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Racialized Perceptions and Child Neglect

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Introduction

Regression models of discrimination in the child protective services borrow from conventional economic methods to measure and detect discrimination (Blinder, 1973; Gupta, Oaxaca & Smith, 2006; Oaxaca, 1973). These methods derive from the premise that employers (or landlords or real estate agents or lenders or child welfare workers) are motivated by “tastes for discrimination” (Becker, 1957). Refinements consider instances where agents do not engage in intentional discrimination but, when faced with limited information or uncertainty about such factors as employee productivity, risk of default, credit worthiness, or in the case of child welfare, “front-end risks,” engage in actions that nonetheless can produce disparate outcomes (Aigner & Cain, 1977; Arrow, 1973). A recurring criticism of these economic models of discrimination, however, has been that they fail to explain or to detail the causal mechanisms that produce the underlying racial biases, beliefs or racialized perceptions that putatively produce observed discriminatory outcomes.

Recent experimental work in both social psychology and economics has produced valuable insights into the formation and prevalence of certain types of racialized perceptions that can produce observed disparities in markets and economically relevant outcomes. Included in this literature are tests about the impacts of names, skin color, and other signals about the race of participants in labor markets or consumer markets (Bertrand & Mullainathan, 2004;

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List, 2004; Nardinelli & Simon, 1990; Nunley, Owens & Howard, 2010; Pope & Sydnor, 2011; Ravina, 2008; Doleac & Stein, 2010). These field experiments can be criticized because, although they speak to the issue of whether racial discrimination exists, they leave largely unaddressed the question of how much of *observed* racial disparities can be explained by the experimental measures of racial bias. There is almost no recent economics literature establishing a clear relationship between measures of racial animosity or individual beliefs about racial inferiority and observed racially disparate market or non-market outcomes.

The foundations for economic modeling of what will be called in this paper “racialized perceptions” can be found in the work of researchers examining stereotype threat models where the social stigma of intellectual inferiority borne by certain cultural minorities can undermine their performance (Aronson, Quinn & Spencer, 1998; Steele, 1997; Steele & Aronson, 1995). This is related to the work of social psychologists who use implicit association tests where subconscious beliefs about subgroups surface in rapid response tests that require pairing or making comparisons (Greenwald, McGhee & Schwartz, 1998; Gawronski, 2002; Ottaway, Hayden & Oakes, 2001). These works point to a possible mechanism underlying racially disparate outcomes. Racialized perceptions can produce both the initial disparities and the self-confirming evidence that permits these disparities to persist through time.

This paper contributes to the growing literature on the modeling of racialized perceptions by considering the controversy about racial disproportionality in child neglect.¹ Child neglect, unlike outcomes in traffic stops or rental markets or job interviews, comes within the framework of social workers. Historically, social workers have been white females whose work is driven by compassion, dedication to the disadvantaged, and commitment to equality. Yet, in child welfare we see wide racially disparate outcomes just as one sees in other spheres of society, such as the criminal justice system, labor markets, housing markets, or credit markets.² Moreover, one rarely sees the “smoking gun” of bigoted, racially offensive behavior on the part of child protective service (CPS) workers. Indeed, charges of racial discrimination or racial bias by such workers often produce great pain and anguish within the social work profession (Drake & Rank, 2009). Thus, the methodology we employ in this paper is designed to uncover unconscious and underlying perceptions that, through training or interventions, offer the potential to change behavior.

A further contribution of this paper is that it produces evidence that there is a relationship between indices of racialized perceptions and observed outcomes, such as racial disproportionality, in substantiated maltreatment across counties. Thus, although it is helpful to produce new ways of measuring racialized perceptions, what is more important is being able to empirically establish whether there is any relationship between these perceptions on one hand and actual outcomes on the other.

This paper models racialized perceptions of child protective service workers and tests the hypothesis that these perceptions contribute to the racial disproportionality in reported and/or substantiated child maltreatment. Three aspects of overrepresentation are of interest. They

¹We focus in this paper on both a) racial disproportionality in child maltreatment and b) disparities by caseworkers in assessment of child neglect. For more on the confusion between disproportionality and disparities in child protective services see Myers, 2011 and Wulczyn, 2011.

