipients: Co-occurrence and correlates. *Journal of Social Issues*, 56, 635-654. <http://dx.doi.org/10.1111/0022-4537.00189>

<sup>25</sup> Hastings and Snowden, "Mental Health Treatment and Work among African American and Caribbean Black Welfare Recipients."

<sup>26</sup> Montoya, Isaac D., David C. Bell, John S. Atkinson, Carl W. Nagy, and Donna D. Whitsett. 2002.

"Mental Health, Drug Use, and the Transition from Welfare to Work." *The Journal of Behavioral Health Services & Research* 29 (2): 144–56. doi:10.1007/BF02287701.

Danzinger, S. K., Corcoran, M. Danzinger, S. H., Heflin, C., Kalil, A., Levine, J., & Tolman, R. (2000). Barriers to the employment of welfare recipients. In R. Cherry & W. M. Rodgers (Eds.), *Prosperity for all? The economic boom and African Americans* (pp.245-278). New York, NY: Russell Sage Foundation.

Chandler, Daniel, Joan Meisel, Pat Jordan, Beth Menees Rienzi, and Sandra Naylor Goodwin. 2005. "Mental Health, Employment, and Welfare Tenure." *Journal of Community Psychology* 33 (5): 587–609. doi:10.1002/jcop.20070.

Danzinger, Kalil, and Anderson, "Human capital, physical health, and mental health of welfare recipients."

domestic violence, physical health problems, and children's health problems, but not higher incidences of dependency on drugs and alcohol.<sup>27</sup> That higher incidence of domestic violence (15% have an incident in the last year, four to five times the national average) leads to higher incidences of PTSD.<sup>28</sup> All this combines with other barriers to work like skills (most TANF recipients read on a 6th to 8th grade level), understanding of workplace norms and behaviors, and employer discrimination to make it much more difficult for women on TANF to get and keep a job.<sup>29</sup>

There are a few studies of mental health and TANF recipients' employment outcomes, but many of the studies are over twenty years old. The PRWORA welfare reform of 1996, which converted Aid for Dependent Families (AFDC) to Temporary Assistance for Needy Families (TANF) led to a rise in studies to see how people were faring under the new model. TANF is a block grant to states, giving them a lot of freedom to use funds how they please, but one main requirement is the recipients need to be engaged in employment activities, either working or looking for work.

One longitudinal but naturalistic study of TANF recipients found that psychotherapy and employment interventions were associated with higher wages.<sup>30</sup> Their growth curve analysis found that symptoms of depression were associated with less participation in job search activities and greater distress at baseline was associated with low wage growth while decreases in distress were correlated with an increase in wages.

---

Derr, M.K., Douglas, S., & Pavetti, L. (2001). *Providing Mental Health Services to TANF Recipients: Program Design Choices and Implementation Challenges in Four States* (MPR: 8736-403) Retrieved from <https://www.mathematica.org/-/media/publications/pdfs/providingmental.pdf>

<sup>27</sup> Danzinger, et. al. "Barriers to the employment of welfare recipients."

<sup>28</sup> Danzinger, et. al. "Barriers to the employment of welfare recipients."

<sup>29</sup> Danzinger, et. al. "Barriers to the employment of welfare recipients."

<sup>30</sup> Montoya, Bell, Atkinson, Nagy, and Whitsett, "Mental Health, Drug Use, and the Transition from Welfare to Work."

They ultimately found that mental health treatment was associated with an average increase in monthly wages of \$166.

Another 1999 longitudinal sample found that functional impairment and diagnosis of a mental disorder at baseline was associated with whether participants reported working, the number of hours worked, income, and probability of being fired in the second wave.<sup>31</sup> They found that TANF participants with mental health issues were more likely to leave the program due to sanctions and less likely to work. When they do work, they work fewer hours and earn less than those without mental health challenges. The author's theory is that mental health issues interfere with the recipients' ability to complete tasks and related well to others in the workplace.

