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Ronald Sowadski

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The purpose of this study was to examine whether there are differences in gender-related pay equity in the public sector, among states, and industries in the United States. The study was conducted with archival data from The American Community Survey. Results of two one-way ANOVAs showed a significant difference in the gender-related pay equity among the 51 states (including D.C.), $F(50, 1740) = 1.69$, $p = 0.019$, *and* among the five major industries, $F(4, 1735) = 17.00$, $p < 0.01$. These empirical findings provide a basis for developing policies to address pay inequity.

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I. INTRODUCTION

Since 1964, pay equity has been a social issue that the government, the entity responsible for the regulation of pay, has not been able to solve. The issue of pay equity is partly due to the lack of a complete dataset (Wade & Fiorentino, 2017). This study and the pay equity problem are based on equity theory, fair distribution of contributions, and benefits for each person (Adams, 1965). Previous scholars have utilized equity theory to research pay equity (Dennis, 2016; Rosado, 2018; Smit & Montag-Smit, 2019). Various laws and acts have been implemented; however, little progress has been made with this social issue. Regardless of the multiple federal laws implemented, women still earn less than men (White, 2019). Over the last century, the gender-related pay equity issue has narrowed, but it remains sizable (Phillips, 2018). The federal government has stated that the pay equality gap is 20% and will take another 130 years to solve (Geoghegan, 2018; Phillips, 2018; Rosado, 2018). This study may expose what states and industries contribute to the social problem of inequity and provide evidence that can provoke change.

The body of research on pay equity has common themes, including laws, acts of legislation, government changes, societal awareness, and human resource departments' responsibilities (Burn, 2018; Dennis, 2016; Smit & Montag-Smit, 2019; Swain, 2019). Future research requires assessing why the gender-related pay equity issue has not been researched more thoroughly despite the Pay Equity Pay Act being passed in 1963. At the current rate, the gender-related pay equality issue will not be closed until the year 2152 (Lobel, 2020; Phillips, 2018; Rosado, 2018). This study's findings may result in changed legislation at all levels of government and society, thereby improving the risk of obesity, heart attacks, depression, and social/financial inequity of 74.6 million women.

Additional scientific knowledge of pay equity is required. The benefits of this study may provide societal results that can change the U.S. economy while enhancing the discipline of industrial-organizational psychology. An additional 512.6 billion dollars would enter the United States economy if women were paid equally to men (Schulze, 2018). The United States gross national profit is 19.61 trillion dollars, providing almost a 3% increase in the United States economy. A 512.6 billion dollar per year influx into the economy would positively change American society.

The adverse effects of the gender-related pay equity issue are felt throughout the economy and society. Pay equity is a topic that affects 74.6 million women workers in the civilian labor force (DeWolf, 2017). Equal pay between men and women would reduce poverty for working women from 8.2 to 4%. Each of the 50 states would benefit from increased funds into their economies (Status of Women, 2020). The most significant adverse effect of gender wage inequality is that pay equity issues contribute to increased anxiety and depression rates among women (Platt et al., 2016). In a partnership with the Center for Workplace Mental Health, the American Psychiatric Association expressed significant concern about gender-related pay equity. The President of the American Psychiatric Association stated that gender-related pay equity issues are more impactful than economic issues and contribute to mental disorders (American Psychiatric Association, 2020). Furthermore, more recent researchers have shown that income inequality increases the risk of obesity and heart attack (Pabayo et al., 2018). It is fair to say that the adverse effects of gender-related pay equity are significant to American society.

Previous researchers studying this topic have used limited and small sample sizes, which required additional research. Obloj and Zenger (2020) researched pay equity with a sample size of only eight of the 50 states. Additionally, these authors focused on 139 institutions, representing a limited sample size within the eight states. Cortés and Pan (2019) researched pay equity, finding the study's most significant limitation to be the sample size and the need to assess industry data. The sample size only included 25 United States cities, not representing all 50 states or entire states, and did not consider industry data. Goldin (2017) identified a limitation of his pay equity studies, which included 23 out of the 50 states of the United States and only had metropolitan areas, not the entire state. Blau and Kahn (2017) researched the gender-related pay equity issue utilizing a sample size of less than 25,000 participants, not representing all 50 states and requested an entirely nationally representative dataset. Rosado (2018) researched gender-related pay equity issues trends but identified limitations in her qualitative study. Rosado asked for future research to provide a larger sample size, industry assessment, and the use of a quantitative research methodology. The previous literature gap of limited sample size has led to the need for a qualitative nationwide data set that includes all 51 states (including D.C.) and industry assessment.

