States higher in racial bias spend less on disabled medicaid enrollees

Jordan B. Leitner[a,*], Eric Hehman[b], Lonnie R. Snowden[c]

[a] Department of Psychology, University of California, Berkeley, United States
[b] Department of Psychology, Ryerson University, United States
[c] School of Public Health, University of California, Berkeley, United States

ARTICLE INFO

ABSTRACT

Background: While there is considerable state-by-state variation in Medicaid disability expenditure, little is known about the factors that contribution to this variation.

Objective: Since Blacks disproportionately benefit from Medicaid disability programs, we aimed to gain insight into whether racial bias towards Blacks is one factor that explains state-by-state variation in Medicaid disability expenditures.

Method: We compiled 1,764,927 responses of explicit and implicit racial bias from all 50 states and Washington D.C. to generate estimates of racial bias for each state (or territory). We then used these estimates to predict states' expenditure per disabled Medicaid enrollee. We also examined whether the relationship between racial bias and disabled Medicaid enrollee expenditure might vary according to states' level of income for Whites, income for Blacks, or conservatism.

Results: States with more explicit or implicit racial bias spent less per disabled Medicaid enrollee. This correlation was strongest in states where Whites had lower income, Blacks had higher income, or conservatism was high. Accordingly, these results suggest that racial bias might play a role in Medicaid disability expenditure in places where Whites have a lower economic advantage or there is a culture of conservatism.

Conclusion: This research established correlations between state-level racial bias and Medicaid disability expenditure. Future research might build upon this work to understand the direction of causality and pathways that might explain these correlations.

1. Introduction

Healthcare safety net programs such as Medicaid are politically controversial. While advocates cite the importance of providing health coverage to low-income and disabled individuals, critics argue that government assistance saps individual initiative, promotes dependency on government support, and is wasteful (Grogan, 1994; Jacoby and Schneider, 2001). Medicaid's stigma is exacerbated by its association with the opioid abuse crisis (Kaiser Health News, 2016) and disability-assistance programs that have come under attack for being rife with false claims (Finger, 2013; Pattison and Waldron, 2013).

This controversy surrounding healthcare safety net programs is evidenced by variation in states' support for expanding Medicaid. For instance, 19 states recently declined Medicaid expansion despite strong financial incentives to accept it (Snyder et al., 2012). While previous research has documented this state-by-state variability in expenditures on Medicaid (The Henry J. Kaiser Family Foundation, 2017a) and disability programs (Center on Budget and Policy Priorities, 2017), little is

known about what accounts for this variability. Thus, the aim of the current work was to examine the role of one possible factor in state support for Medicaid disability programs: racial bias.

1.1. Racial bias and opposition to Medicaid disability programs

Why might racial bias be involved in the opposition of health care assistance programs? Relative to the rest of the US population, Blacks tend to be disproportionately poor (Macartney et al., 2013) and rely on assistance programs to finance healthcare (DeNavas-Walt et al., 2014). Furthermore, there are strong stereotype-based links between Blacks and low income (van Doorn, 2015). Accordingly, voters and policy-makers who harbor negative attitudes towards Blacks might show greater opposition to such programs. While racial bias may undermine support of a variety of assistance programs, racial bias may play an especially prominent role in support for programs focused on disability, given that Blacks are disproportionately disabled (Clark and Maddox, 1992).

Supporting a possible link between racial bias and opposition to health care safety net programs, states with proportionally more Black and Latino residents spend less per-capita on Medicaid (Kousser, 2002). Furthermore, a review of evidence from cross-sectional, longitudinal, and experimental studies showed that race-based resentment aroused by Barack Obama's election predicted opposition to the Affordable Care Act (ACA; Tesler, 2016). For instance, greater racial resentment predicted less support for the ACA when it was described as Barack Obama's proposal, as compared to Bill Clinton's or "some people's" proposal. While this evidence suggests that racial bias influences citizens' self-reported opposition to Medicaid, a limitation of previous work is that it has not addressed the degree to which racial bias is related to states' actual spending on Medicaid programs. Thus, testing a direct link between racial bias and state-level Medicaid expenditures would be a valuable extension of prior work.

1.2. Manifestations of racial bias

Policy-makers' decisions regarding Medicaid disability expenditure may be related to state-level racial bias measured at both explicit and implicit levels. Explicit measures capture overt, consciously controlled bias, whereas implicit measures capture more automatic associations that are difficult to control (Greenwald et al., 2009). While some research has conceptualized explicit and implicit bias as independent constructs at the individual-level (Hofmann et al., 2005), little is known about the psychometric properties of explicit and implicit bias at the aggregate-levels of analysis. Given the paucity of research in this area, we considered it possible that Medicaid disability expenditure would be related to: (a) explicit but not implicit measures of bias, (b) implicit but not explicit measures of bias, or (c) both explicit and implicit measures of bias. Thus, to the extent that explicit and implicit bias are independent constructs at aggregate-levels of analysis, it would be ideal to apply modeling techniques that determine whether each independently predicts Medicaid disability expenditure.

Several factors may determine whether racial biases relate to states' support of Medicaid disability programs. One factor may be the socio-economic climate of Whites and Blacks. Specifically, Whites' latent racial biases may manifest into opposition of Medicaid expenditures when Whites' relative advantage is less, as evidenced by lower White income, higher Black income, or both. This possibility is consistent with research and theory suggesting that hostility towards other groups stems from resource scarcity (Pettigrew and Meertens, 1995) and the desire to justify an existing resource advantage (Sidanius and Pratto, 1993). Moreover, resource scarcity leads individuals to perceive Blacks as darker and more stereotypically Black, which in turn predicts fewer resources given to Blacks (Krosch and Amodio, 2014). Thus, explicit and implicit biases may predict decreased per enrollee expenditure in states where Whites (vs. Blacks) show low economic advantage, but not in states where Whites (vs. Blacks) show high economic advantage.

