

Wrongful Convictions in the US: A Study of Compensation Issues

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01

Introduction

Introduction

Since 1989, researchers have identified more than 2,000 individuals in the US who have been wrongly convicted of crimes they did not commit.



Issue of Compensation



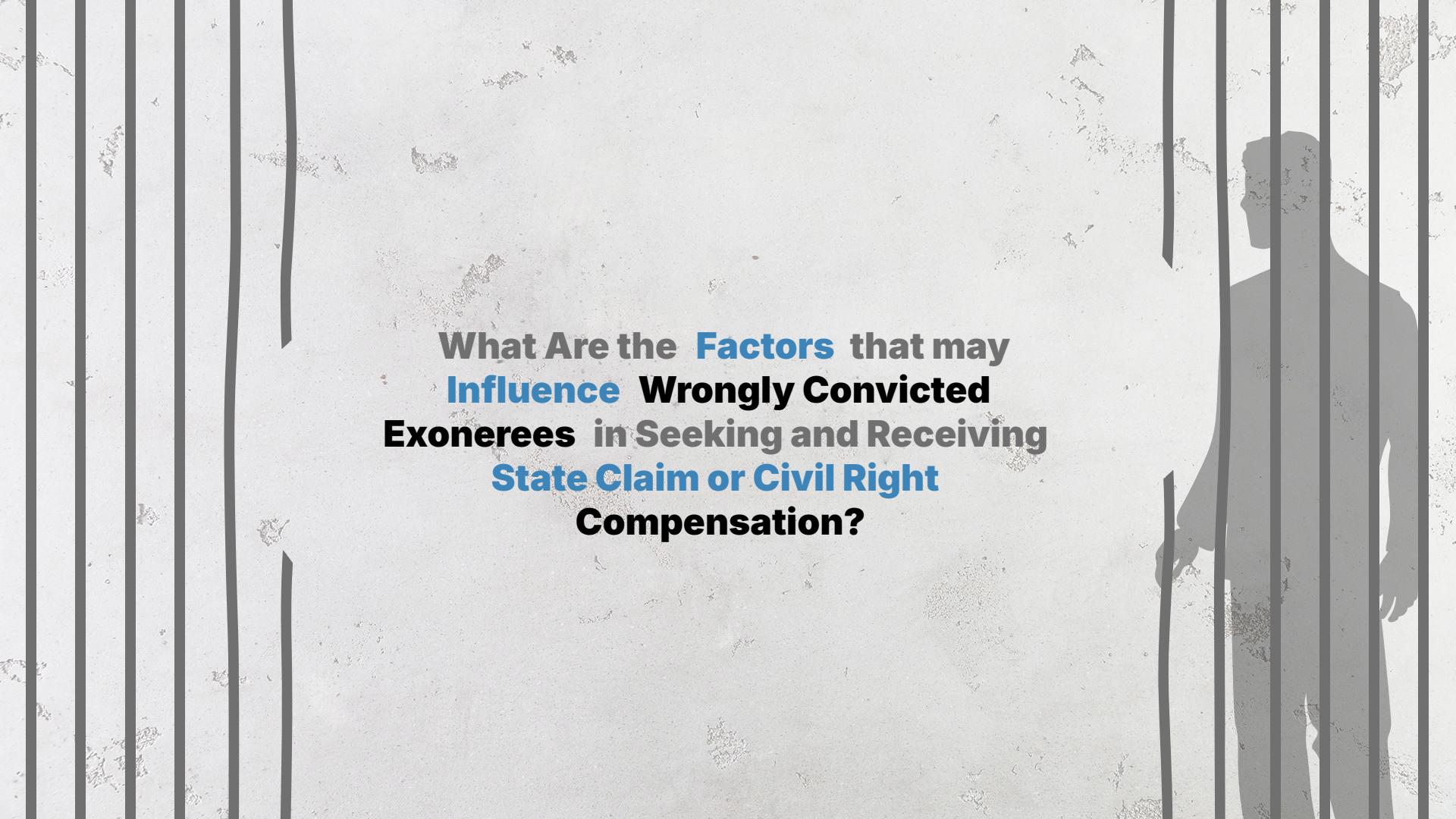
Two methods for wrongly convicted exonerees to seek compensation: state compensation and civil rights compensation.



Limitations and challenges: Some exonerees may not be eligible for state compensation, while others may face denials despite their claims of misconduct.

02

Research Question

A black and white photograph of a man standing behind vertical metal bars, possibly in a jail cell. He is looking towards the right of the frame. The background is a light-colored wall with some texture and small dark spots.

What Are the **Factors that may
Influence Wrongly Convicted
Exonerees in Seeking and Receiving
State Claim or Civil Right
Compensation?**

03

Data Set

Data Description

1900 individual cases and 40 variables

Variable	Meaning
Age	The age of the exoneree at the time the crime was committed
Race	Male and Female
Sex	Asian, Black, Caucasian, Hispanic, Native American, Other
State of Conviction	The exoneration was the result of work by a Conviction Integrity Unit
CIU	The exoneree pled guilty to the crime
Guilty Plea	The exoneree pled guilty to the crime
IO	The exoneree was helped by an innocence organization
Worst Crime	Murder, Sexual Assault, Drugs, Child Sexual Abuse, Robbery, Other
Death Penalty	The exoneree is death penalty
DNA	The defendant exonerated by DNA analysis
FC	A false confession a contributing factor to the conviction
MWID	A mistaken witness ID a contributing factor to the conviction
F/MFE	False or misleading forensic evidence a contributing factor to the conviction
P/FA	Perjury or a false allegation a contributing factor to the conviction
State Claim Made	A state statutory claim made
State Award	The state claim granted
Non-Statutory Claim Filed	A non-statutory claim, e.g., a civil rights claim against government entities, was filed.
0 Time	The exoneree serve no time in prison
Award	The exoneree recover money by verdict or settlement
Amount	The amount of recovery.
Years Lost	The number of years lost to wrongful conviction