Additional gaps were found in the previous literature. Previous literature utilized outdated sample data, which required further research. Many previous studies that had limitations of sample size also utilized obsolete datasets. Cortés and Pan (2019) researched pay equity and used a dataset that was eight years old at completion. The dataset that was used was the 2011 American Community Survey data. Blau and Kahn's (2017) gender earning equity study utilized a 2010 dataset that was seven years old at completion and requested future research to assess occupations and industries. Goldin (2017) researched gender earning equity utilizing a 17-year-old dataset from 2000. In the current study, the researcher used the most up-to-date dataset to ensure the validity of the results.

The U.S. Census Bureau and American Community Survey data are the most appropriate datasets for assessing state and industry-level data. Statistics are given from a national perspective to cover individual states and industries. This study may provide gender-related pay equity data by state and industry, with added analyses of potential social and economic factors contributing to pay equity issues.

II. METHODS

This quantitative, nonexperimental, comparative study aimed to examine differences in gender-related pay equity across states and industries in the U.S. economy's public sector. The study was conducted using archival data from the 2017 American Community Survey. Out of 3,526,808 responses to that survey, only 2,145,639 were retained in the final dataset because the United States Census Bureau only accepts fully completed surveys. The researcher downloaded survey data aggregated at the subindustry level by state. The dataset analyzed in this study included 1,834 data points representing 36 subindustries X 51 states (including D.C.). District of Columbia lacked data from two subindustries within the significant industry of Natural resources, construction, and maintenance (i.e., farming, fishing, forestry, and construction and extraction occupations). Explaining why the total number of cases in the data file was 1,834 instead of 1,836. There were 36 subindustries within each state, with the exception of the District of Columbia, which had only 34 subindustries. Subindustry data points best represented the total population.

The independent variables were state and industry and compared 1,834 data points for 36 subindustries within each of the 51 states (including D.C.) The dependent variable was gender-related pay equity, operationalized as the proportion of women's pay relative to men's pay at the subindustry level in each state (measured on a ratio scale as a percentage). Previous scholars have called for investigating this topic using a quantitative research method approach (Rosado, 2018; Swain, 2019). A more robust conclusion of statistical assessment to compare data between the studies and variables may increase analytical and generalized effectiveness utilizing a quantitative research method. The data analysis provided information about gender-related pay equity in all 50 states plus the District of Columbia and the industries within each state.

Gender-related pay data were analyzed with IBM SPSS Statistics software to assess gender-related pay equity specifics. The U.S. Census Bureau administered the 2017 American Community Survey, and this dataset provided a significant amount of gender-related pay data for men and women at an individual state level. Gender-related pay data retrieved from the United States Census Bureau (American Community Survey) were analyzed to assess the gender-related pay equity percentage between men and women. The American Community Survey raw data provided the percentage of gender-related pay equity for each subindustry within each state. In this study, the percentage of gender-related pay represents the compensation ratio between men and women. Higher percentages indicated better pay equity for women relative to men. Values below 100% indicated that women were paid less than men, and percentages above 100% indicated that women were paid more than men. States were broken into the five major industries to assess industry bias. The 2017 American Community Survey raw dataset provided all data points (percentages).

The variables were gender-related pay equity, state, and industry. It is important to note that the dependent variable of gender-related pay equity was utilized for both research questions. The analysis involved two ANOVA tests comparing states and industries regarding the dependent variable. A Bonferroni (1936) correction was applied to the statistical significance level to prevent Type I error inflation. The corrected alpha became .025 (.05 / 2 = .025). The following research questions and corresponding hypotheses guided this quantitative comparative study:

RQ_1: Are there any statistically significant differences in gender-related pay equity among the 51 states (including D.C.) in the United States public sector?
$H1_0$: There is no statistically significant difference in gender-related pay equity among the 51 states (including D.C.) in the United States public sector.
H1a: At least one statistically significant difference in gender-related pay equity among the 51 states (including D.C.) in the United States public sector.
RQ_2: Are there any statistically significant differences in gender-related pay equity among the five major industries in the United States public sector?
$H2_0$: No statistically significant difference in gender-related pay equity among the five major industries in the United States public sector.
H2a: At least one statistically significant difference in gender-related pay equity among the five major industries in the United States public sector.

