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Discrimination Fully Mediates the Effects of Incarceration History on Depressive Symptoms and Psychological Distress among African American Men

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Abstract

Aim: Using a nationally representative sample of African American men, this study investigated the associations between lifetime history of incarceration, discrimination, and mental health (e.g. depressive symptoms and psychological distress). We hypothesized that discrimination would fully mediate the association between incarceration history and mental health outcomes among African American men.

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Authors Contribution: Shervin Assari and Robert Joseph Taylor designed the current work. Shervin Assari analyzed the data. Shervin Assari, Reuben Miller, and Robert Joseph Taylor drafted the manuscript. Reuben Jonathan Miller, Dawne Mouzon, Verna Keith, Linda Chatters and Robert Joseph Taylor contributed to the interpretation of the results and revising the manuscript. All authors confirmed the final draft. Linda Chatters and Robert Joseph Taylor contributed to design and conducting NSAL.

Conflict of Interest. Shervin Assari, Reuben Jonathan Miller, Dawne Mouzon, Verna Keith, Linda Chatters, and Robert Joseph Taylor declare that they have no conflict of interest.

Institutional Review Board (IRB) Approval. The University of Michigan Institutional Review Board (IRB) approved the study protocol.

Ethics. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent. Informed consent was obtained from all participants included in the study.

Animal Studies. No animal studies were carried out by the authors for this article.

Methods: Using a cross-sectional design, our analysis included 1,271 African American men who participated in the National Survey of American Life (NSAL), 2001–2003. Incarceration history was the main independent variable. Depressive symptoms and psychological distress were the dependent variables. Everyday discrimination was the mediator. Age, education, and income were covariates. Structural equation models (SEM) were used for data analysis.

Results: Among African American men, incarceration history was positively associated with perceived discrimination, depressive symptoms, and psychological distress. Everyday discrimination fully mediated the associations between incarceration history and both depressive symptoms and psychological distress.

Conclusion: Discrimination may play an important role in the mental health problems of African American men with a history of incarceration. These findings have public policy implications as well as clinical implications for mental health promotion of African American men. Policies that reduce preventable incarceration or at least reduce subsequent discrimination for those who have been incarcerated may enhance mental health of previously incarcerated African American men.

Keywords

African American men; depression; mass incarceration; discrimination; mental health; prisoner re-entry

Introduction:

Beginning in the 1970s, a series of criminal justice reforms increased the length and severity of sentences for a range of crimes, increasing, precipitously, the number of people held in U.S. jails and prisons, and as a logical extension, the number of people who have a criminal record (1,2). By 2008, the peak year for growth in the U.S. inmate population, U.S. jails and prisons housed 2,304,115 inmates—a more than 600% increase in just over three decades (3,4).

African American men have been disproportionately impacted by the policy changes due to criminal justice reforms in the U.S. (5–8). Despite recent modest declines in the total inmate population, African American men remain 36 percent of all prisoners in the United States, but just 6 percent of the nation’s general population (9). African American men are twice as likely to be arrested and six times more likely to be incarcerated than their White counterparts (10). African American men represent one-third of all people with a felony record (11). One-third of all working-age African American men will spend some time in jail or prison (12, 13) and one-third of African American men have a felony conviction (11).

Given the well-established “collateral consequences” of a criminal conviction (14), the negative impact of mass incarceration on the well-being of African American men cannot be overstated. Over 48,000 laws, administrative sanctions and penalties prevent people with criminal records from full labor market participation, accessing essential public welfare benefits including affordable housing, educational grant and loans, and food subsidies; or fully participating in the civic life of their home communities (15, 16). The National Inventory of the Collateral Consequences of Conviction, a database curated by the American

Bar Association lists over 26,000 entries restricting access to employment, 27,000 restricting access to occupational, professional and business licenses, and over 1,000 limiting housing access for formerly incarcerated people (15). Even without a criminal record, African American men face discrimination in the labor market (17–21). However, the mark of a criminal record exacerbates already existing disadvantages that African American men face by providing a legal means to exclude them from the labor market, and many meaningful forms of social and civic participation (e.g., voting) (22,23).