Table 1. Data Description

Changes Made to the Dataset



Time

Time is added as an auxiliary variable; dividing the years of exoneration into seven periods of time frames (Dependent Variable)



Time Frames

Before 1990, 1990-1995,
1996-2000, 2001-2005,
2006-2010, 2011-2015,
After 2016

5 Subset Groups

- Filing state claim - no state statutes (=N) or never served in prison (NO TIME=1)
- Filing civil right claim – No limit.
- Receiving state claim - when exoneree filed claim.
- Receiving civil right claim- when exoneree filed claim.
- Civil right amount per year lost: exoneree has successfully received the civil right reward.

Likelihood	Total Obs.
Filing State Claim	1509
Filing Civil Right	1900
Receiving State Claim	703
Receiving Civil Right	802
Civil Right Amount/Year Lost	403

Table 2. Number of Observations in Subsets

04

Research Methods

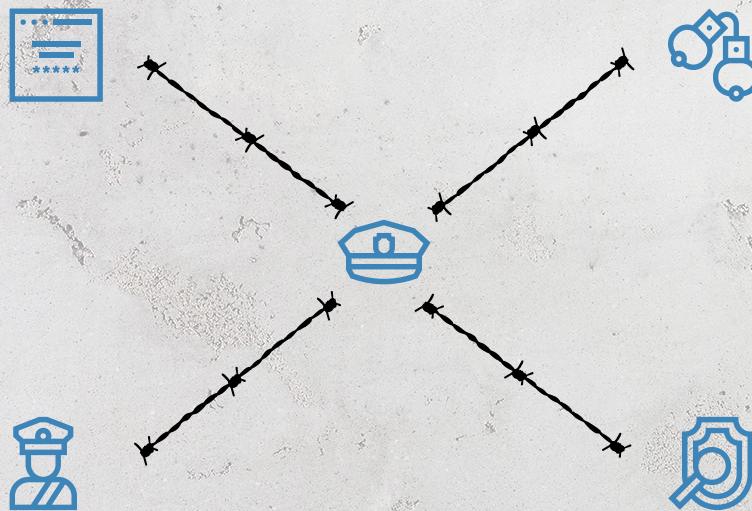
RESEARCH METHODS

Contingency
Table
Analysis

Logistic
Regression
Analysis

Two-Way
ANOVA
Table
Analysis

Stepwise
Model
Selection



05

Single Variable Analysis

Incarcerated Exonerees