Another factor that may determine whether racial biases relate to lower support of Medicaid expenditure is conservatism. In general, conservative movements advocate for reduced government spending for programs such as Medicaid. Further, conservatism has previously been associated with a fear of losing resources (Jost et al., 2003). Since people in less conservative areas have a relatively lower fear of losing resources, they may support assistance programs (i.e., Medicaid) independent of their attitudes toward outgroups that benefit from such programs. In contrast, people in highly conservative areas may oppose assistance programs that allocate resources to disliked outgroups. In other words, the combination of high conservatism and high racial bias may uniquely predict low support for Medicaid disability programs.

1.3. Current research

In summary, the current research aimed to determine whether Whites' racial bias is associated with states' support of Medicaid

expenditures for disabled individuals. Our primary hypothesis was that, in states where Whites harbor greater racial bias towards Blacks, Medicaid expenditure per disabled enrollee would be lower. Additionally, we hypothesized that the effects of Whites' racial bias on Medicaid disability expenditure would be strongest in states where Whites had lower income, Blacks had higher income, and where there was a history of conservatism.

To determine whether any effects of racial bias were consistent across measures, we examined both explicit and implicit measures of racial bias. While the current research was correlational, and thus could not establish causality, we aimed to provide initial insight into whether racial bias might be related to Medicaid disability expenditures.

2. Data sources

2.1. Medicaid spending on disabled enrollees

Data on states' payment per disabled Medicaid enrollee were compiled from a report that analyzed 2009 spending (Snyder et al., 2012). We also compiled data on the raw number of Medicaid enrollees per state as an overall control for health, healthcare-related poverty, and demand on the Medicaid system. (For convenience, we also label the District of Columbia a *state.*) A Shapiro-Wilk test indicated that payment per disabled enrollee was significantly skewed, skew = .909, $w = .942$, $p = .0147$. To meet the assumption of normality, we log-transformed this variable. Nevertheless, the overall pattern of results is identical when we model the non-transformed version of this variable.

2.2. Racial bias

Racial bias was assessed by compiling responses from Project Implicit (Xu et al., 2014), a database of racial bias collected over the Internet since 2002. Within this dataset, data from respondents were included if they were White and their state-level geographical information was available. This search yielded 1,764,927 responses from all 50 states and Washington D.C. (# of responses per state: $M = 34,606$, $SD = 32,726$, range = 2305 to 150,155). Data were collected between 2002 and 2015. Fig. 1 displays a map of the states for which we obtained anti-Black racial bias.

Implicit bias. To assess implicit bias, respondents completed the Implicit Association Test (Greenwald et al., 1998), a speeded dual-categorization task in which respondents simultaneously categorized faces as "African American" or "European American," and words (e.g., "agony") as "Bad" or "Good" with a key press. Faster responses when Black and Bad (and White and Good) required the same key press, as compared to the reverse, are thought to reflect more anti-Black (or pro-White) implicit attitudes (Greenwald et al., 2009). Implicit bias was computed according to the D measure (Greenwald et al., 2003).

Explicit bias. To measure explicit bias, respondents rated how warm they felt towards European Americans and African Americans on separate 0 (coldest feelings) to 10 (warmest feelings) scales. Consistent with previous work (Karpinski and Hilton, 2001), we operationalized explicit bias as warmth towards European Americans minus African Americans.

2.3. Income

Median household income was assessed by compiling data from the 2009–2013 5-year estimate from the American Community Survey (factfinder.org). To examine potentially divergent effects of Whites' income and Blacks' income, we obtained independent values of Whites' median household income and Blacks' median household income in each state.
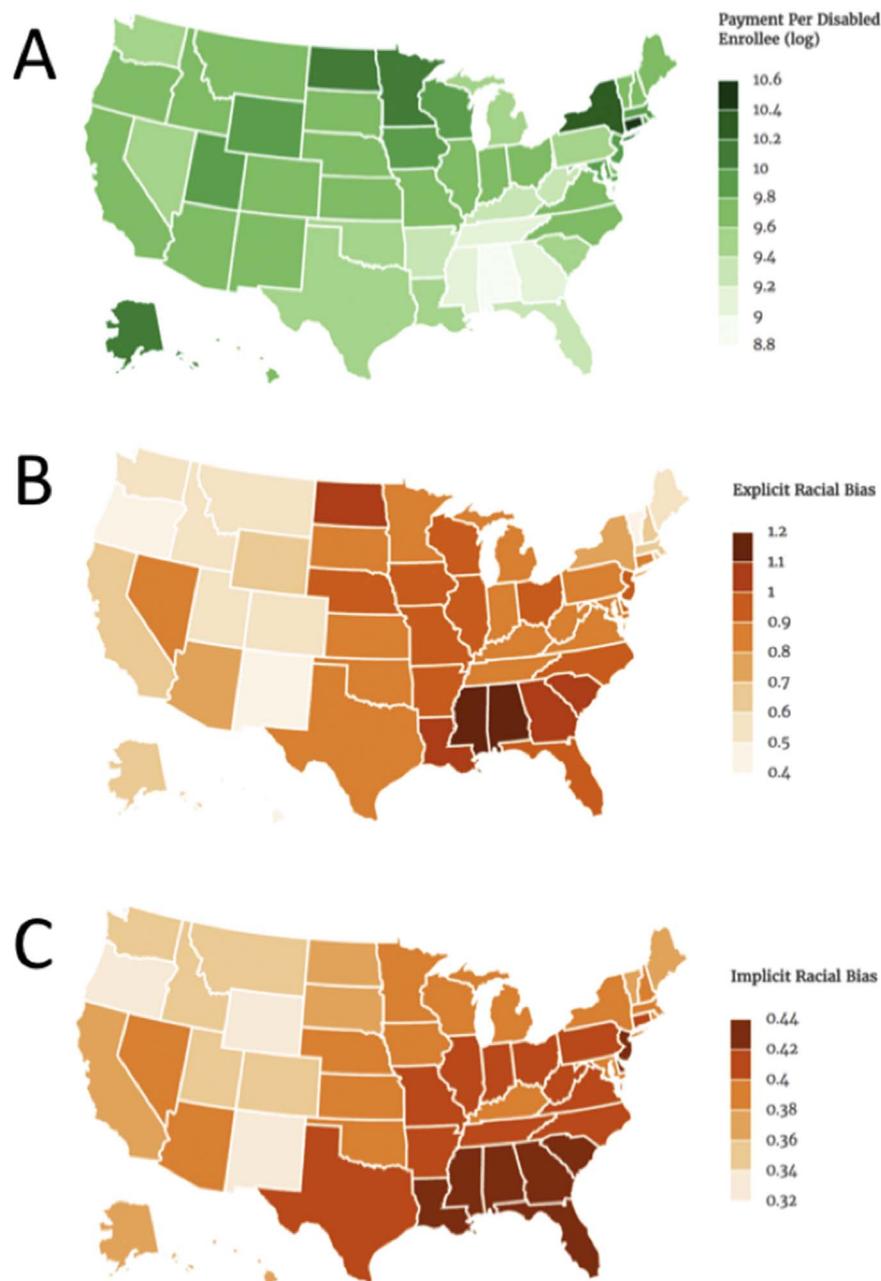
J.B. Leitner et al.