Everyday forms of discrimination and the social and economic disadvantages this population faces (i.e., chronic unemployment, poverty, and social isolation) have each been linked with negative mental health outcomes (24–28). Taking together the disproportionate impact of the criminal justice system on African American men, the collateral consequences of a criminal record, and the effects of cumulative disadvantage on health and mental health outcomes, the mark of a criminal record increases the likelihood of poor mental health outcomes among this population.

The present analysis utilized data from the National Survey of American Life (2003) (29) to investigate the associations between incarceration history, everyday discrimination, and two measures of mental health, namely depressive symptoms and psychological distress. Using a nationally representative sample of African American men, we specifically tested the following two hypotheses: *Hypothesis # 1*: discrimination fully mediates the association between lifetime history of incarceration and depressive symptoms, and *Hypothesis # 2*: discrimination fully mediates the effect of lifetime history of incarceration on psychological distress.

Methods

Survey

This analysis uses data from the National Survey of American Life (NSAL), 2001 to 2003. The NSAL data were collected by the Program for Research on Black Americans at the Institute for Social Research, University of Michigan, Ann Arbor. The NSAL is a nationally representative survey of African Americans, non-Hispanic Whites and Black Caribbeans. Study design and sampling have been described in detail elsewhere (29). The study has been approved by the University of Michigan Institutional Review Board. Participants received compensation for participating in this study.

Participants

Participants are African American men ($n = 1,271$) who were selected from the total number of 3,570 African American adults (aged 18 or older) participating in the NSAL. The analytical sample of this study included all African American men in the NSAL survey sample. No African American men were excluded from the current analysis.

Interview

Most interviews were face-to-face and conducted within participants' homes. The overall response rate of the study was 72.3% (response rate for African Americans = 70.7%).

Measures

Socio-demographic data.—Socio-demographic factors including age, education level (less than high school, high school graduate, some college, college graduate), and household income were measured.

Incarceration history.—Participants were asked: “Have you ever spent time in a reform school, detention center, jail, or prison?” Responses include: 1 – Reform School, 2 – Detention Center, 3 – Jail, 4 – Prison, and 5 – None of the above. This measure was operationalized as a dichotomous variable; responses to the options 1 to 4 were considered as positive incarceration history (30).

Everyday discrimination.—We used the everyday discrimination scale, a 10-item scale developed by Williams et al (31) to measure everyday discrimination. Although everyday discrimination scale is correlated with measures of institutional and interpersonal racial discrimination (32, 33), it does not probe respondents to think about race as the cause of discrimination (34). The scale asks about routine, chronic, and overt (threatening) and less overt discriminatory experiences that have occurred in the past year. The everyday discrimination scale captures discriminatory experiences that are often a common aspect of the life experiences of African Americans. A total of 10 items were used to measure everyday discrimination: being treated with less courtesy, treated with less respect, received poor restaurant service, being perceived as not smart, being perceived as dishonest, or being perceived as not as good as others; and being feared, insulted, harassed, and followed in stores. Using a Likert scale ranging from 1 (never) to 6 (almost every day), we computed the total score, ranging from 10 to 60, with higher scores indicating higher discriminatory experiences in the previous year. The measure showed high reliability (Cronbach Alpha = .86) (35).

Depressive symptoms.—We used the 12-item Center for the Epidemiological Studies-Depression (CES-D) developed by Radloff in 1977 (36) to measure depressive symptoms. The 12-item measure was developed by Roberts & Sobhan in 1992 (37) based on the original 20-item CESD measure. The measure assesses (in the past 30 days) the extent to a person had trouble keeping their mind on tasks, enjoyed life, had crying spells, could not get going, felt depressed, hopeful, restless, happy, as good as other people, that everything was an effort, that people were unfriendly, and that people dislike them. Responses were coded from 0 (rarely or none of the time) to 3 (most of the time), providing a sum score ranging from 0 to 36. The CES-D has been shown to provide comparable results between African Americans and other ethnic groups (38–40). Cronbach’s alpha ($\alpha = .76$) suggested high internal consistency of the measure for our group.