Incarcerated vs Never Incarcerated

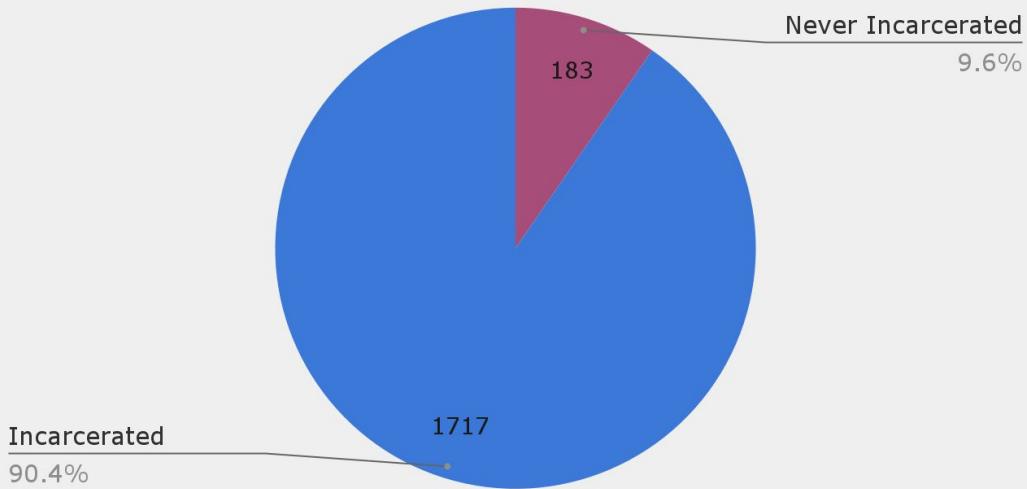


Figure 1. Incarcerated vs. Never Incarcerated

Gender Effect

Incarcerated vs All Exonerees in Genders

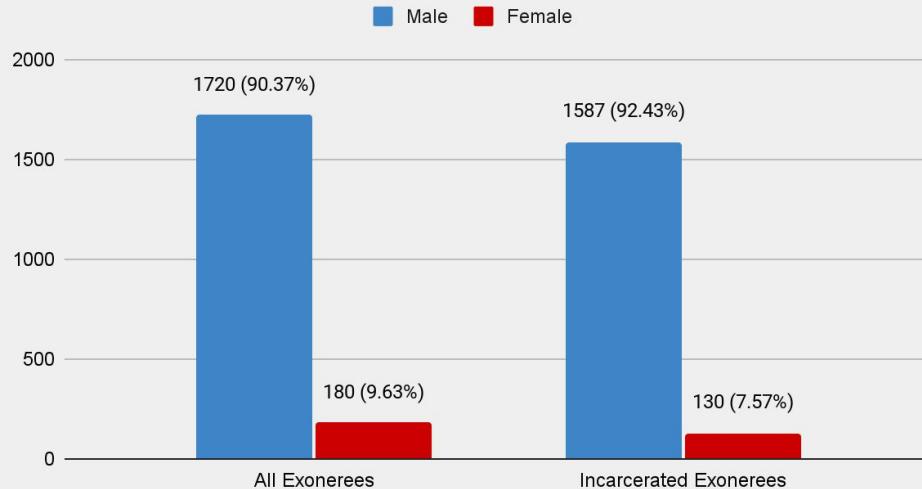


Figure 3. Incarceration vs.
All Exonerees in Genders

Gender Effect

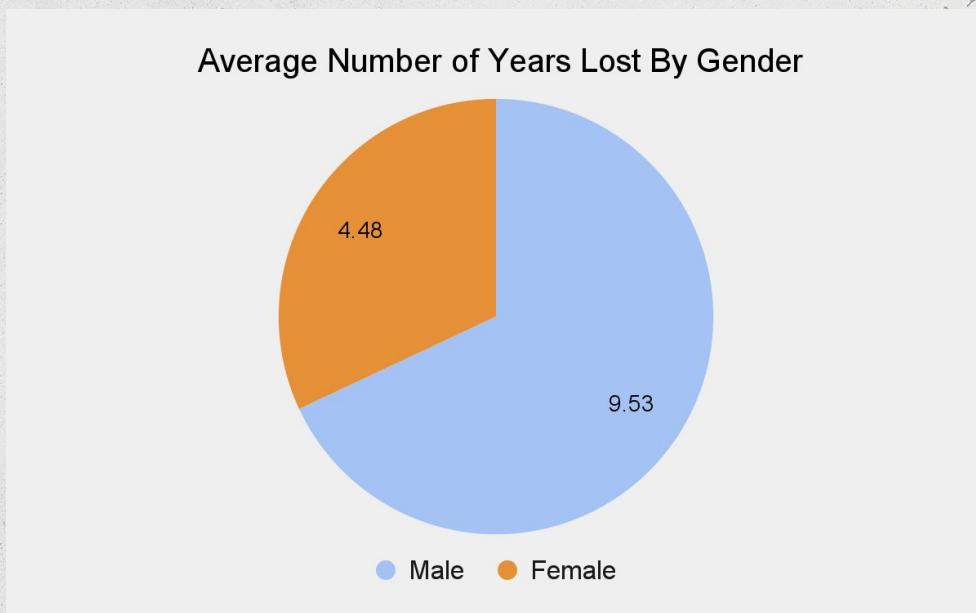


Figure 4. Average Number of Years Lost by Gender

Gender Effect

- Impact on the likelihood of filing for both compensation.
- Males are more likely to file for compensation.
- No difference between genders in receiving state claim and civil right.

Likelihood	Chi-Square	P-Value
Filing State Claim	13.4139	0.0002
Filing Civil Right	9.1621	0.0026
Receiving State Claim	0.0963	0.7563
Receiving Civil Right	2.6555	0.1032

Table 3. P-Values of Each Likelihood for Gender

Gender Effect

Amount	F Value	P-Value
Gender and Amount	0.85	0.3579

Table 4. Anova Table of Gender and Amount Received Per Year Lost

- ANOVA table checks the relationship between gender and amount received per year lost.
- Gender would not significantly affect the amount received.