Fig. 1. Maps showing state-level estimates of payment per disabled enrollee (A), explicit racial bias (B), and implicit racial bias (C). Higher values on B and C reflect more anti-Black (or pro-White) attitudes.

2.4. Conservatism

States' conservatism was assessed by compiling data from the Pew Research Center, 2014 Religious Landscape Study (Pew Research Center, 2014).

3. Results

We had data on all measures from all 50 states and District of Columbia, which implies no missing data in any state-level analysis. First, we examined whether states' explicit or implicit bias was correlated with expenditure per disabled enrollee. We examined whether explicit and implicit bias were related to expenditure per disabled enrollee in separate models since explicit and implicit bias were strongly correlated ($r = .87, p < .0001$) and collinearity far exceeded acceptable levels when both bias measures were in the model together

(VIFs > 29). We report these results in separate models to demonstrate the consistency of any effects across two measures of racial bias.

Linear regression analyses indicated that in states where respondents harbored more explicit or implicit bias, expenditures per disabled enrollees decreased (Tables 1 and 2, Model 1; Fig. 2).

Next, we examined whether the effects of explicit and implicit bias would remain significant when controlling for a set of factors that may covary with racial bias and payments per enrollee. Specifically, we regressed payments per disabled enrollee on bias, conservatism, number of enrollees, Whites' income, and Blacks income. Even after accounting for these covariates, both explicit and implicit bias significantly predicted payments per disabled enrollees (Tables 1 and 2, Model 2). We also explored whether a quadratic effect of racial bias improved model fit, but no quadratic effects were significant ($ps > .13$) and were dropped from models.

To determine whether the effects of explicit bias varied as a function

Table 1
Regression models for explicit bias.

	b	β	SE	p	R^2
Model 1					.18
Explicit bias	0.684	−.423	.209	.0020	
Model 2					.43
Explicit bias	−.467	−.289	.238	.0557	
Conservatism	−.162	−.039	.780	.8360	
Enrollees	−.001	−.043	.002	.7126	
White Income	1.414	.542	.471	.0044	
Black Income	-.345	−.097	.562	.5423	
Model 3					.69
Explicit bias	−.766	−.474	.179	.0001	
Conservatism	−.213	−.051	.590	.7194	
Enrollees	−.002	−.136	.002	.2345	
White Income	3.459	1.327	.505	< .0001	
Black Income	−2.809	−.791	.627	.0001	
Explicit bias × Conservatism	−8.632	−.433	2.571	.0017	
Explicit bias × Enrollees	−.020	−.170	.013	.1467	
Explicit bias × White income	6.478	.567	1.779	.0008	
Explicit bias × Black income	−7.742	−.394	2.552	.0042	

Table 2
Regression models for implicit bias.

	b	β	SE	p	R^2
Model 1					.15
Implicit bias	−4.158	−.383	1.434	.0056	
Model 2					.47
Implicit bias	−3.477	−.320	1.257	.0082	
Conservatism	−0.428	−.103	.690	.5379	
Enrollees	< .001	−.018	.002	.8717	
White Income	1.350	.518	.440	.0037	
Black Income	-.134	−.038	.506	.7924	
Model 3					.70
Implicit bias	−3.556	−.327	1.034	.0014	
Conservatism	−.598	−.143	.561	.2930	
Enrollees	.001	.033	.002	.7259	
White Income	2.728	1.046	.454	< .0001	
Black Income	−1.922	−.541	.562	.0014	
Implicit bias × Conservatism	−60.773	−.445	17.238	.0011	
Implicit bias × Enrollees	.046	.045	.101	.6520	
Implicit bias × White income	40.380	.446	12.911	.0032	
Implicit bias × Black income	−50.620	−.329	21.966	.0263	

of income, conservatism, or the number disability enrollees, we included interactions between explicit bias and all covariates (Table 1, Model 3). The explicit bias × White income, explicit bias × Black income, and explicit bias × conservativism interactions were significant (Fig. 3). Simple slope analyses indicated that greater explicit bias predicted lower disability expenditure in states where: Whites had low income, $b = -1.5825$, $β = −.976$, $SE = .306$, $p < .0001$, Blacks had high income, $b = −1.444$, $β = −.894$, $SE = .301$, $p < .0001$, and conservatism was high, $b = −1.393$, $β = −.862$, $SE = .268$, $p < .0001$. In contrast, explicit bias was unrelated to disability payments in states where: Whites had high income, $b = 0.051$, $β = .031$, $SE = 0.267$, $p = .8501$, Blacks had low income, $b = −.088$, $β = −.054$, $SE = .271$, $p = .7489$, and conservatism was low, $b = −0.213$, $β = −.051$, $SE = 0.590$, $p = .7194$.