There is some precedent for providing mental health care to TANF recipients regardless of mental health status. The block grants structure of TANF incentivizes states to give benefits to as few families as possible and not to provide employment support or programming,<sup>32</sup> but it also gives the flexibility to use program funds for things like mental health care. California experimented with using program funds to either provide mental health care or refer participants to mental health care through Medicaid for those with and without diagnosed mental health issues.<sup>33</sup> They found that mental health care had positive effects on both participants' self-judgement of being ready to work and providers' ratings of their ability to look for and maintain a job using a differences-in-

---

<sup>31</sup> Chandler, Meisel, Jordan, Menees Rienzi, and Naylor Goodwin, "Mental Health, Employment, and Welfare Tenure."

<sup>32</sup> Hastings and Snowden, "Mental Health Treatment and Work among African American and Caribbean Black Welfare Recipients."

<sup>33</sup> Chandler, Dan, Pat Jordan, Joan Meisel, and CarolAnn Peterson. Rep. *Outcomes of CalWORKs Supportive Services in Los Angeles County: Mental Health, Year Two*. Sacramento, CA: California Institute for Mental Health, 2005.

differences model. They also found that the length or cost of the services did not have a strong effect on how effective they were. Finally, they found strong investment in the treatment from the participants - 45% attended all or most of their visits, and 64% of them said it was their first time ever receiving mental health care.

All the literature on mental health and employment for TANF recipients is over twenty years old – no modern studies have been done to connect providing mental health care with an increase in employment, and even those old studies did not use robust statistical methods like regression analysis. Overall, it is well established that unemployment leads to depression, and there is some evidence that improvements in mental health lead to improvements in employment. Women receiving TANF are required to work, but also experience a multitude of barriers, including a high incidence of mental health issues. Taking care of those mental health barriers, even for those without a formal diagnosis, could be key to increasing employment in this population.

## Data & Methods

California's TANF support program CalWorks has been providing mental health and addiction recovery support to their welfare population since the early 2000s. They found high incidences of mental health issues, substance abuse, and domestic violence in their welfare population and put funds aside to both refer for services and provide them in-house.<sup>34</sup> They specifically gave treatment not only to those with severe diagnoses, but to others who may see a benefit. In 2005 the program found that for over half of enrollees

---

<sup>34</sup> Chandler, Jordan, Meisel, and Peterson, *Outcomes of CalWORKs Supportive Services in Los Angeles County: Mental Health, Year Two*

this was their first time receiving mental health treatment, and almost half of those given treatment persisted in that treatment.<sup>35</sup> Two-thirds saw an improvement in daily functioning and emotional regulation, and many evaluated that treatment improved their readiness to work.<sup>36</sup>

In fiscal year 2015 the program began collecting data on the number of recipients who received different services and the number of jobs obtained by recipients each month in each county.<sup>37</sup> The data is split into two-parent families and other families. For the purposes of analysis, the data was scaled so each number represented the number of people per 100 enrollees who received a service or referral. Data was from July 2015 to April 2021, the latest information available.

The dependent variable of interest was employment obtained. For the regression models, employment was lagged three, six, nine, and twelve months to see how the effect of services offered would affect employment in future months. Year fixed effects were also included for each model to control for differences in the economy and other external conditions that could affect enrollees' ability to obtain employment.

## Results

Overall, the mean number of enrollees per county per month was 604 two-parent family enrollees, 1,536 other family enrollees, and 2,140 enrollees overall. The maximum

---

<sup>35</sup> Chandler, Jordan, Meisel, and Peterson, *Outcomes of CalWORKs Supportive Services in Los Angeles County: Mental Health, Year Two*