²There are wide racial gaps in housing, credit, and labor markets (Yinger, 1995; Ladd, 1998; Darity & Myers, 1998). There are also wide racial disparities in the business outcomes (Fairlie and Robb, 2007; Fairlie & Meyer 1996, 2000; Boston, 1999; Bates, Lofstrom & Servon, 2010). In public procurement and contracting, for example, African American business enterprises are far less likely than other firms to bid successfully on state and federally funded construction, professional services, and other contracts, and when they are successful they receive contracts of smaller size than other firms (Myers & Chan, 1996; *GEOD vs NJT*, 2010). Other widely cited racial disparities include those in the criminal justice system, school performance, traffic stops, and health care.

are the overrepresentation of African American children: a) who are reported to county child protective services for alleged abuse or neglect; b) whose maltreatment cases are investigated and substantiated by county child protective service workers; c) who are placed in foster care or out-of-home placement, in part as a result of county investigations and substantiations.

The data for our analysis come from Minnesota where African Americans are five to six times more likely to be found in child protective services (CPS) than they are found in the child population, producing one of the highest disproportionality rates in the nation.³ African Americans are more likely to be found in every stage of the process, from report to out-of-home and foster care placement, than they are to be found in the general child population. While this disproportionality exists elsewhere in the United States, it is particularly acute in Minnesota and has prompted legislation requiring documentation and research to reduce it (2001 Minnesota Session Laws, First Special Session, Chapter 9, Article 11, Section 15).

The paper proceeds as follows. First, we summarize the controversy about the racial disproportionality of African American children in child protective services. We provide some background on the possible causes for overrepresentation of African American children in the child welfare system. Second, we discuss methods and techniques suggested in the literature to model racialized perceptions or beliefs of caseworkers. We then detail the method adopted for this analysis, which captures the salient features of “stereotype” assessments (e.g., implicit association tests (Greenwald, McGhee & Schwartz, 1998; Gawronski, 2002; Ottaway, Hayden, & Oakes, 2001)) and stereo-type threat models performance (Aronson, Quinn, & Spencer, 1998; Steele, 1997; Steele & Aronson, 1995) while focusing on visual representations of state definitions of neglect and reportable offenses.

Our hypothesis is that black disproportionality in *reported and substantiated* child neglect hinges on how and whether case workers visualize black vs. white neglect situations. If things that “look black” are more likely to be perceived by caseworkers as reportable offenses or to meet state definitions of child maltreatment than things that “look white,” then this could be a pretext for locating larger fractions of black children among the reported and substantiated or out-of-home placements.

We were fortunate in constructing our test of racialized perceptions because our interviews with child welfare workers produced a consistent illustration of what constitutes a specific form of neglect. In the state of Minnesota it refers to a failure to provide adequate food, clothing, or shelter that endangers a child's welfare constitutes neglect.⁴ Our interviews with caseworkers unveiled a concept called “the messy room (or apartment)” phenomenon. Respondents in our interviews uniformly indicated that a filthy, messy, disorderly living environment is something they “know when they see it” and “it” usually signals a neglectful set of circumstances. Building on this illustration of what case workers *visualize* as neglect—whenever they visit a home after a report or during an investigation—we have constructed a test that is then used to produce an index of racialized perceptions on the part of case workers in a county. We then test the hypothesis that these racialized perceptions are statistically related to disproportionality rates.

³Also in Minnesota, American Indians are four to five times more likely to be found in the CPS than they are to be found in the child population; Hispanics are 1.7 to 2.7 times more likely to be found in the CPS than they are to be found in the child population (Ards, Chung, & Myers, 1998).

⁴See, for example, Minnesota's child neglect definition, Minnesota Statutes Chapter 626, No. 556 Subdivision 2. Definition (Minnesota) (d) NEGLECT.

I. The Racial Disproportionality Controversy: Reasons for Overrepresentation of Black Children in the Child Welfare System

African American children are 1.6 times more likely to be found in child protective services⁵ and two times more likely to be found in out-of-home placement than they are to be found in the overall population.⁶ In some states like Wisconsin and Minnesota with relatively small black populations, the disproportionality rates are even higher.