Race Effect

All Exonerees in Different Race

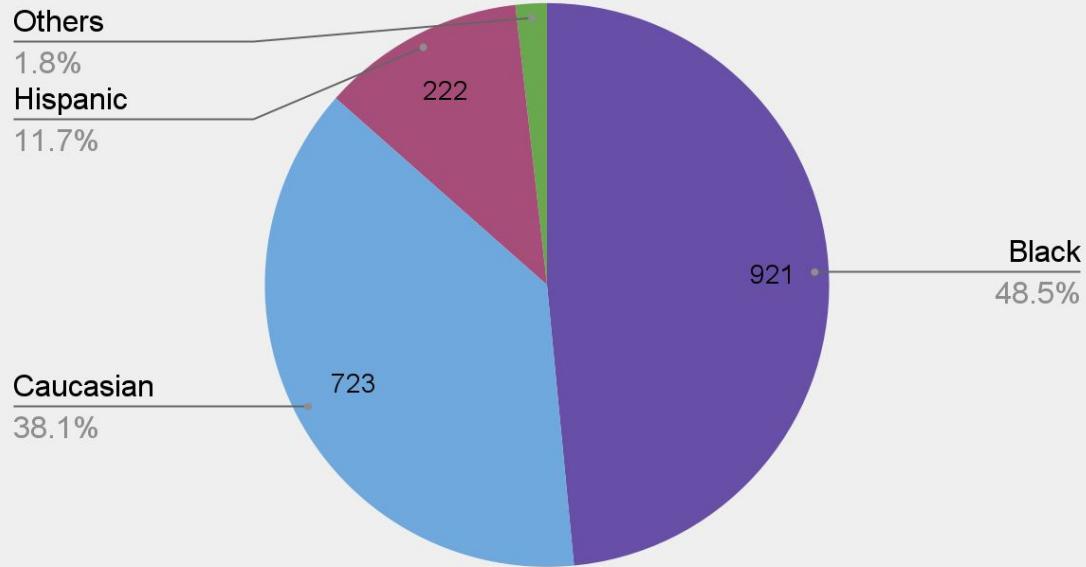


Figure 5. All Exonerees in Different Race

Race Effect

Average Years Lost in Different Race

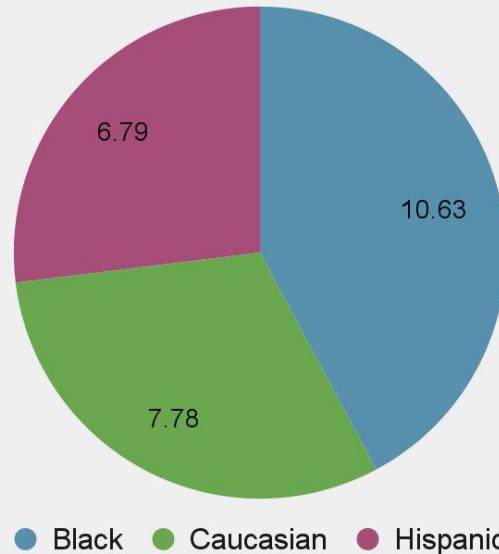


Figure 7. Average Number of Years Lost by Race

Race Effect

- Race significantly impacts the likelihood of filing for both compensations.
- Does not significantly influence the likelihood of prevailing compensation.

Likelihood	Chi-Square	P-Value
Filing State Claim	6.4139	<0.0001
Filing Civil Right	67.1621	0.0332
Receiving State Claim	2.998	0.7563
Receiving Civil Right	2.6555	0.1032

Table 5. P-Values of Each Likelihood for Race

Race Effect

Amount	F Value	P-Value
Race and Amount	2.56	0.0780

Table 6. Anova Table of Race and Amount Received Per Year Lost

Guilty Pleas Effect

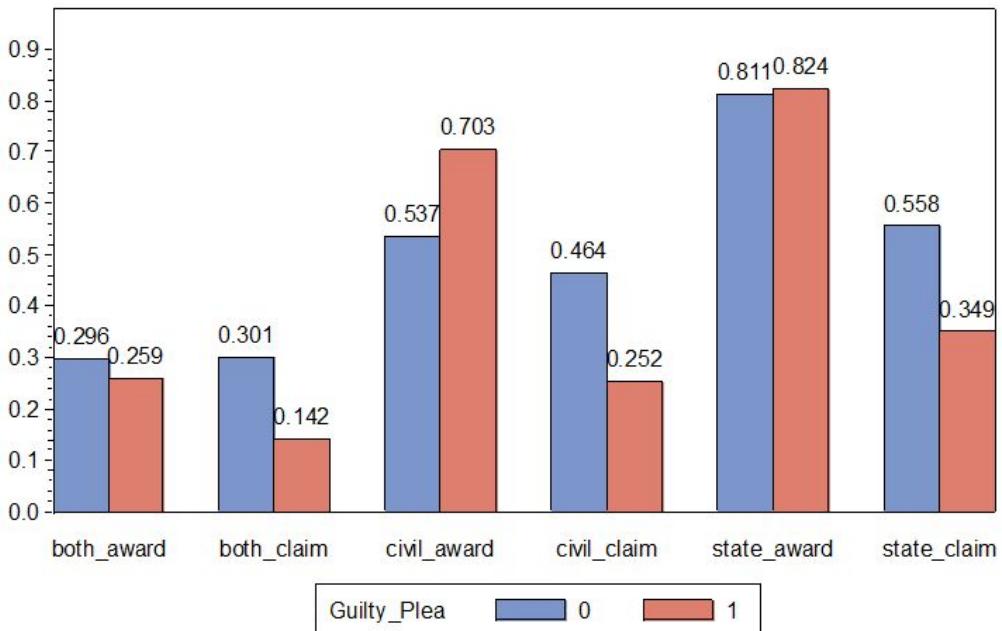


Figure 9. Guilty Pleas in Seeking or Receiving Compensation

- Person actually plead guilty to the crime that they had not committed.
- Significant influence of the percentage of exonerees filing state claim or civil right.
- Less likely to look for compensation if they already plead the guilty.
- Affects receiving the civil right award, but not state claim award.

Guilty Pleas Effect

- Significantly affects filing compensation.
- Influence prevailing civil right compensation, but not prevailing state claims.
- Not affect the amount received.

Variables	Test	Test Value	P-Value
Filing State Claim	Chi-Square	39.1443	<0.0001
Filing Civil Right	Chi-Square	58.6281	<0.0001
Receiving State Claim	Chi-Square	0.0024	0.9611
Receiving Civil Right	Chi-Square	12.1979	0.0004
Guilty Pleas and Amount	F-Test	0.09	0.7656

Table 8. The Test Result for Guilty Pleas

IO Effect

- Innocence Organization
- More likely to file for both state claim and civil right compensation.
- Not affect prevailing state claim and civil right compensation.
- Not affect the amount received.