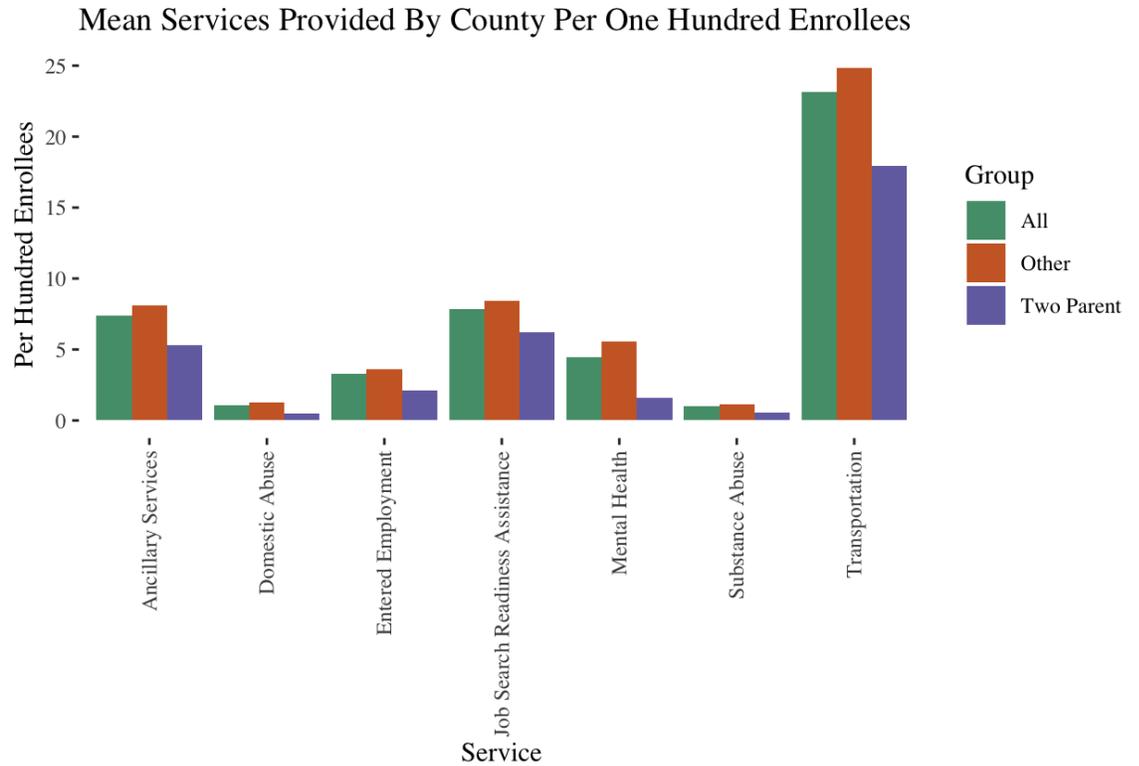
<sup>36</sup> Chandler, Jordan, Meisel, and Peterson, *Outcomes of CalWORKs Supportive Services in Los Angeles County: Mental Health, Year Two*

<sup>37</sup> CalWORKs Data Tables WTW 25 - CalWORKs Welfare-To-Work Monthly Activity Report. (2021, July 2). <https://www.cdss.ca.gov/inforesources/research-and-data/calworks-data-tables>.

number of enrollees in a given month in a county was 56,308 and the minimum was zero. Transportation assistance was the most often-provided service, with about a quarter of enrollees receiving it in a given month, and substance abuse and domestic abuse treatment were the least often offered with only one per one hundred enrollees per month on average. Means for all services offered and employment obtained are reported per 100 enrollees in figure 1.

All services, especially mental health treatment, the dependent variable of interest, were offered much more often to non-two-parent households. For example, only about one per 100 enrollees from two parent households were offered mental health assistance, while six per 100 enrollees from other households received services. Two parent enrollees also were less likely to get jobs overall, with only three per 100 gaining employment each month compared to 4 for other families.

Based on the theories in previous literature, providing mental health treatment is expected to be associated with a higher employment rate in future months. Mental health treatment improves the recipients' self-esteem, helps them related better to others, and equips them to deal with the daily tasks of living that are necessary to obtain employment.



*Figure 1*

Models lagged three, six, nine, and twelve months showed similar results. Coefficients are reported in table 1.

The independent variable of interest, mental health treatment and referrals, had a statistically significant effect on future employment for two parent families only. For every five to six people from two-parent families given mental health treatment, one would get a job three, six, nine, and twelve months later. This supports the hypothesis that providing mental health treatment leads to more employment for welfare recipients.