Because logarithmic transformations can make interpretations

difficult, for interpretability, we exponentiated the product of each coefficient with the *SD* of explicit bias to estimate the predicted change in Medicaid disability spending (in raw units) for every *SD* increase in explicit bias. For every one-*SD* increase in explicit bias, Medicaid disability spending decreased 26% in states where Whites had low income (but increased 1% in states where Whites had high income), decreased 24% in states where Blacks had high income (but decreased 2% in states where Blacks had low income), and decreased 23% in states where conservatism was high (but decreased 3% in states where conservatism was low). Taken together, higher explicit bias predicted decreased per enrollee expenditure in conservative states where Whites had less of an economic advantage and Blacks had more of an economic advantage.

To determine whether the effects of implicit bias varied as a function of income, conservatism, or the number of disability enrollees, we included interactions between implicit and all covariates (Table 2, Model 3). The implicit bias × White income, implicit bias × Black income, and implicit bias × conservatism interactions were significant (Fig. 4). Greater implicit bias predicted lower per enrollee expenditure in states where: Whites had low income, $b = −8.647$, $β = −.796$, $SE = 1.944$, $p < .0001$, Blacks had high income, $b = −7.991$, $β = −.735$, $SE = 2.144$, $p = .0006$, and conservatism was high, $b = −7.968$, $β = −.733$, $SE = 1.597$, $p < .0001$. In contrast, implicit bias was unrelated to disability payments in states where: Whites had high income, $b = 1.535$, $β = .141$, $SE = 1.913$, $p = .4269$, Blacks had low income, $b = .879$, $β = .081$, $SE = 2.225$, $p = .6947$, and conservatism was low, $b = .856$, $β = .079$, $SE = 1.650$, $p = .6064$. For every one-*SD* increase in implicit bias, Medicaid disability spending: decreased 21% in states with low White income (but increased 4% in states with high White income), decreased 20% in states with high Black income (but increased 2% in states with low Black income), and decreased 20% in states where conservatism was high (but increased 2% in states where conservatism was low). Thus, higher implicit bias predicted lower disability payments in conservative states where Whites had less of an economic advantage and Blacks had more of an economic advantage.

Finally, our decision to model explicit bias as warmth towards Whites minus warmth towards Blacks did not affect conclusions. Specifically, lower state-level warmth towards Blacks was related to lower Medicaid disability expenditure, $b = 0.7317$, $β = .327$, $SE = 2.237$, $p = .0299$, and this relationship was most pronounced in conservative states where Whites had less of an economic advantage and Blacks had a greater economic advantage.

4. Discussion

There is considerable state-by-state variation in Medicaid expenditure, as states can opt to offer optional benefits (e.g., physical therapy, adult dental care, optometry), control prescription drug benefits, and impose cost-sharing requirements for receiving care (The Henry J. Kaiser Family Foundation, 2017b). While previous research has found that a greater prevalence of Blacks and Hispanics in the population is related to lower Medicaid spending (Kousser, 2002), and racial resentment is related to negative perceptions of health care assistance programs (Tesler, 2016), no previous work has established whether racial bias is directly related to Medicaid spending. The current research provides evidence for this key link, demonstrating that Medicaid disability spending was lower in states where Whites harbored more racial bias.

Notably, state-level racial bias was correlated with state-level Medicaid disability expenditure, regardless of whether bias was operationalized with explicit or implicit measures. As such, one question raised by these findings is: was explicit or implicit bias the stronger predictor of Medicaid disability spending. Indeed, this question is consistent with work that has modeled explicit and implicit bias together to quantify the independent role of each form of bias (Hehman et al., 2017; Leitner et al., 2016a, 2016b). However, a critical difference
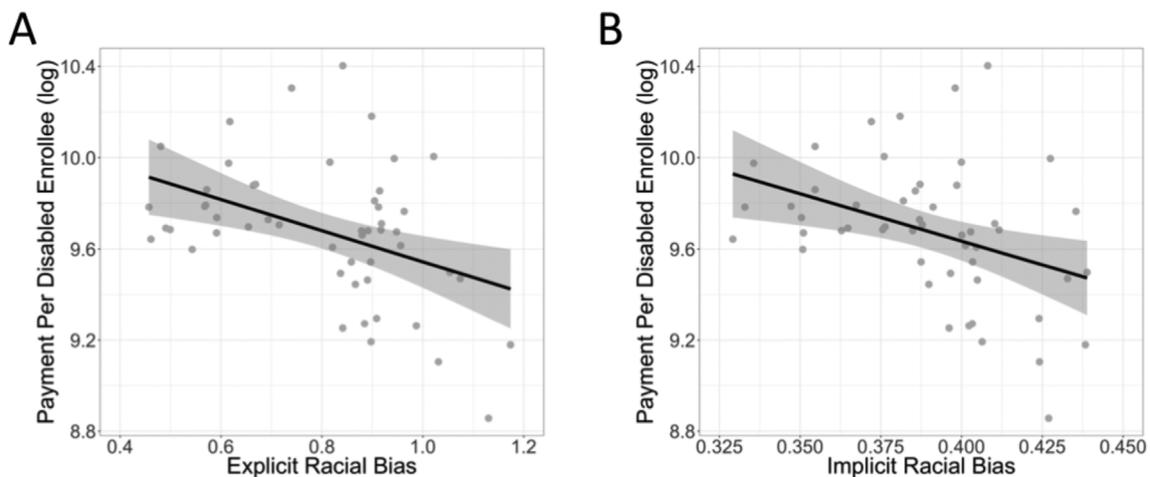
Fig. 2. Scatter plots showing payment per disabled enrollee as a function of explicit bias (A) and implicit bias (B). Each dot represents state-level averages.