In Minnesota, African Americans are five to six times more likely to be found in child protective services (CPS) than they are found in the child population, producing one of the highest disproportionality rates in the nation. Also in Minnesota, American Indians are four to five times more likely to be found in CPS than they are to be found in the child population; Hispanics are 1.7 to 2.7 times more likely to be found in CPS than they are to be found in the child population (Ards, Chung, & Myers, 1998).

The NCANDs (National Child Abuse and Neglect Data) reporting system compiles official reported and substantiated abuse and neglect cases at the county and state levels. Consistently, this data set reveals large and statistically significant disparities in reported and substantiated maltreatment.

This disproportionality in reported and substantiated child abuse and neglect is in stark contrast to what is known about underlying patterns of child maltreatment. In repeated federally financed studies of both reported and unreported abuse and neglect, researchers of what have come to be known as the *National Incidence Studies (NIS)* have concluded that there are imperceptible differences in actual maltreatment rates between blacks and whites. In the first three NIS studies (1980, 1986, and 1993), no statistically significant differences are found between blacks and whites in maltreatment rates (Sedlak & Broadhurst, 1996). By implication, then, the observed racial disparities in report rates must be due to racial disparities in reporting and not to racial disparities in underlying abuse. But a design flaw in the three NIS studies did not consider the possibility of racial disparities in reports by child protective service workers and other child welfare officials. Nevertheless, correcting for this bias does not reverse the conclusion that reporting bias does not appear to be the cause of the overrepresentation of blacks among those abused and neglected (Ards, Chung, & Myers, 1998).

The fourth NIS study in 2004 (Sedlak & Schultz, 2005) improves the methodology, includes a larger sample, and produces racial differences in maltreatment rates comparable to those found in NCANDs. The larger sample and smaller standard errors result in these differences being statistically significant, removing some of the doubt about the origins of observed disparities.

Three explanations are most often provided for these racial disparities in reported and substantiated child maltreatment (Hill, 2006; Fluke, et al., 2011). First, blacks are expected to be overrepresented in the child welfare system because they have *multiple risk factors* (such as single parent families, high school dropout rates, and residency in high crime areas) that predispose them to maltreat their children more than whites (Barth & Miller, 2001; Jason, Anderreck, & Tyler, 1982). Related to the high-risk factors is the explanation that disparate representation is due to blacks' poverty status, i.e., since poor families are more likely to be in child welfare than non-poor families, and blacks are more likely to be poor

⁵Estimation based on U.S. Department of Health and Human Services, Administration for Children and Families. *Child Maltreatment 2006*. Table 3–11, Race and Ethnicity of Victims, 2006, p. 51.

⁶Estimation based on U.S. Department of Health and Human Services, Administration for Children and Families. The AFCARS Report, Preliminary FY 2006 Estimates as of January 2008 and U.S. Census Bureau, Population Division.

than whites, they should be more highly represented than whites in the child welfare population (Pelton, 1978; Lindsey, 1991). Indeed, most studies have found a strong relationship between poverty and child maltreatment, since the highest rates of abuse and neglect are among the most economically disadvantaged groups (Fluke, et al., 2001).

A second and highly influential explanation is that children of color are often *more visible* than others and thus are more likely to come to the attention of child protective service workers and those involved in the child welfare system. There are two variants of the *visibility hypothesis*. One variant argues that children of color are disproportionately exposed to the welfare system by being more likely to come into contact with the mandated reporters most likely to report observed or suspected instances of maltreatment. In this variant, one would expect to see larger concentrations of children of color among reported and substantiated maltreatment cases in locations where there are large nonwhite welfare caseloads (Ards, Myers, Chung, Malkis, & Hagerty, 2003; Ards, Myers, & Malkis with Sugure & Zhou, 2003).

An alternative view of visibility arises in places like Minnesota with relatively small populations of children of color. This variant of the *visibility hypothesis* suggests that children of color “stand out” in these environments and thereby are more likely to be reported and substantiated and ultimately placed in foster care than whites (Garland, et al., 1998).