Psychological distress.—Serious psychological distress was measured by the K6. This is a 6-item scale designed to assess nonspecific psychological distress including symptoms of depression and anxiety in the past 30 days (41). This measure assessed how often the respondent felt sad, hopeless, worthless, nervous, restless, and had no interest in things in the past 30 days. The K6 is intended to identify persons with mental health problems severe enough to cause moderate to serious impairment in social and occupational functioning and

to require treatment (42,43). Response items ranged from 1 (none of the time) to 5 (all the time), providing a sum score ranging from 0 to 30, with higher scores reflecting more psychological distress (43). The measure showed high reliability (Cronbach Alpha = .84).

Statistical Note

Univariate and bivariate analysis were conducted in SPSS 20.0 (IBM Inc. Armonk, NY). Stata version 13 (Stata Corp., College Station, TX, USA) was used for multivariable analysis (44,45). To account for the complex sampling design, standard errors were estimated using the Taylor series approximation technique, thus all findings in this study reflect the study's complex design. Bivariate associations were tested using Pearson's correlation test. Structural equation modeling (SEM) was used for multivariable data analysis (46).

In Model 1, we estimated the main effect of incarceration history on mental health outcomes, net of socio-economic factors (age, education, and income). In Model 2 (Figure 1-a and Figure 1-b), incarceration history was the predictor(s), socio-economic factors (age, education, and income) were controls, and daily discrimination was the mediator. P-values less than 0.05 were considered statistically significant. In one model, psychological distress, and in another model, depressive symptoms were the outcomes. Unstandardized adjusted correlation coefficients (b) and their 95% Confidence Intervals (CI) were reported.

Fit statistics included p more than 0.05, Chi square, the comparative fit index (CFI) [>0.90], the root mean squared error of approximation (RMSEA) [<0.06], and X^2 to degrees of freedom ratio (47–49). Unstandardized and standardized regression coefficients were reported. Full information maximum likelihood (FIML) was applied to handle missing data.

We used Baron and Kenny's (50) definition of mediation. To test whether discrimination mediates the effect of lifetime history of incarceration on mental health outcomes, we ran SEM models without and with discrimination as the potential mediator. Discrimination would be considered as a mediator if 1) there was a significant path from lifetime history of incarceration to the mental health outcomes (Model 1), 2) there were significant paths from lifetime history of incarceration to discrimination and from discrimination to the outcomes (Model 2), and 3) the direct paths between lifetime history of incarceration and outcomes were no longer significant after discrimination was added to the model (Model 2).

Results

As Table 1 indicates, mean age of the participating African American men was 41.76. Mean education and annual family income of the participants were 12.45 years and \$42,912, respectively. For all participants, 26.52% reported a lifetime history of incarceration.

Table 2 shows a summary of the correlation matrix for the study variables. Age was negatively associated with discrimination, depressive symptoms, and psychological distress. Discrimination had a moderate association with depressive symptoms and psychological distress; depressive symptoms and psychological distress were strongly correlated. Income and education were also positively correlated. Although education was associated with lower depressive symptoms and psychological distress, education was associated with higher

perceived discrimination. While income was negatively associated with depressive symptoms and psychological distress, it was not associated with perceived discrimination.

Both our final SEM models showed very good fit. The model with CES-D score as the outcome showed excellent fit [Chi square = 2.288, Degrees of freedom = 1, $P = 0.130$, CFI = 0.997, $\chi^2/df = 2.228$, $RMSEA = 0.032$]. The final SEM model with psychological distress as the outcome also showed very good fit. [Chi square = 2.288, Degrees of freedom = 1, $P = 0.137$, CFI = 0.997, $\chi^2/df = 2.212$, $RMSEA = 0.031$].

The findings of our two structural equation models are presented in Figure 1. Figure 1-a reports the analysis of depressive symptoms, whereas Figure 1-b reports the analysis of psychological distress. The analysis reported in Figure 1-a reveals that there was a positive and significant path from incarceration history to discrimination while age, education, and income were controlled. There was also a positive and significant association between discrimination and depressive symptoms, suggesting that high discrimination is associated with more depressive symptoms. While the indirect paths from incarceration history to discrimination and from discrimination to depressive symptoms were significant, the direct path from incarceration history to depressive symptoms was not significant, supporting the mediation *Hypothesis #1* (Table 3).