between these previous papers and the current work is the level of aggregation of racial bias. Whereas previous work aggregated racial bias at the levels of county (Leitner et al., 2016a, 2016b) and core based statistical areas (Hehman et al., 2017), the current work aggregated at the state level. Critically, recent evidence indicates that the correlation between explicit and implicit bias js stronger at the state-level ($r = .84$) than CBSA-level ($r = .75$), which is stronger than the country-level ($r = .25$; Hehman et al., under review). Thus, it is possible that the explicit and implicit bias measures reflect independent constructs at lower levels of aggregation, but reflect the same underlying construct at higher levels of aggregation.

Related to this possibility, a recent theoretical framework suggests that a person's implicit bias may manifest into explicit bias to the extent that the person is in a social context where others have high levels of implicit bias (Payne et al., 2017). Thus, in places where "crowds" have high implicit bias, explicit and implicit bias measures may capture overlapping constructs. Additionally, theoretical frameworks suggest that diverse individual-level attributes can shape stable group-level social structures (e.g., laws, institutions; Oishi and Graham, 2017; Rentfrow et al., 2008), and group-level constructs can emerge that are distinct from the individual constructs that comprise it (Smaldino, 2014). For instance, while the number of artists in a city may affect the city's budget for art programs, artist population and art budget are ultimately distinct. Thus, measuring explicit or implicit bias at the group-level may tap into common structural factors that are independent from individual-level characteristics.

However, an alternative possibility is that explicit and implicit bias measures tap the same underlying construct at both individual and aggregate levels of analysis. If this were the case, it would beg the question of why the explicit-implicit correlation increases with higher levels of aggregation. One potential explanation is that the reliability of implicit bias is greater at higher levels of analysis (Hehman et al., under review), and the potential for strong correlations between measures grows as reliability of these measures increases (Nunnally, 1970; Spearman, 1904). As future research is needed to evaluate these possibilities, we are cautious about making strong conclusions about whether state-level explicit and implicit bias differ on construct or predictive validity.

4.1. Limitations

One limitation of this research was that its correlational design does not provide evidence of causality. As such, a remaining question is what causal pathways might explain the correlation between the racial bias of individuals in a state and state-level healthcare policy decisions? Since Medicaid spending decisions are made by elected officials (Snyder

et al., 2012), one possibility is that voters who harbor racial bias towards Blacks elect politicians with platforms that oppose programs that disproportionately benefit Blacks (e.g., Medicaid disability assistance). Once elected, these politicians may contribute to decisions that limit such programs in order to reflect the interests of their constituents. State-elected politicians may be especially sensitive to the racial biases of White constituents since these politicians are themselves disproportionately White (The Gender and Multi-cultural Leadership Project, 2017), and people adopt the racial biases of in-group members (Priest et al., 2014). Furthermore, the largest campaign contributions come from areas that are predominately White (Gimpel et al., 2006), and campaign contributions may influence policy decisions.

Supporting the possibility of a causal link between Whites' racial bias and health care policy, research has found that explicit and implicit biases at the individual-level explain unique variance in voting behavior (Glaser and Finn, 2013; Payne et al., 2010), and Blacks report decreased access to affordable healthcare in areas where Whites harbor more racial bias towards Blacks (Leitner et al., 2016a,b). However, the correlational nature of this research leaves the possibility that an unmeasured "third variable" accounted for the link between racial bias and Medicaid disability expenditure. Thus, future research is needed to determine whether a causal relationship exists between racial bias and Medicaid disability expenditure.

Another limitation of the current research is that racial biases were measured with self-selected samples that might not be representative. For instance, estimates might not represent individuals who are not motivated to complete bias measures or do not have Internet access. While Project Implicit respondents show similar patterns of bias as nationally representative samples (Pinkston, 2015), and recent research has demonstrated that county-level estimates of racial bias as measured from Project Implicit predict important outcomes, including healthcare availability and death rate (Leitner et al., 2016a), future research should examine if the current findings replicate when bias is measured with full probability sampling.