Variables	Test	Test Value	P-Value
Filing State Claim	Chi-Square	58.3482	<0.0001
Filing Civil Right	Chi-Square	83.3509	<0.0001
Receiving State Claim	Chi-Square	61.6518	0.9611
Receiving Civil Right	Chi-Square	0.3071	0.5795
IO and Amount	F-Test	0.16	0.6904

Table 9. The Test Result for IO

DNA Effect

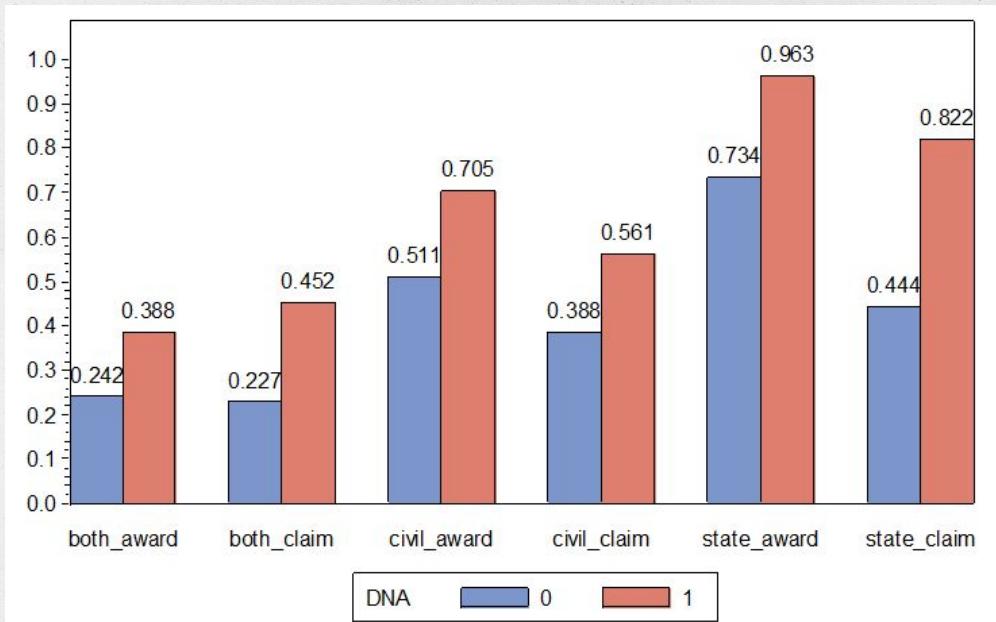


Figure 10. DNA in Seeking or Receiving Compensation

- If exonerees were wrongfully convicted due to DNA evidence, they had a higher likelihood of seeking and receiving both state claim and civil right compensation.

DNA Effect

- Significant impact on filing and prevailing both state claim and civil right.
- Wrongfully convicted were more likely to receive compensation
- No effect on the compensation amount.

Variables	Test	Test Value	P-Value
Filing State Claim	Chi-Square	138.737	<0.0001
Filing Civil Right	Chi-Square	33.2426	<0.0001
Receiving State Claim	Chi-Square	61.1691	<0.0001
Receiving Civil Right	Chi-Square	27.4729	<0.0001
DNA and Amount	F-Test	1.52	0.2181

Table 10. The Test Result for DNA

Worst Crime Effect

- Six types: Murder, Sexual Assault, Drugs, Child Sexual Abuse, Robbery, Other
- Affect filing both compensations and receiving state claim, but not receiving civil right compensation.
- No effect on the compensation amount.

Variables	Test	Test Value	P-Value
Filing State Claim	Chi-Square	88.4339	<0.0001
Filing Civil Right	Chi-Square	195.4974	<0.0001
Receiving State Claim	Chi-Square	34.7871	<0.0001
Receiving Civil Right	Chi-Square	4.5455	0.4738
Crime and Amount	F-Test	2	0.0771

Table 11. The Test Result of Crimes

Death Penalty Effect

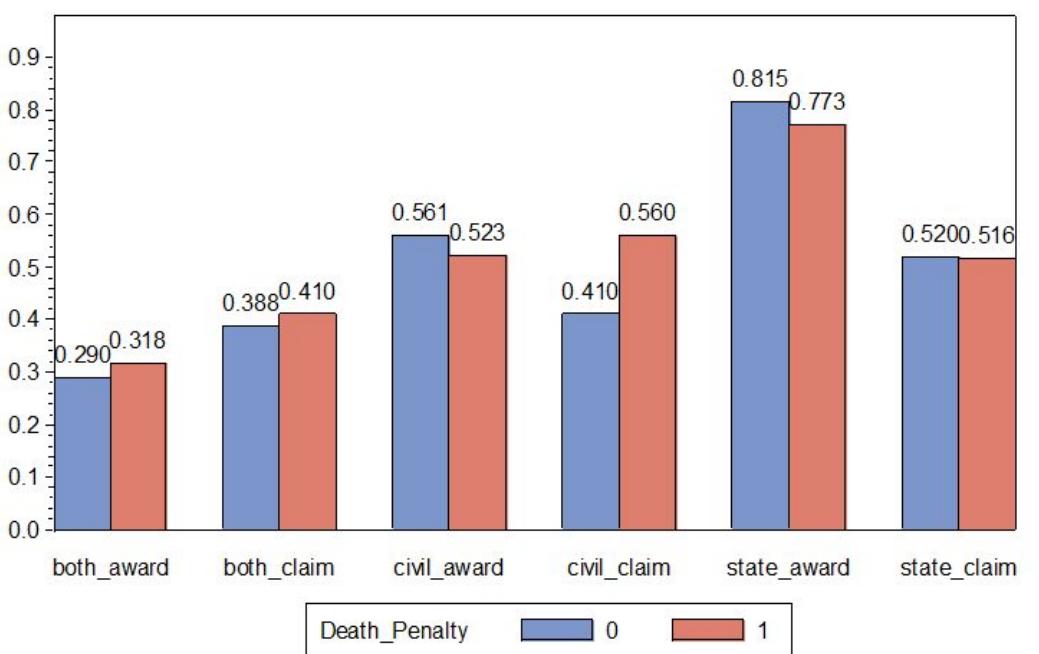


Figure 11. Death Penalty in Seeking or Receiving Compensation

- Not impact the outcome of filing or prevailing in state claim compensation.
- Exonerees who faced the death penalty were more inclined to file for civil right compensation.
- Would not affect the result of receiving civil right compensation.