It is interesting that the effect of mental health treatment was only significant for two-parent family enrollees because they received services at a much lower rate than non-two-parent enrollees. Only about one per 100 enrollees from two parent households

were offered mental health assistance, while six per 100 enrollees from other households received services. Many of the previous studies looked specifically at single mothers and the effect that mental health had on their ability to obtain employment, but the present model did not find a significant effect for that group. It may be that external stressors and lack of outside support kept mental health treatment from being as effective as it could have been for this population. Perhaps enrollees from two parent families are more likely to have the support needed outside of treatment to improve their mental health and obtain employment, or perhaps the support of a co-parent helps them stay in treatment longer.

Referrals for substance abuse treatment were significant for both two-parent and other families, but it had the effect of decreasing employment. For example, for every three people from two parent families referred for substance abuse treatment, one fewer person would get a job twelve months later. This may be because addiction is such a difficult illness to treat; the referrals were really measuring the number of people with a substance abuse problem, and the treatment was not effective at combating their addiction, leading to lower levels of employment.

Domestic abuse treatment and referrals led to higher employment across the board for all types of families and all time periods measured. In general, for every ten people referred for domestic abuse services, one person got a job three, six, nine, and twelve months later.

Finally, transportation assistance led to more jobs in all time periods measured. For every twelve people given transportation assistance, one got a job three and six months later. Transportation assistance is a cheap and easy-to-provide benefit, so these results are promising.

Childcare provided did not have a significant effect on employment, but it was provided so rarely (less than one per 100 enrollees) that the model is not a reliable measure of its effectiveness.

### Results of Multiple Regression Analysis

	3 Month Lagged			6 Month Lagged			12 Month Lagged		
	All	Two-Parent	Other	All	Two-Parent	Other	All	Two-Parent	Other
<b>Job Search Readiness</b>	-0.024*** (0.005)	0.006 (0.005)	-0.020*** (0.005)	-0.025*** (0.005)	0.001 (0.005)	-0.019*** (0.005)	0.022*** (0.005)	-0.0003 (0.005)	-0.17*** (0.005)
<b>Mental Health</b>	0.001 (0.008)	0.178*** (0.017)	0.010 (0.008)	-0.007 (0.008)	0.168*** (0.017)	-0.0004 (0.008)	-0.011 (0.008)	0.188*** (0.016)	0.006 (0.008)
<b>Substance Abuse</b>	-0.021 (0.016)	-0.295*** (0.035)	-0.084*** (0.021)	-0.009 (0.016)	-0.286*** (0.034)	-0.061** (0.021)	0.001 (0.015)	-0.310*** (0.032)	-0.064** (0.020)
<b>Domestic Abuse</b>	0.137*** (0.011)	0.148*** (0.013)	0.100*** (0.012)	0.121*** (0.011)	0.127*** (0.013)	0.087*** (0.012)	0.093*** (0.010)	0.089*** (0.012)	0.067*** (0.011)
<b>Transportation</b>	0.082*** (0.003)	0.053*** (0.003)	0.081*** (0.003)	0.082*** (0.003)	0.053*** (0.003)	0.081*** (0.003)	0.075*** (0.003)	0.048*** (0.003)	0.073*** (0.003)
<b>Ancillary Services</b>	0.011 (0.006)	0.004 (0.006)	0.015* (0.006)	0.008 (0.006)	0.003 (0.006)	0.012 (0.006)	0.008 (0.006)	-0.002 (0.006)	0.011 (0.006)
<b>Childcare</b>	-0.175 (0.431)	0.088 (0.226)	-0.519 (0.531)	-0.204 (0.428)	-0.023 (0.224)	-0.519 (0.529)	-0.125 (0.411)	-0.220 (0.211)	0.127 (0.504)
<b>Adjusted R-squared</b>	0.67	0.46	0.64	0.65	0.45	0.63	0.64	0.44	0.62
Significance Codes	0.001 ***	0.01 **	0.05 *						