The findings of the analysis of psychological distress were similar to the analysis of depressive symptoms. The analysis reported in Figure 1-b indicates that the path from incarceration history to discrimination was positive and significant after controlling for the effects of age, education, and income. The path from discrimination to psychological distress was also positive and significant. While the indirect paths from history of incarceration to discrimination and from discrimination to psychological distress were significant, the direct path from history of incarceration to psychological distress was not significant, supporting the mediation *Hypothesis #2* (Table 4).

Discussion

This study showed two findings among African American men: First, history of incarceration was associated with higher perceived discrimination and poor mental health (i.e. depressive symptoms and psychological distress). Second, discrimination fully statistically mediates the association between incarceration history and poor mental health.

A history of incarceration increases African American men's likelihood of perceiving discrimination in their everyday life. African American men with a criminal record are at higher risk of everyday discrimination due to many actual and completely legal forms of discrimination they face each day. Discrimination may exacerbate the effects of past incarceration on mental health in this population. African American men report higher perceived discrimination compared to African American women (51,52), which may partially be due to mass incarceration and police brutality (53,54) as well as a higher likelihood of experiencing unsafe environments (55,56). Due to social norms and masculinity ideologies that both emphasize importance of maintaining dominance and hierarchy in the society, experiences with discrimination have very high psychological costs

for men (57–59). In fact, a growing body of evidence suggests that gender may interact with discrimination on health outcomes (60–63). In a consistent pattern across various ethnic groups, discrimination has been shown to have a more salient role as a risk factor for poor mental health outcomes among men than women (64–66). This literature helps us better understand why discrimination fully explains the link between history of incarceration and increased psychological distress and depressive symptoms in African American men. Our finding has important public health implications, as it reveals an additional pathway to poor mental health of African American men.

Policies that increase the likelihood of African American incarceration, like “Stop, Question and Frisk” in New York City and the “Three Strikes Law” in the state of California, reproduce the material conditions necessary to ensure African Americans have greater criminal justice contact (67). These policies increase the likelihood of African American men experiencing everyday forms of discrimination (30,68). At the same time, arrest and incarceration has been described as a “life course event” for African American men (12), with 1 in 3 working age African American men spending some time in jail or prison and nearly a third of African American men having a felony conviction. The experience of incarceration is seemingly ubiquitous for African American men, and poor African American men especially. As a consequence, everyday forms of racial discrimination and discrimination based solely on the fact of a criminal record may be indistinguishable, lending credence to theories of the criminal justice system as a form of racialized social control (7, 22). The literature on “stop and frisk,” “driving while Black,” and racial disparities in arrest, incarceration, conviction severity and sentencing attest to these claims. That is, since African American men have disproportionate criminal justice contact, they are likely to report everyday discrimination that they experience during and in the wake of their interactions with the criminal justice system.

Findings of this study are significant. Given the collateral consequences of a criminal conviction and previous research demonstrating that African American men who have had criminal justice contact are more likely to report experiences of everyday discrimination than African American men who do not (30), one’s history of incarceration may make more visible, or even exacerbate instances of perceived discrimination, contributing to negative mental health outcomes (33, 35–38, 43, 69–71). At the same time, the many laws, regulations and administrative sanctions which restrict where formerly incarcerated people may live, work, or take leisure, along with the disproportionate contact African American men already have with the criminal justice system, opens new channels for legal forms of everyday discrimination among this group.

The literature on public attitudes and criminal justice policy has shown that the higher rate of African American incarceration is positively associated with greater support for punitive criminal justice policies among White Americans (67). That is, the greater the over representation of African American inmates, the greater the support among Whites for policies that increase African American incarceration rates. Since White Americans hold a numerical majority, both as a share of the U.S. general population and a disproportionate share of U.S. policymakers, disproportionate African American incarceration likely creates a feedback loop.

Although one's incarceration history is unknown and hidden in daily interactions, it still contributes to a significant increase in everyday perception and experiences of discrimination. Research by Santuzzi and Ruscher help us understand this phenomenon (72). They conducted experiments showing that belonging to a stigmatized group -even when non-disclosed - increases self-conscious concerns and negative attitudinal metaperceptions, which increase perception of discrimination. As a major stigma, incarceration history would have major implications for cognitive processes that are involved in social interactions of individuals (72).