Several studies, however, suggest a third explanation for black overrepresentation—*systemic racism* or *unconscious discrimination* (Better, 2002; Morton, 1999; Roberts, 2002). This view suggests that whether consciously or unconsciously, child protective service workers charged with the responsibility of investigating allegations of abuse or neglect, reach racially disparate conclusions about these allegations.

Rivaux, et al. (2008) found that, rather than racial bias directly influencing the assessment of risk, the disparities may be more adequately explained by differences in what they call the “decision threshold.” While the factors that influence one's assessment of risk are those associated with information about the current situation (ie: income), the factors that influence the threshold for action are associated with the experience and history of the decision-maker (ie: race). The implication of their finding is that, while child protective service workers may assess risk in a universal manner, their experiences may alter their own threshold for removal or service provision. Dettlaff, et al. (2011) had similar findings with respect to the importance of decision-makers' risk assessments. By including caseworkers' assessment of risk into their model of the substantiation decision, race became a considerably more important predictive factor of positive substantiation, with all racial/ethnic groups showing increased likelihood of substantiation in relation to whites.

Where there is great latitude and room for professional judgment about what does or does not merit an investigation or what does or does not result in a formal substantiation finding, there is the potential for unconscious racialized perceptions to affect outcomes. In the next section of this paper we model such unconscious racialized perceptions.

II. Modeling of Racialized Perceptions in Child Neglect

To uncover racialized beliefs among child protective service workers, it is helpful to use vignettes. “Vignettes are simulations of real events depicting hypothetical situations” (Wilks, 2004) and can be used to assess attitudes, perceptions, beliefs, and norms (Finch, 1987). They are helpful in uncovering attitudes about highly sensitive issues and can help the researcher understand the reasoning process that underlies decisions (Morrison, Stettler, & Anderson, 2004).

Previous application of vignettes techniques to depict hypothetical situations has proved to be effective. These studies have focused on measuring agents' practices (Barling & Huthinson, 2000; Corazzini, 2003), analyzing individuals' preferences (Feitelson, 1992), measuring people's behaviors (Halpern, 1997), identifying psychological problems (Pottick, 2003), and rating life satisfaction (Bouazzaoui & Mullet, 2002). Researchers have used “vignettes” as the main analytical method of a study or with other analytical tools (Campanelli & Channell, 1994).

Generally speaking, vignette and similar studies have been designed in the social work literature to uncover what it is about the attitudes or beliefs of caseworkers that might explain racial disparities in their decisions. The reason for delving into these beliefs and perceptions appears to be the assumption that the race of the caseworker alone is not a useful construct for understanding racial differences in placement decisions. For example, using hypothetical vignettes, Schram, et al. (2009) found that case managers are more likely to recommend sanctions for African Americans than White Americans when individuals failed to comply with welfare program rules. This analysis is confirmed when using state administrative data.

A vignette is a sketch of an actual or hypothetical child welfare case. The scenario used incorporates many, if not all, of the key factors that enter into the decision apparatus (to report, investigate, substantiate, or recommend foster care or out-of-home placement). Key aspects of the vignette can be altered, such as the race of the child or caregivers and/or the severity of the offense. A wide variety of caseworkers view one or more of these vignettes and are asked what course of action should be taken in the case. The analyst wants to know whether the respondents' decisions differ as a result of variations in the contents of the vignettes. Because not all persons observe the same contents in each vignette, the appropriate estimation procedure is a mixed effects estimator.

Through focus groups and interviews with experienced CPS caseworkers and supervisors in Minnesota, we were able to create a stylized picture of a reportable child neglect situation that often results in substantiation and the decision to remove a child from the caretaker. This stylized picture was one of a “messy house” or a filthy, uninhabitable residence unsuitable for sheltering a child. From actual case files, we obtained pictures taken by law enforcement officials during a removal case and digitally superimposed alternately a black baby or a white baby. In a pretest in a neighboring state, caseworkers were asked to read the state's definition of neglect.. Some were provided a written vignette and shown a picture of the messy living room. Some were only shown pictures. Some respondents were shown the messy bedroom with no baby on the bed, some with a white baby and some with a black baby on the bed. Respondents were then asked whether the picture portrayed in the vignette met the state's definition of child neglect, whether the situation depicted in the pictures was reportable, how often the respondent actually encountered the situation, and whether the situation was likely to be reported in the respondent's county. Respondents were randomly distributed between those who saw only pictures and those who saw pictures and who also read written vignettes. Results from the pretest showed that caseworker responses regarding the pictures were not substantially different whether they were given a written vignette or just a picture of the child's living conditions. Thus, in the final study design, we did not disseminate the written vignette and relied solely on random presentations of pictures depicting the child's living conditions.