3.1 Population and Sample Selection

This study's general population was 2.1 million respondents to the American Community Survey of men and women from the United States public sector. All 50 states, as well as the District of Columbia, were included. Additionally, the five major industries in each state were included. The original 2.1 million data points were archival data from the United States Census Bureau. Data authorization was obtained from the United States Census Bureau the Center for Economic Studies (CES), which provides public-use data.

Email confirmation of approval and consent to utilize the United States Census Bureau data was completed (see Appendix B). If permission from the United States Census Bureau had not been obtained, other public archival databases would have been considered.

Addressing the problem statement and answering both gender-related pay equity research questions required two one-way ANOVAs of aggregated archival data collected from the United States Census Bureau data (American Community Survey). The aggregated archival was retrieved from the 2017 ACS dataset. Raw data were aggregated to provide a single data point for each of the 36 subindustries from each of the 51 states (including D.C.), representing the 1,834 data points (the District of Columbia lacked data from two subindustries). The unit of observation in the survey was the individual respondent, and the unit of analysis subindustry was identified by state and utilized for analysis. The unit of analysis had dual identification: subindustry X state (36 subindustries X 51 states = 1836 cases). Since the unit of analysis had dual identification, pay data (unit of study) from the 36 subindustries represent the dataset for both questions.

The ACS data are archival and publicly accessible, indicating that no participant approvals were needed. Sample and target sizes were the same because the archive includes 2.1 million data points. The original 2017 ACS dataset included 3,526,808 responses. The final data set consisted of 2,145,639 data points because the United States Census Bureau only accepts fully completed surveys. The original 2.1 million data points were compared to 1,834 data points for analyses (i.e., 51 states (including D.C.) and the 36 subindustries within each state). District of Columbia did not contain two data points. The data from two subindustries resulted in a total dataset of 1,834 compared to 1,836. The two subindustries not represented in the District of Columbia are within the significant Natural resources industry, construction and maintenance. The two subindustries are farming, fishing, forestry, and construction and extraction occupations.

The United States Census Bureau has a minimal standard confidence level of 90%, with the margin of error (MOE) = 1.645 x S.E. S.E. stands for Standard Error (S.E.), the foundational measure of the variability of an estimate due to sampling. The Census Bureau states alternate confidence levels in data 95% and 99%, MOE = 1.96 x S.E., and 2.58 x S.E. Achieving the highest level of confidence in information is critical; utilizing a larger geographical size and combining estimates across characteristics and geographies lowers the risk of estimate sampling variability (Fuller, 2018). This researcher used a large eographic size of all traits to achieve 99% confidence in data integrity.

Table 3: United States Census Bureau Confidence Chart

Confidence Level	Margin of Error (MOE)	MOE, for Example Estimate
90%	1.645 x S.E.	+/- 3,778
95%	1.96 x S.E.	+/- 4,501
99%	2.58 x S.E.	+/- 5,925

2.2 Instrumentation

The data source used in this study was the U.S. Census Bureau, which collected the data through the American Community Survey (ACS). The 2017 ACS collected data from 2.1 million public sector employees. The United States Census Bureau collects data through two survey methods: online and paper. The United States Census Bureau seeks to obtain a significant majority of data collected through the website, online survey, and a mail-in option. The U.S. Census Bureau results are required under law 13, U.S. Code, Sections 141, 193, 221, and inform how 675 billion dollars of federal dollars are dispersed across the country. The distribution of 675 billion dollars is 29 percent of all United States federal assistance.

2.3 Data Analysis

Two one-way ANOVA analyses were used to compare gender-related pay equity across states and industries. IBM SPSS statistics software was used for the entire analysis. Previous researchers have analyzed incomplete data without national data broken down by state, requiring a larger, more diverse sample size (Blau & Kahn, 2017; Cortés & Pan, 2019; Goldin, 2017; Obloj & Zenger, 2020). The minimum sample size for this quantitative, nonexperimental, comparative research was estimated in G*Power 3.1.9.7. for two one-way ANOVAs (fixed effects, omnibus, one-way) with the same dependent variable and distinct, independent variables. The input included an expected medium effect size (f = .25), corrected alpha (.025), minimum power .95 (meaning 5% risk of type II error), and the maximum number of compared groups (51). The estimated minimum sample was 816 cases (gender-related pay ratio between men and women), with complete data for each research question (see Appendix F). The researcher added that 15% (123 cases) discard outliers or use nonparametric tests in case of unresolved assumption violations for the preferred parametric analysis. The minimum sample size was raised to 939 instances. The final sample included 1,834 cases (gender-related pay ratio between men and women) and exceeded the minimum sample size for both research questions.