A similar explanation suggests that the combination of incarceration and high levels of discrimination may lead to high levels of vigilance (e.g., avoiding being harassed, preparation for potential prejudice and discrimination) (73). Research on African Americans indicates that anticipation of unfair treatment is associated with psychiatric disorders (74), major depressive disorder (24), depressive symptoms (25), hypertension (75), and poor sleep quality (76). Another possible explanation is that incarceration increases actual exposure to discrimination in the daily life of individuals, as it may label the individual which, in turn, increases their visibility and diminishes their respect. Recent research by Taylor et al., (30) found that African American men who have been previously incarcerated reported higher levels of everyday discrimination compared to African American men who did not have any contact with the criminal justice system. Future research should explore how cognitive interpretations of events, as well as actual social interactions are affected by incarceration.

Directions for Future Research

Based on the findings from this study, we recommend future research in four areas. First, there is also a need to investigate whether different forms of incarceration and length of incarceration might differentially contribute to negative mental health outcomes. Length of incarceration is particularly important as one would expect that there are big differences between men who have been incarcerated for less than one week as opposed to over 10 years. Although our incarceration measure is limited, the NSAL is one of the few, if not the only, dataset based on a national probability sample that has measures of incarceration, mental health, discrimination and a sizable number of African American men. Second, there is a need for a robust research program on higher level factors such as state level policies. Comparing mental health outcomes of African American men in areas that adopt less punitive criminal justice policies with those that do not would shed more light on how criminal justice policies operate as a social and political determinants of health of African American men. Third, future research might utilize longitudinal studies to compare pre- and post- incarceration discriminatory experiences. Although our findings are suggestive of a link between racial discrimination and depressive symptoms amongst formerly incarcerated African American men, these findings should be followed up with longitudinal studies with lifetime as well as everyday measures of discrimination. Fourth, we still do not know whether the mechanism found in this study is exclusively relevant to African American men, or whether the paths from incarceration history, discrimination, and poor mental health holds for all demographic, ethnic, and social groups. This study investigated the impact of everyday discrimination—experiences that can be encountered on a daily basis (e.g., being treated with less courtesy, treated with less respect) on mental health.

Fifth, future research should investigate the impact of major discrimination (e.g., unfairly fired or denied a promotion; not hired for a job; prevented from buying, renting, or leasing a home or apartment; denied a bank loan; and denied access to educational opportunities) on mental health. This is particularly important for previously incarcerated individuals who, due to legalized social and civil restrictions, experience instances of major discrimination on a fairly frequent basis. Lastly, research should investigate the potential ways that different types of everyday discrimination may interact with one another and with types of formal systematic discrimination and restrictions (i.e., housing, employment) faced by African American men with a history of contact with the criminal justice system (30). Collectively, these studies would uncover the complex and nonlinear mechanisms by which race, gender, socioeconomic status, unemployment, imprisonment, and discrimination shape mental health of African American men in the United States.

Limitations

Due to the cross-sectional design, we cannot conclude causation from our findings. For incarceration, we relied on self-reported data, and did not confirm it with data from correctional settings. As a result, the incarceration history may be subject to misclassification bias. The survey data are 15 years old and may not be applicable to African American men currently. The NSAL, like the vast majority of national probability based samples, does not include homeless men or institutionalized populations such as men in halfway houses. These populations have a higher likelihood of being previously incarcerated. The self-report measures also are liable to be inadvertently subject to bias with individuals who feel more distress/depressed more likely than others to report discrimination as a result of their psychological state, but not necessarily due to actual differences in discrimination. That is, African American men with mental health problems may be more likely to report experiencing everyday discrimination. Longitudinal analyses, however, have largely found that discrimination precedes mental health problems, not the reverse (77). Despite these limitations, using a national representative sample and a sizable number of African American men were major strengths of this study.

Conclusions

We found that African American men with a history of incarceration have worse mental health outcomes than other African American men. Further, perceived everyday discrimination may contribute to these mental health problems. There is a growing realization among both Democrats and Republican politicians that the increasingly high rate of incarceration in the United States has been detrimental to the country. However, there has been little discussion about reducing the numerous discriminatory barriers that deny employment, housing, and civic opportunities (voting) to individuals who have been previously incarcerated. Our findings suggest that any public policy that reduces the rates of African American incarceration and/or incarceration-related discrimination will likely enhance the mental health and general wellbeing of African American men.