4.2. Public health implications

As hypothesized, the lowest Medicaid disability expenditures were in states with both the highest levels of explicit bias and where Whites' held less of a socioeconomic advantage over Blacks. This is consistent with research showing that hostility towards other groups is related to competition for resources (Pettigrew and Meertens, 1995) and the desire to justify an existing resource advantage (Sidanius and Pratto, 1993). However, we extend this past work to domain of public health. This is important, as congressional Republicans have proposed awarding federal contributions as block grants to states (The Henry J.
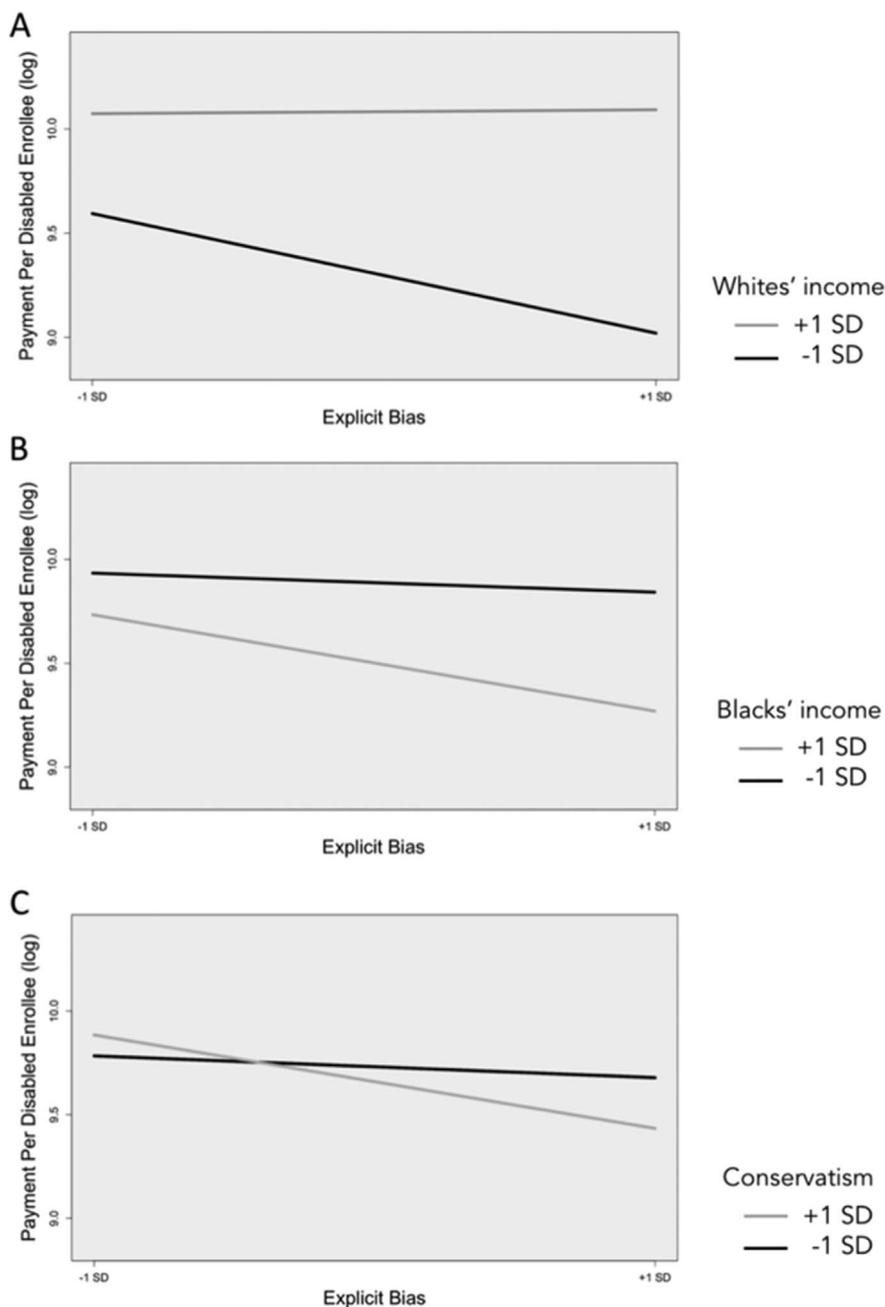
Fig. 3. Payment per disabled enrollee (log-transformed) as a function of explicit bias and Whites' income (A), Blacks' income (B), and conservatism (C). Slopes are adjusted for covariates.

Kaiser Family Foundation, 2017b). These block grants would increase states' discretion in making health policies, and thus open the possibility that states' policies would be shaped by the intergroup biases and socioeconomic competition of voters in that state.

Healthcare expenditures for disabled persons vary across states for many reasons, including states' demographics and population health. Additionally, opportunities to purchase care vary with states' healthcare treatment infrastructure: states with more healthcare providers and facilities present more opportunities for spending on care. As such, one question raised by the current findings is: Was state-by-state variation in Medicaid spending due to variation in supply of services or need for services? We posit that need for disability-related services was likely consistent across states since all Medicaid disabled enrollees meet common standards of poverty and disability. Thus, we interpret the current findings as evidence that racial bias was related to states' supply of disability-related health care services. However, future research

might explore whether people are less likely to seek out opportunities for care when they live in environments where they are the target of racial bias.