IBM SPSS 25 premium statistics were performed with a multi-step process.

1. State data were downloaded from the United States Census and American Community Survey databases in a CSV format importable to IBM SPSS premium statistics software.
2. Each state, the District of Columbia, and industry was assigned a number representing analysis for SPSS.
3. A state and the District of Columbia data point included 36 individual industries within each state and the District of Columbia.
4. State and the District of Columbia data were calculated to represent a total dataset of 1,834 data points for analyses (51 states, including D.C.) and the 36 subindustries within each state).
5. A CSV file was organized to represent the gender-related pay equity for 1,834 data points for analyses (51 states, including D.C.) and the 36 subindustries within each state).
6. The five major industries are defined from the original 36 subindustries. Archival data provide significant industry data points.
7. The CSV file was imported into IBM SPSS 25 premium statistics software.
8. The analysis process compared the means through the gender-related pay equity rate test of the variable of the 1,834 data points.
9. With state data collection into IBM SPSS format, a CSV file was imported into IBM SPSS 25 premium statistics software.
10. The six assumptions for one-way ANOVA were tested using the Shapiro-Wilk, Levene, and Kolmogorov-Smirnov tests.
11. If the sample failed assumptions, then a nonparametric test had to be performed for both sets of independent groups.
12. IBM SPSS univariate options were set to descriptive statistics and homogeneity of variance test.
13. The level of statistical significance was corrected to .025 to mitigate inflation of type I error (Bonferroni, 1936).
14. The one-way ANOVA analysis assessed data interaction utilizing a general linear model and univariate analysis.
15. The univariate analysis variables defined a dependent variable of rate (gender-related pay equity), state, and industry factors.
16. IBM SPSS was used to analyze the data.

III. RESULTS

In this nonexperimental comparative study, the researcher compared data collected from the United States Census and the American Community Survey in 2017. The dataset enabled the researcher to examine a nationwide sample. The nonexperimental comparative method provided the research framework to compare gender-related pay equity between men and women in all 50 states, the District of Columbia, and five significant industries (36 subindustries).

The dependent variable was gender-related pay equity. This variable was operationalized as the proportion of women's pay relative to men's pay at the subindustry level by state. In addition, the sample of data is per individual state data in the United States. The descriptive statistics summaries of the gender-related pay equity are shown in Tables 1 and 2. The mean gender-related pay equity for the general population is 74.73% (SD = 14.24%).

The highest gender-related pay equity in the dataset is 118.16%, while the lowest gender-related pay equity of the general population is 32.71%, shown in Tables 1 and 2. It should be noted that male samples have higher pay data than female samples because the percentage is below 100%. The results mean that men are in favor of women (women are paid less than men). Thus, a gender-related pay equity issue was observed; however, the significance of the difference in gender-related pay equity was determined using a one-way ANOVA to determine a significant difference in gender-related pay equity by states and industry of the United States public sector.

Table 2 refers to the revised composite abuse scale (CAS_R-SF). The revised combined abuse scale refers to the relationship, meaning a current partner. A primary interpretation of CAS_R-SF is to validate the reliable brief of self-reporting measurement developed using a mixed-method approach. The majority focus of CAS_R-SF is on the severity and intensity of the data point captured.

Table 1: Descriptive Statistics Summaries of Gender-Related Pay Equity Data

Median earnings (%)	*N*	Minimum	Maximum	*M*	*SD*
Gender-Related Pay Equity	1791	32.71%	118.16%	74.73%	14.24%

Table 2: Descriptive Statistics for Gender-Related Pay Equity Variables Measured as CAS_R-SF (N = 1,791)

CAS_R-SF	Mean	Median	Standard Deviation	Standard Error	*z*-Skewness	*z*-Kurtosis
Median Earnings	74.73%	74.71%	14.24%	0.34%	-0.02	0.13

RQ1: Are there any statistically significant differences in gender-related pay equity among the 51 states (including D.C.) in the United States public sector?