Table 1

## Conclusion

The focus of TANF is to get families off of the program as quickly as possible, usually through obtaining gainful employment, while providing as few services as possible to save limited program funds. In order to get TANF recipients back to work, policymakers should focus their block grant funds on removing the barriers to work that are more common for TANF families than others. Past studies have shown the mental health issues are more prevalent in the TANF population and that those mental health issue can prove to be serious impediments to getting and keeping employment. As proven here, providing mental health care either directly or through referrals to Medicaid services can have a substantial impact on future employment attainment for two-parent families over the following year. Further studies should look to tease out the differences in this effect between two parent and other families, as it may be that other families need additional supports for mental health care to effect employment.

A key limitation of the models in this paper is that they were run with aggregate data, so causation at the individual level cannot be determined. Future data collection should look at individuals referred for mental health treatment and their future employment. They could also measure persistence in treatment, as many people referred to or enrolled in services may not attend or continue past the first session. Models that use data such as this could show that more sessions with a mental health professional lead to better future employment prospects and perhaps can measure persistence in employment as well.

## Bibliography

- Berzins, Sandy, Wagner, Robbie Babins, and Kathleen Hyland. 2018. "Relationship of Employment Status and Socio-economic Factors with Distress Levels and Counselling Outcomes during a Recession." *Counselling & Psychotherapy Research* 18 (2): 122–32. doi:10.1002/capr.12164.
- CalWORKs Data Tables WTW 25 - CalWORKs Welfare-To-Work Monthly Activity Report. (2021, July 2). <https://www.cdss.ca.gov/inforesources/research-and-data/calworks-data-tables>.
- Chandler, Daniel, Joan Meisel, Pat Jordan, Beth Menees Rienzi, and Sandra Naylor Goodwin. 2005. "Mental Health, Employment, and Welfare Tenure." *Journal of Community Psychology* 33 (5): 587–609. doi:10.1002/jcop.20070.
- Danzinger, S. K., Corcoran, M. Danzinger, S. H., Heflin, C., Kalil, A., Levine, J., & Tolman, R. (2000). Barriers to the employment of welfare recipients. In R. Cherry & W. M. Rodgers (Eds.), *Prosperity for all? The economic boom and African Americans* (pp.245-278). New York, NY: Russell Sage Foundation.
- Danzinger, S. K., Kalil, A., & Anderson, N. J. (2002). Human capital, physical health, and mental health of welfare recipients: Co-occurrence and correlates. *Journal of Social Issues*, 56, 635-654. <http://dx.doi.org/10.1111/0022-4537.00189>
- Derr, M. K., Douglas, S., & Pavetti, L. (2001). Providing Mental Health Services to TANF Recipients: Program Design Choices and Implementation Challenges in Four States (MPR: 8736-403) Retrieved from <https://www.mathematica.org/-/media/publications/pdfs/providingmental.pdf>
- Ellis, Rebecca A., and M. Susan Taylor. 1983. "Role of Self-Esteem Within the Job Search Process." *Journal of Applied Psychology* 68 (4): 632–40. doi:10.1037/0021-9010.68.4.632.
- Eric, Chinaeke, Gwynn Melanie, Hong Yuan, Zhang Jiajia, and Olatosi Bankole. 2020. "The Positive Association between Employment and Self-Reported Mental Health in the USA: A Robust Application of Marginalized Zero-