4.3. Conclusion

To our knowledge, this is the first research to find a correlation between racial bias and Medicaid expenditure. This correlation emerged when racial bias was operationalized with explicit or implicit measures. Moreover, these relationships were strongest in states where Whites had less of an economic advantage (Whites had lower income and/or Blacks had higher income) and conservatism was high. Future research should determine the causal pathways that might account for the correlations observed in the current work.
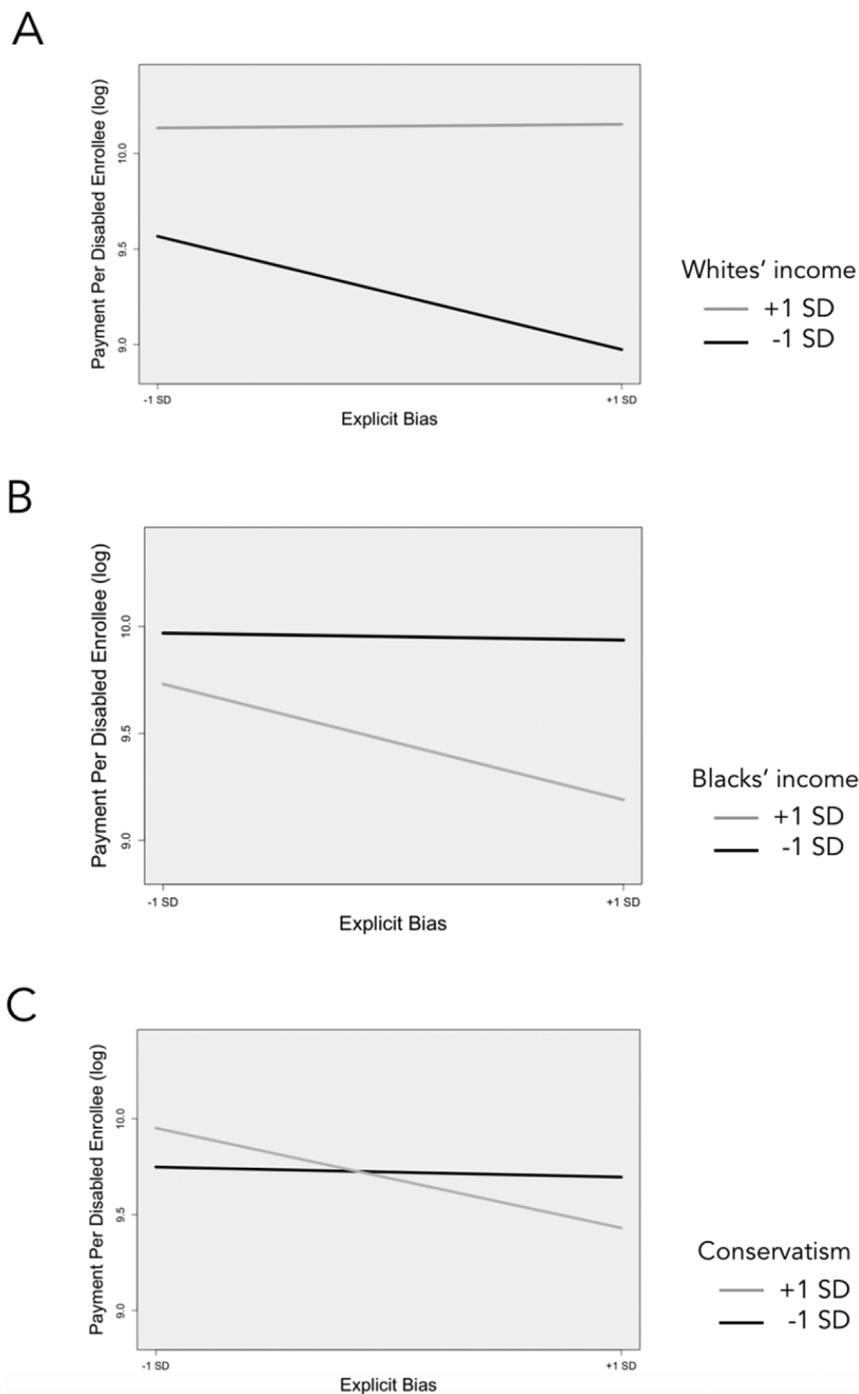
Fig. 4. Payment per disabled enrollee as a function of implicit bias and Whites' income (A), Blacks' income (B), and conservativism (C). Slopes are adjusted for covariates.

References

Center on Budget and Policy Priorities, 2017. Chart Book: Social Security Disability Insurance. [ONLINE] Available at: https://www.cbpp.org/research/social- security/chart-book-social-security-disability-insurance, Accessed date: 1 October 2017.

Clark, D.O., Maddox, G.L., 1992. Racial and social correlates of age-related changes in functioning. J. Gerontol. 47, S222–S232.

DeNavas-Walt, C., Proctor, B.D., Smith, J.C., 2014. Income, Poverty, and Health Insurance Coverage in the United States: 2012. US Census Bureau. 2013.

Finger, R., 2013. Fraud and Disability Equal a Multibillion Dollar Black Hole for Taxpayers. [ONLINE] Available at: https://www.forbes.com/sites/richardfinger/2013/01/14/fraud-and-disability- equal-a-multibillion-dollar-balck-hole-for-taxpayers/#7ed4d3d53369, Accessed date: 1 October 2017.

Gimpel, J.G., Lee, F.E., Kaminski, J., 2006. The political geography of campaign contributions in American politics. J. Polit. 68, 626–639.

Glaser, J., Finn, C., 2013. How and why implicit attitudes should affect voting. PS Political Sci. Polit. 46, 537–544.

Greenwald, A.G., McGhee, D.E., Schwartz, J.L.K., 1998. Measuring individual differences in implicit cognition: the implicit association test. J. Pers. Soc. Psychol. 74, 1464–1480. http://dx.doi.org/10.1037/0022-3514.74.6.1464.

Greenwald, A.G., Nosek, B.A., Banaji, M.R., 2003. Understanding and using the implicit association test: I. An improved scoring algorithm. J. Pers. Soc. Psychol. 85, 197–216. http://dx.doi.org/10.1037/0022-3514.85.2.197.

Greenwald, A.G., Poehlman, T.A., Uhlmann, E.L., Banaji, M.R., 2009. Understanding and using the implicit association test: III. Meta-analysis of predictive validity. J. Pers. Soc. Psychol. 97, 17–41. http://dx.doi.org/10.1037/a0015575.

Grogan, C.M., 1994. Political-economic factors influencing state Medicaid policy. Polit. Res. Q. 47, 589–622.

Hehman, E., Calanchini, J., Flake, J.K., Leitner, J.B. Under review. Establishing Construct Validity: Evidence for Region-Level Measures of Explicit and Implicit Racial Bias.

Hehman, E., Flake, J.K., Calanchini, J., 2017. Disproportionate use of lethal force in policing is associated with regional racial biases of residents. Soc. Psychol. Personal. Sci., 1948550617711229.

Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., Schmitt, M., 2005. A meta-

analysis on the correlation between the Implicit Association Test and explicit self-report measures. Personal. Soc. Psychol. Bull. 31, 1369–1385.

Jacoby, W.G., Schneider, S.K., 2001. Variability in state policy priorities: an empirical analysis. J. Polit. 63, 544–568.