The results presented in Table 3 indicate a statistically significant difference across the 51 states (including D.C.) in terms of gender-related pay equity, $F(50, 1740) = 1.69$, $p = 0.019$. The difference is significant because the *p*-value is below the corrected level of significance value (α = .025). No post hoc tests were performed because of the vast number of compared groups (51). Based on these findings, which showed statistically significant differences in gender-related pay equity across the 51 states (including D.C.) for U.S. public sector employees, the null hypothesis for Research Question 1 was rejected.

Table 3: Results of One-Way ANOVA for Gender-related Pay Equity by State

Confidence Level	Margin of Error (MOE)	MOE, for Example Estimate
90%	1.645 x S.E.	+/- 3,778
95%	1.96 x S.E.	+/- 4,501
99%	2.58 x S.E.	+/- 5,925

States with the lowest gender-related pay equity, women were paid lowest to men (measured as the percent difference between the median values for males and females) were Idaho (*M* = 66.91%; *SD* = 16.55%), Utah (*M* = 67.53%; *SD* = 15.35%), Louisiana (*M* = 69.53%; *SD* = 12.66%), Wyoming (*M* = 70.80%; *SD* = 18.93%), and Connecticut (*M* = 71.58%; *SD* = 13.31%). The states with the highest (i.e., best) gender-related pay equity were the District of Columbia (*M* = 81.69%; *SD* = 13.31%), Nevada (*M* = 81.18%; *SD* = 73.86%), Arizona (*M* = 80.67%; *SD* = 11.75%), Vermont (*M* = 79.55%; *SD* = 17.82%), and Maryland (*M* = 79.15%; *SD* = 14.17%).

RQ_2: Are there any statistically significant differences in gender-related pay equity among the five major industries in the United States public sector?

The categorical independent variable defined five groups that were compared: (1) management, business, science, and art occupations; (2) service occupations; (3) sales and office occupations; (4) natural resources, construction, and maintenance occupations, and (5) production occupations. A level of significance of .025 was also used in the one-way ANOVA. The one-way ANOVA results determined the importance of the difference in gender-related pay equity by industry; the results are shown in Table 4. The one-way ANOVA revealed a significant difference in gender-related pay equity among the five major industries, $F(4, 1735) = 17.00$, $p < .001$ *(Table 4)*. There is a significant difference because the *p*-value corresponding to the *F* statistic is lower than the corrected level of significance ($\alpha = .025$). It is important to note that the analysis of the significant industries had 51 fewer data points since "civilian employed population 16 years and over with earnings" does not have a specific industry since it represents all data points that were not explicitly classified under one of the five major industries. The post hoc test results of the Games-Howell tests (Table 5) identified the statistically significant differences for multiple pairings of groups. Specifically, there were substantial differences in the gender-related pay equity between management, business, science, and art occupations and natural resources, construction, and maintenance occupations ($p < 0.001$) by a mean difference of 4.34%. There were significant differences in the gender-related pay equity between management, business, science, and art occupations and production occupations ($p < 0.001$) by a mean difference of 8.35%. There were significant differences in the gender-related pay equity between service occupations and natural resources, construction, and maintenance occupations ($p = 0.01$) by a mean difference of 4.14%. There were significant differences in the gender-related pay equity between service occupations and production occupations ($p = 0.001$) by a mean difference of 4.75%. Also, there was a significant difference in the gender-related pay equity between sales, office, and production occupations ($p < 0.001$) by a mean difference of 5.43%. There was a significant difference in the gender-related pay equity between natural resources, construction and maintenance occupations, and production occupations ($p = 0.04$) by a mean difference of 4.01%.

Table 4: Results of the One-Way ANOVA for Gender-Related Pay Equity by Major Industry

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	13,660.15	4	3,415.03	17.00	<0.000*
Within Groups	348,449.65	1735	200.83		
Total	362,109.80	1739			

**Significant difference at the level of significance of 0.025*

Table 5: Results of the Games-Howell Test for Gender-related Pay Equity by Major Industry*

(I) Industry	(J) Industry	Mean Difference (I-J)	*S.E.*	Sig.**	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	0.20%	0.87%	1	-2.18%	2.58%
	3	2.91%	1.25%	0.14	-0.50%	6.33%

	4	4.34%	1.16%	0.00**	1.18%	7.50%
	5	8.35%	1.11%	0.00**	5.31%	11.39%
2	3	2.72%	1.35%	0.26	-0.97%	6.41%
	4	4.14%	1.27%	0.01**	0.68%	7.60%
	5	8.15%	1.23%	0.00**	4.80%	11.50%
3	4	1.43%	1.55%	0.89	-2.81%	5.66%
	5	5.43%	1.52%	0.00**	1.29%	9.58%
4	5	4.01%	1.44%	0.04**	0.06%	7.95%