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1-a- Model 1; Depressive symptoms as the outcome

1-b- Model 2, Psychological distress as the outcome

Figure 1.

Summary of the path models on the association between incarceration history and mental health among African American men

Fit for Model 1: [Chisquare = 2.288, Degrees of freedom = 1, $P = 0.137$, CFI = 0.997, $\chi^2/df = 2.212$, $RMSEA = 0.031$].

Fit for Model 2: [Chisquare = 2.288, Degrees of freedom = 1, $P = 0.130$, CFI = 0.997, $\chi^2/df = 2.228$, $RMSEA = 0.032$].

Solid lines with bold numbers represent statistically significant paths ($p < 0.05$).

Numbers are standardized path coefficients.

Table 1:

Demographic and socio-economic characteristics of African American men

	Mean (SE)	95% CI
Age	41.76(0.67)	40.40–43.12
Education	12.45(0.12)	12.21–12.69
Income	42912.46(2246.66)	38346.69–47478.23
Psychological Distress	3.36(0.18)	2.99–3.73
Depressive Symptoms	6.11(0.23)	5.65–6.58
Discrimination	13.71(0.47)	12.75–14.67
	% (SE)	95% CI
Incarceration history		
No	73.48(0.01)	70.30–76.43
Yes	26.52(0.01)	23.57–29.7

Means and Percentages are weighted.

SE=Standard Error, CI=Confidence Interval

Table 2:

Correlation matrix between incarceration history, demographic factors, discrimination, depressive symptoms, and psychological distress among African American men

	1	2	3	4	5	6	7
1 Incarceration History	1	−0.008	−.123 **	−.117 **	.139 **	.128 **	.163 **
2 Age		1	−.248 **	−0.029	−.061 *	−.072 *	−.222 **
3 Education			1	.317 **	−.156 **	−.125 **	.084 **
4 Income				1	−.147 **	−.131 **	0.004
5 Depressive Symptoms					1	.693 **	.288 **
6 Psychological Distress						1	.283 **
7 Discrimination							1

*
P<0.5

**
P<0.01

Table 3:

Summary of structural equation modeling testing if discrimination mediates the effect of incarceration history on depressive symptoms of African American Men

Predictor		Outcome	B (SE)	P
Model 1				
Incarceration history	→	Depressive symptoms	0.10(0.34)	<0.001
Age	→	Depressive symptoms	-0.08(0.01)	0.004
Education	→	Depressive symptoms	-0.15(0.16)	<0.001
Income	→	Depressive symptoms	-0.09(0.01)	0.003
Model 2				
Incarceration history	→	Discrimination	0.16(0.58)	<0.001
Discrimination	→	Depressive symptoms	0.28(0.02)	<0.001
Incarceration history	→	Depressive symptoms	0.05(0.33)	0.061
Age	→	Depressive symptoms	-0.02(0.01)	0.520
Education	→	Depressive symptoms	-0.16(0.15)	<0.001
Income	→	Depressive symptoms	-0.09(0.01)	0.002
Age	→	Discrimination	-0.22(0.02)	<0.001
Income	→	Discrimination	0.02(0.01)	0.539

Table 4:

Summary of structural equation modeling testing if discrimination mediates the effect of incarceration history on psychological distress of African American Men

Predictor		Outcome	B (SE)	P
Model 1				
Incarceration history	→	Psychological distress	0.09(0.25)	0.001
Age	→	Psychological distress	-0.09(0.01)	0.001
Education	→	Psychological distress	0.13(0.12)	<0.001
Income	→	Psychological distress	-0.08(0.01)	0.008
Model 2				
Incarceration history	→	Discrimination	0.16(0.58)	<0.001
Discrimination	→	Psychological distress	0.27(0.01)	<0.001
Incarceration history	→	Psychological distress	0.05(0.25)	0.090
Age	→	Psychological distress	-0.03(0.01)	0.315
Education	→	Psychological distress	-0.14(0.12)	<0.001
Income	→	Psychological distress	-0.08(0.01)	0.005
Age	→	Discrimination	-0.22(0.02)	<0.001
Income	→	Discrimination	0.02(0.01)	0.547