We continue to refer to the model and the estimation procedure as a “vignette” although we did not use written scenarios to ask the respondents whether the situation is reportable and/or meets the state definition of neglect. We call this a *visual vignette*.

Next, we obtained permission to administer an online exercise to all CPS caseworkers in Minnesota as a module within a regularly scheduled training session. Participants were not informed of the purpose of the exercise, which was imbedded within existing training materials.

A total of 459 county child maltreatment intake, assessment, and caseworkers in 82 Minnesota counties participated in a web survey concerning knowledge of the state assessment protocols. Included in the otherwise innocuous educational survey were the visual vignettes described above. The Minnesota Legislature's definition of child neglect and its reporting requirements were provided. A picture of a messy living room was shown. Then, a second picture of a bedroom appeared. In some of the pictures a child was placed on the bed; in other pictures no child was on the bed. Of those pictures with a child, the race of the child varied.

After the caseworker was shown the two pictures, s/he was asked a) whether the case depicted in the picture met the state definition of neglect; b) was a reportable offense, based on state reporting requirements; c) how often a similar situation results in an official report; and d) how often a similar situation was encountered. The response, y , is dependent on a series of independent variables, x , the visual vignette observed, V , an error structure associated with the vignettes observed, the group of which the respondent is part, and a random disturbance. Equation 1 provides the underlying equation that we propose to estimate in order to determine whether there are impacts of specific vignettes on caseworker responses.

$$y_{ij} = \beta' x_{ij} + \varphi_j V_j + (\delta_j + \gamma_i + \varepsilon_{ij}) \quad \text{Equation 1}$$

where:

y = response, equal to one or zero

x = individual characteristics

V = vignette

β = vector of coefficients on x

φ = effects of vignettes on outcomes

δ = vignette-specific error term

γ = group-specific error term

ε = random disturbance

The response variable, y , is dichotomous. It reflects whether the respondent agrees or disagrees with the statements that the situation depicted in the pictures meets the state's definition of neglect or whether the offense is reportable. The underlying equation can be estimated as a linear or as a logistic fixed effects model (Greene, 2003).

III. The Data

Caseworkers in Minnesota were sampled. The response rate was 87 percent.⁷

⁷The Milwaukee test was conducted during mid-summer and suffered from the fact that many respondents may have been on vacation. Another aspect of the test was that supervisors explained to caseworkers the nature of the test. The Minnesota test was a part of a larger educational tool used by the Department of Human Services and thus there was no specific identification of the test as an examination of racial disproportionality.

Table 1 shows that most caseworkers were white, female, middle-aged, and well-educated. The web-based assessment was completed by 87 percent of the caseworkers, who were administered the survey as a part of a regular training workshop.

Figure 5 displays the raw results. Those individuals viewing the picture with the black baby were slightly more likely to indicate that the situation met the state definition of neglect than those viewing no baby or those viewing the white baby. The black-white difference is not statistically significant although the black-no baby difference is significant at the 1 percent level.

Figure 5 also shows that respondents were slightly more likely to indicate that the offense was reportable when the baby viewed was black than when the baby viewed was white or there was no baby. The reportable offense differences are not statistically significant.⁸

It is important to remember the state definitions. The relevant section of the Minnesota definition of neglect reads:

Failure by a person responsible for a child's care to supply a child with necessary food, clothing, shelter, health, medical, or other care required for the child's physical or mental health *when reasonably able to do so*; (Minnesota Statutes Chapter 626, No. 556 Subdivision 2. Definition (Minnesota) (d) NEGLECT) (bold-italics added for emphasis)

The operable term in Minnesota is “when reasonably able to do so.” In other words, there is greater flexibility in the Minnesota law that empowers caseworkers to interpret what constitutes reasonableness and ability. It is likely that racialized beliefs manifest themselves when there is great discretion on the part of the decision maker but not when the law makes explicit that there are no exceptions.