Death Penalty Effect

- Has a minimal effect on filing state claim, prevailing both compensations.
- More likely to file for civil right compensation.
- No impact on amount.

Variables	Test	Test Value	P-Value
Filing State Claim	Chi-Square	0.0057	0.9396
Filing Civil Right	Chi-Square	9.6786	0.0019
Receiving State Claim	Chi-Square	0.6711	0.4127
Receiving Civil Right	Chi-Square	0.3020	0.5826
Death Penalty and Amount	F-Test	0.25	0.6208

Table 12. The Test Result for Death Penalty

Tag Effect

Tags	Description
FC	A false confession a contributing factor to the conviction
MWID	A mistaken witness ID a contributing factor to the conviction
F/MFE	False or misleading forensic evidence a contributing factor to the conviction
P/FA	Perjury or a false allegation a contributing factor to the conviction
OM	Official misconduct a contributing factor to the conviction
ILD	An inadequate legal defense a contributing factor to the conviction

Table 13. Tags and their Descriptions

Tag Effect

Likelihood	FC Tag	MWID Tag	F/MFE Tag	P/FA Tag	OM Tag	ILD Tag
Filing State Claim	Influential	Influential				
Filing Civil Right	Influential			Influential	Influential	
Receiving State Claim		Influential	Influential			Influential
Receiving Civil Right	Influential		Influential	Influential	Influential	Influential
Amount						

Table 14. List of Significant Tags for Each Likelihood

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Models

Likelihood of Filing State Claim

- General logistic model; Stepwise selection method

Step	Variables	Chi-Square	P value
1	Years Lost	249.4001	<.0001
2	State	104.683	<.0001
3	DNA	102.2001	<.0001
4	No Time	60.1162	<.0001
5	MWID	15.124	0.0001
6	Exoneration Date	28.6916	<.0001
7	Area	6.9229	0.0085
8	Crime	13.4401	0.0196

Table 15. Stepwise Selection for Likelihood of Filing State Claim

Likelihood of Filing Civil Right

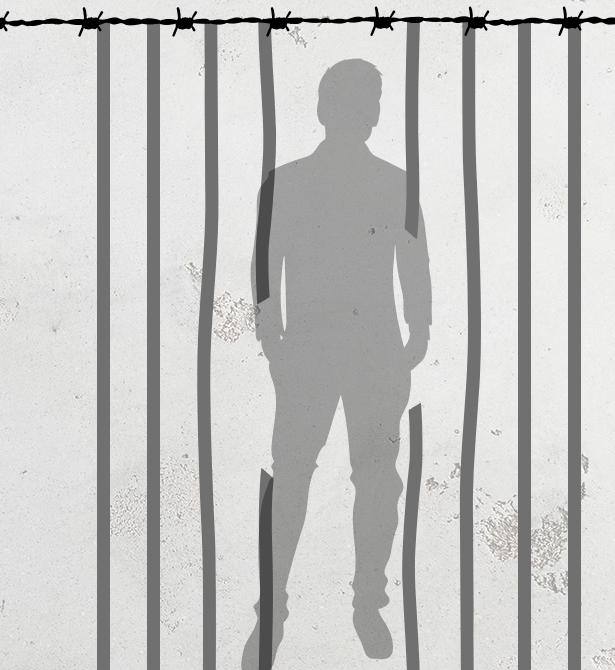
Step	Variables	Chi-Square	P value
1	OM	259.9305	<.0001
2	Years Lost	140.0661	<.0001
3	State	153.029	<.0001
4	DNA	27.2077	<.0001
5	Area	18.3375	<.0001
6	Crime	22.675	0.0004
7	P/FA	12.7644	0.0004
8	IO	10.5719	0.0011
9	Exoneration Date	13.2636	0.039

Table 16. Stepwise Selection for Likelihood of Filing Civil Right

Likelihood of Prevailing State Claim

Step	Variables	Chi-Square	P value
1	DNA	53.7804	<.0001
2	IO	19.1529	<.0001
3	State	15.0736	0.0018
4	Exoneration Date	21.8947	0.0013
5	CIU	4.2346	0.0396

Table 17. Stepwise Selection for Likelihood of Prevailing State Claim



Likelihood of Prevailing Civil Right

Step	Variables	Chi-Square	P value
1	Exoneration Date	64.4259	<.0001
2	Area	23.4274	<.0001
3	DNA	17.7953	<.0001
4	Guilty Plea	11.9616	0.0005
5	ILD	9.5322	0.002
6	P/FA	8.4101	0.0037
7	State	11.2487	0.0105