- Inflated Negative Binomial Regression (MZINB).” *Journal of Public Health* 42 (2): 340–52. doi:10.1093/pubmed/fdaa030.
- Frijters, Paul, David W. Johnston, and Michael A. Shields. 2014. “The Effect of Mental Health on Employment: Evidence from Australian Panel Data.” *Health Economics* 23 (9): 1058–71.  
<http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eoh&AN=1459087&site=ehost-live&scope=site>.
- Hastings, Julia F., and Lonnie R. Snowden. 2019. “Mental Health Treatment and Work among African American and Caribbean Black Welfare Recipients.” *Cultural Diversity and Ethnic Minority Psychology* 25 (3): 342–49. doi:10.1037/cdp0000240.
- Jacobs, Anna W., Terrence D. Hill, Daniel Tope, and Lauren K. O’Brien. 2016. “Employment Transitions, Child Care Conflict, and the Mental Health of Low-Income Urban Women with Children.” *Women’s Health Issues* 26 (4): 366–76. doi:10.1016/j.whi.2016.05.003.
- Kramer, Fredrica D., and Washington, DC. Welfare Information Network. 2001. “Screening and Assessment for Physical and Mental Health Issues That Impact TANF Recipients’ Ability To Work.” *Issue Notes* 5 (3).  
<http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eric&AN=ED451415&site=ehost-live&scope=site>.
- Modini, Matthew, Sadhbh Joyce, Arnstein Mykletun, Helen Christensen, Richard A. Bryant, Philip B. Mitchell, and Samuel B. Harvey. 2016. “The Mental Health Benefits of Employment: Results of a Systematic Meta-Review.” *Australasian Psychiatry* 24 (4): 331–36. doi:10.1177/1039856215618523.
- Montoya, Isaac D., David C. Bell, John S. Atkinson, Carl W. Nagy, and Donna D. Whitsett. 2002. “Mental Health, Drug Use, and the Transition from Welfare to Work.” *The Journal of Behavioral Health Services & Research* 29 (2): 144–56. doi:10.1007/BF02287701.
- Moscone, F., E. Tosetti, and G. Vittadini. 2016. “The Impact of Precarious Employment on Mental Health: The Case of Italy.” *Social Science & Medicine* 158 (June): 86–95. doi:10.1016/j.socscimed.2016.03.008.

- Perreault, Michel, El Hadj Touré, Nicole Perreault, and Jean Caron. 2017. "Employment Status and Mental Health: Mediating Roles of Social Support and Coping Strategies." *Psychiatric Quarterly* 88 (3): 501–14. doi:10.1007/s11126-016-9460-0.
- Reed, Kirk, and Halina Kalaga. 2018. "Focusing on Employment in Primary Mental Health Care: A Scoping Review." *Work* 59 (1): 3–13. doi:10.3233/WOR-172665.
- Safawi, Ali, and Liz Scott. "To Lessen Hardship, States Should Invest More TANF Dollars in Basic Assistance for Families." Center on Budget and Policy Priorities, January 12, 2021. <https://www.cbpp.org/research/family-income-support/to-lessen-hardship-states-should-invest-more-tanf-dollars-in-basic#:~:text=In%202019%20states%20spent%20%243.2,1%20percent%20to%2027%20percent>.
- Shore, Milton F., and Joseph L. Massimo. 2014. "Fifteen Years after Treatment: A Follow-up Study of Comprehensive Vocationally-Oriented Psychotherapy." *American Journal of Orthopsychiatry* 84 (6): 619–23. doi:10.1037/h0100166.
- Utzet, Mireia, Erika Valero, Isabel Mosquera, and Unai Martin. 2020. "Employment Precariousness and Mental Health, Understanding a Complex Reality: A Systematic Review." *International Journal of Occupational Medicine and Environmental Health* 33 (5): 569–98. doi:10.13075/ijomeh.1896.01553.
- Veldman, Karin, Sijmen A. Reijneveld, Frank C. Verhulst, Josue Almansa Ortiz, and Ute Bültmann. 2017. "A Life Course Perspective on Mental Health Problems, Employment, and Work Outcomes." *Scandinavian Journal of Work, Environment & Health* 43 (4): 316–25. doi:10.5271/sjweh.3651.

## Curriculum Vita

Catherine Marie Aprile was born Catherine Marie Gold in Bennington, Vermont. She received her Bachelor of Arts degree in Public Policy from Hamilton College in Clinton, NY in May of 2014. During her time at Hamilton, she studied Public Health and Indigenous Medicine through SIT in Arica, Chile and researched and wrote a thesis on Public Health Education and Obesity. For her final thesis of her bachelor's degree, she researched immigrant parents' involvement in their children's elementary education. She expects to graduate with a Masters of Data Analytics and Policy from Johns Hopkins University in August 2021.