** Industries: (1) management, business, science, and art occupations; (2) service occupations; (3) sales and office occupations; (4) natural resources, construction, and maintenance occupations; and (5) production occupations.*

*** The mean difference is significant at the 0.05 level.*

The comparison of means in Table 6 shows that the industries with the highest gender-related pay equity (i.e., the lowest percentage of female earnings relative to male earnings) were production occupations (*M* = 68.18%; *SD* = 11.84%) and natural resources, construction, and maintenance occupations (*M* = 72.18%; *SD* = 16.53%). The industries with the lowest gender-related pay equity (i.e., the highest percentage of female earnings relative to male earnings) were management, business, science, and art occupations (*M* = 76.53%; *SD* = 12.29%), followed by service occupations (*M* = 76,33%; *SD* = 14.95%). These results provided evidence of statistically significant differences in gender-related pay equity across the five primary industries for the United States public sector. Based on these findings of the one-way ANOVA, the null hypothesis for Research Question 2 was rejected.

Table 6: Descriptive Statistics for Gender-related Pay Equity across the Five Major Industries

Main Industry *	*N*	*M (%)*	*S.D. (%)*	Min (%)	Max (%)	*z*-Skewness	*z*-Kurtosis
1	810	76.53	12.29	37.55	116.33	-0.07	0.52
2	391	76.33	14.95	32.71	116.42	0.00	0.07
3	153	73.61	20.01	37.03	111.03	-0.15	-1.22
4	184	72.18	16.53	35.83	118.16	0.25	0.01
5	202	68.18	11.84	36.92	114.34	0.37	0.72
Total	1740	74.80	14.43	32.71	118.16	-0.03	0.06

**Note. Main industry classification: (1) management, business, science, and art occupations; (2) service occupations; (3) sales and office occupations; (4) natural resources, construction, and maintenance occupations; and (5) production occupations.*

IV. DISCUSSION

The study results have profound practical implications and applications regarding gender-related pay equity. The study results suggest that gender-related pay equity is significantly influenced by the individual state in which a woman lives and industry. As stated before, the adverse effects of gender-related pay equity are felt throughout our economy and society. Pay equity is a topic that affects 74.6 million women workers in the civilian labor force (DeWolf, 2017). Equal pay between men and women would reduce poverty for working women from 8.2 to 4 percent. Each of the 50 states would benefit from increased funds into their economies (Status of Women, 2020). Another adverse effect of gender wage inequality is that gender-related pay equity contributes to increased rates of anxiety and depression among women (Platt et al., 2016). In a partnership with the Center for Workplace Mental Health, the American Psychiatric Association expressed significant concern about gender-related pay equity. The President of the American Psychiatric Association, Renee Binder, MD, stated that gender-related pay equity is more impactful than economic issues and contributes to mental disorders (American Psychiatric Association, 2020). Researchers have shown that income inequality increases the risk of obesity and heart attack (Pabayo et al., 2018).

Scholars have suggested that gender-related pay equity is significantly based on the state of the United States; therefore, more resources can be implemented in areas of need. Such resources can include money, economic pressure, social pressure, and education. Because gender-related pay equity has significant adverse health effects, there is a need to increase the country's mental and physical health resources. Federal funding can be withheld from states for not following federal laws.

4.1 Future Implications

The implications of finding out that states have not adhered to previous legislation will create challenging questions. Negative findings could cause a halt in billions of dollars of federal funds. Federal funding is meant to assist the state in infrastructure, education, relief, and economic benefits. This completed dataset will provide practical applications as the blueprint of gender-related pay equity, providing Americans information to apply legislation and political pressure for change and benefit 74.6 million American women workers. States of the United States are not protecting the women that live within them. The mental, physical, social, and economic health of these women is negatively affected by gender-related pay equity. It has been discovered that individual states are not protecting women workers. State governments', businesses', and organizations' failings can no longer go unnoticed. Future researchers have provided the framework for assessing why their state influences gender-related pay equity. More state and industry-specific research can be conducted to evaluate gender-related pay equity at the state and industry levels.

4.2 Declaration of Conflict of Interest

The author declares no conflict of interest.

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