Table 18. Stepwise Selection for Likelihood of Prevailing Civil Right

07

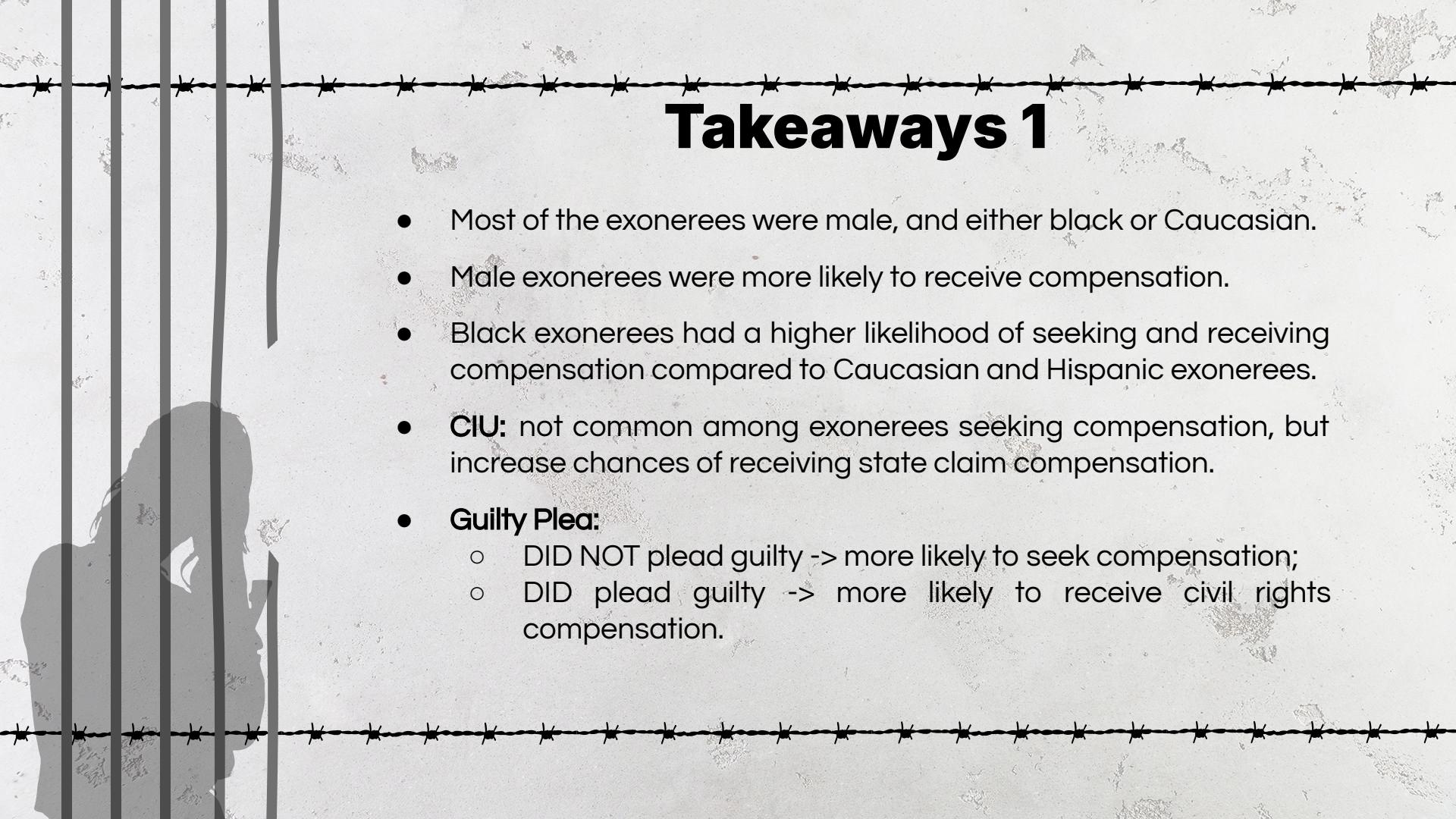
Conclusion

Influential Factors

Likelihood	Variables
Filing State Claim	Race, Sex, State, Guilty Plea, IO, Crime, Year Exonerated, DNA, FC, MWID
Filing Civil Right	Race, Sex, State, CIU, Guilty Plea, IO, Crime, DNA, FC, P/FA, OM
Receiving State Claim	Crime, Year Exonerated, DNA, MWID, ILD
Receiving Civil Right	State, Guilty Plea, Year Exonerated, DNA, FC, P/FA

Tabela 19. Influential Factors for Each Likelihood





Takeaways 1

- Most of the exonerees were male, and either black or Caucasian.
- Male exonerees were more likely to receive compensation.
- Black exonerees had a higher likelihood of seeking and receiving compensation compared to Caucasian and Hispanic exonerees.
- CIU: not common among exonerees seeking compensation, but increase chances of receiving state claim compensation.
- **Guilty Plea:**
 - DID NOT plead guilty -> more likely to seek compensation;
 - DID plead guilty -> more likely to receive civil rights compensation.

Takeaways 2

- **Innocence organizations:** helped to win compensation, but not effective in receiving civil right awards.
- **DNA:** Exonerees who were wrongly convicted by DNA analysis had a higher likelihood of seeking and receiving both compensation.
- **Death penalty:** Not influential on seeking and receiving both compensation.
- **Crimes:** More serious crimes had a higher likelihood of seeking state claim but did not affect the chances of receiving civil right.
- Only a few variables are affected by the amount received per year lost.