Jost, J.T., Glaser, J., Kruglanski, A.W., Sulloway, F.J., 2003. Political Conservatism as Motivated Social Cognition.

Kaiser Health News, 2016. Hoping to Attack Opioid Epidemic at its Source, State Medicaid Programs Are Limiting Prescriptions. [ONLINE] Available at: https://www.statnews.com/2016/11/23/medicaid-opioid-limits/, Accessed date: 1 October 2017.

Karpinski, A., Hilton, J.L., 2001. Attitudes and the implicit association test. J. Pers. Soc. Psychol. 81, 774–788. http://dx.doi.org/10.1037/0022-3514.81.5.774.

Kousser, T., 2002. The politics of discretionary Medicaid spending, 1980–1993. J. Health Polit. Policy Law 27, 639–672.

Krosch, A.R., Amodio, D.M., 2014. Economic scarcity alters the perception of race. Proc. Natl. Acad. Sci. Unit. States Am. 111, 9079–9084.

Leitner, J.B., Hehman, E., Ayduk, O., Mendoza-Denton, R., 2016a. Blacks' death rate due to circulatory diseases is positively related to whites' explicit racial bias: a nationwide investigation using project implicit. Psychol. Sci. 27 (10), 1299–1311.

Leitner, J.B., Hehman, E., Ayduk, O., Mendoza-denton, R., 2016b. Racial bias is associated with ingroup death rate for Blacks and Whites: insights from Project Implicit. Soc. Sci. Med. 1–8. http://dx.doi.org/10.1016/j.socscimed.2016.10.007.

Macartney, S., Bishaw, A., Fontenot, K., 2013. Poverty Rates for Selected Detailed Race and Hispanic Groups by State and Place: 2007-2011. US Department of Commerce, Economics and Statistics Administration, US Census Bureau.

Nunnally, J., 1970. Introduction to Psychological Measurement. McGraw-Hill, New York.

Oishi, S., Graham, J., 2017. Social ecology : lost and found in psychological science. Perspect. Psychol. Sci. 5 (4), 356–377.

Pattison, D., Waldron, H., 2013. Growth in new disabled-worker entitlements 1970-2008. Soc. Secur. Bull. 73, 25.

Payne, B.K., Krosnick, J.A., Pasek, J., Lelkes, Y., Akhtar, O., Tompson, T., 2010. Implicit and explicit prejudice in the 2008 American presidential election. J. Exp. Soc. Psychol. 46, 367–374.

Payne, B.K., Vuletich, H.A., Lundberg, K.B., 2017. The bias of crowds: how implicit bias bridges personal and systemic prejudice. Psychol. Inq. 28 (4), 233–248.

Pettigrew, T.F., Meertens, R.W., 1995. Subtle and blatant prejudice in western europe. Eur. J. Soc. Psychol. 25, 57–75.

Pew Research Center, 2014. Political Ideology by State. [ONLINE] Available at: http://www.pewforum.org/religious-landscape-study/compare/political- ideology/by/

state/, Accessed date: 1 October 2017.

Pinkston, K., 2015. The black-white malleability gap in implicit racial evaluations: a nationally representative study. J. Soc. Psychol. 155, 189–203.

Priest, N., Walton, J., White, F., Kowal, E., Baker, A., Paradies, Y., 2014. Understanding the complexities of ethnic-racial socialization processes for both minority and majority groups: a 30-year systematic review. Int. J. Intercult. Relat. 43, 139–155. http://dx.doi.org/10.1016/j.ijintrel.2014.08.003.

Rentfrow, P.J., Gosling, S.D., Potter, J., 2008. A theory of the emergence, persistence, and expression of geographic variation in psychological characteristics. Perspect. Psychol. Sci. 3 (5), 339–369.

Sidanius, J., Pratto, F., 1993. The inevitability of oppression and the dynamics of social dominance. Prejud. Polit. Am. Dilemma 173–211.

Smaldino, P.E., 2014. The Cultural Evolution of Emergent Group-level Traits. pp. 243–295. http://doi.org/10.1017/S0140525X13001544.

Snyder, L., Rudowitz, R., Garfield, R., Gordon, T., 2012. Why Does Medicaid Spending Vary across States: a Chart Book of Factors Driving State Spending. Kaiser Fam. Found. 8378, Washington, DC.

Spearman, C., 1904. The proof and measurement of association between two things. Am. J. Psychol. 15 (1), 72–101.

Tesler, M., 2016. Post-racial or Most-racial?: Race and Politics in the Obama Era. University of Chicago Press.

The Gender and Multi-cultural Leadership Project, 2017. United States: National Elected Officials. [ONLINE] Available at: http://www.gmcl.org/maps/national/gender.htm, Accessed date: 1 October 2017.

The Henry J. Kaiser Family Foundation, 2017a. Current Flexibility in Medicaid: an Overview of Federal Standards and State Options. [ONLINE] Available at: https://www.kff.org/medicaid/issue-brief/current-flexibility-in-medicaid-an- overview-of-federal-standards-and-state-options/, Accessed date: 1 October 2017.

The Henry J. Kaiser Family Foundation, 2017b. 5 Key Questions: Medicaid Block Grants & Per Capita Caps. [ONLINE] Available at: https://www.kff.org/medicaid/issue-brief/5-key-questions-medicaid-block-grants-per-capita-caps/, Accessed date: 1 October 2017.

van Doorn, B.W., 2015. Pre-and post-welfare reform media portrayals of poverty in the United States: the continuing importance of race and ethnicity. Polit. Policy 43, 142–162.

Xu, K., Nosek, B., Greenwald, A.G., 2014. Data from the race implicit association test on the project implicit demo website. J. Open Psychol. Data 2, e3. http://dx.doi.org/10.5334/jopd.ac.