Reference

Exoneree Dataset. The National Registry of Exonerations -
Exoneration Registry. (n.d.).

<https://www.law.umich.edu/special/exoneration/Pages/about.aspx>

Thank you for Attention !

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Race Effect

Incarcerated vs All Exonerees in Races

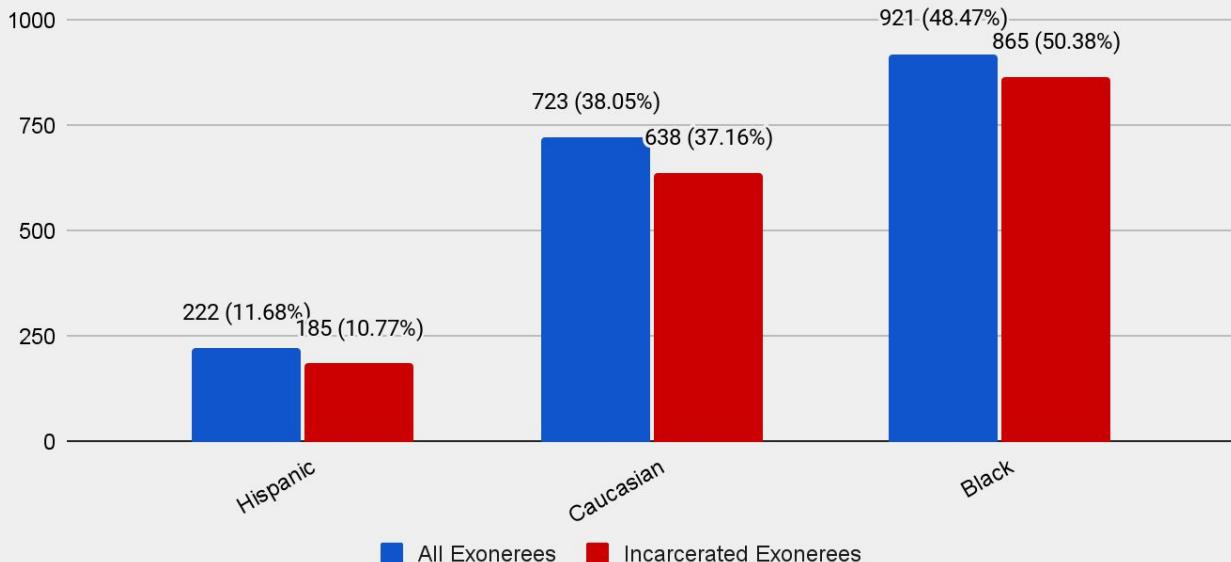


Figure 6. Incarceration vs. All Exonerees in Difference Races

CIU Effect

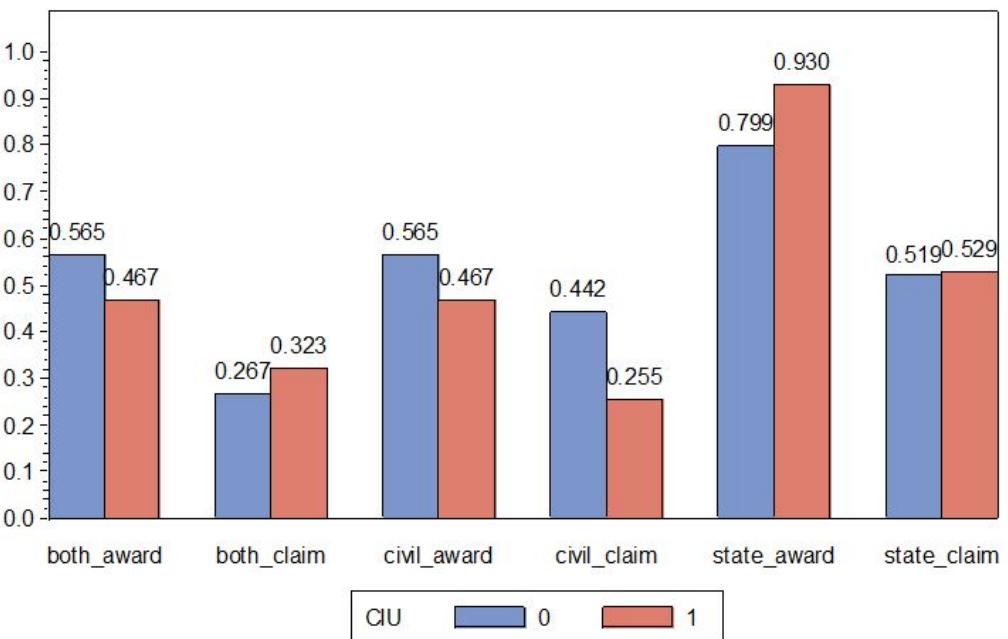


Figure 8: CIU in Seeking or Receiving Compensation

- The conviction integrity unit.
- Similar chances of filing a state claim.
- More likely to receive state compensation.
- Less likely to seek CIU's assistance when pursuing civil right compensation.

CIU Effect

- Exonerees who did not use CIU are more likely to file civil right claims.
- Would not affect prevailing civil right compensation and the amount received.

Variables	Test	Test Value	P-Value
Filing Civil Right	Chi-Square	29.0408	<0.0001
Prevailing Civil Right	Chi-Square	1.1505	0.2834
CIU and Amount	F-Test	0.04	0.8507

Table 7. The Test Result for CIU

Period 1 and Period 2