Of course, the mean differences in responses do not tell the full story since not everyone saw each of the pictures. Moreover, it is possible that characteristics of the reporter (age, race, experience, education, tenure, etc.) explain these disparities. Accordingly, we estimate equation 1 to isolate the independent effects of the visualized vignettes on responses.

IV. The Effects of Vignettes on Case Worker Responses

We have estimated fixed effects linear probability and logistic models for the responses as to whether the situation in the picture meets the state definition and whether the offense is reportable. Independent variables include: the respondent's age, gender, and race; whether the respondent was born in the Twin Cities metropolitan area (Minneapolis and St. Paul), majored in social work, was an intake worker, or worked in Hennepin County (of which Minneapolis is part). Table 2 reports the results. We discuss separately the impacts of respondents' demographic characteristics and the effects of the vignettes themselves.

Impacts of Characteristics of Respondents—Older respondents are more likely to indicate that the situation depicted meets the state definition of neglect or is reportable. The estimated coefficient on age is positive and statistically significant in both the linear and logistic equations for both the “meets the state definition” and the “offense is reportable” dependent variables. Males are less likely than females to agree that the situation depicted meets the state definition of neglect or is reportable, but the estimated coefficients are statistically insignificant in the “offense is reportable” equations. Black child protective

⁸We also examined whether persons had encountered situations like those depicted in the vignette and whether such housing conditions were prevalent in their county. There were very low numbers of persons who responded affirmatively with or without a baby in the picture.

service workers are more likely than others to indicate that the situation depicted meets the state definition of neglect, but the estimated coefficient in the logistic model is statistically insignificant. The impacts of race in the reportable offense equations are statistically insignificant. It is important to remember that this finding of no race effect among case workers compares blacks to all other races. We have experimented with other specifications (white vs. all others; blacks, Hispanics, and American Indians vs. all others) but we do not find a consistent independent race effect. The high variance in the estimated coefficients on the race variables is indicative of the high variability both within a racial group and between groups in responses.

In the linear model, having a degree in social work is associated with higher rates of responding that the situation meets the state definition of neglect or is reportable. In the logistic model, these effects vanish.

Location of birth has no effect on responses in any of the model specifications while the impacts of being an intake worker vary across model specifications and dependent variables. However, Hennepin county employees consistently are less likely than workers in other counties to agree that the situation depicted meets the state definition of neglect or is a reportable offense. This is a significant finding because Hennepin County has some of the highest caseloads in the state, it houses the largest number of black children in the state child protective services, but also happens to have the most automated process of recording allegations of neglect.⁹

Impacts of Vignettes—The fixed effects estimators yield statistically significant impacts of the black baby vignette (compared to no baby or white baby) on the likelihood that respondents agree that the situation depicted in the picture meets the state definition of neglect. In the linear model the coefficient is .115, meaning seeing the black baby adds 11.5 percentage points to the probability of agreeing that the situation meets the state definition of neglect. In the logistic model, the slope—computed at the means of the independent variables—is estimated to be .045.

The effect of seeing the black baby is also positive and statistically significant for the question of whether the situation depicted is a reportable offence. In the linear model, the estimated coefficient is .101. In the logistic equation, the estimated slope computed at the means is .019. In both model specifications, the slopes are smaller for the question regarding reportable offences than they are for the question regarding whether the situation depicted meets the state definition of neglect. Clearly, if respondents do not believe that a situation meets the state definition of neglect, then respondents are less likely to indicate that the case is reportable, explaining why the coefficients on the reportable equations are smaller than in the state definition equation.

The gateway to an investigation, a possible determination or substantiation, and ultimately to a court hearing and/or removal of a child from the family and placement into foster care is the report. But, reports depend on how case workers view the initial circumstances of a case. As Ards and Harrold (1993) established, many child maltreatment cases are never reported by mandated reporters.

We have estimated alternative specifications of the basic model outlined in equation 1. In a longer version of the paper, we have shown that OLS estimators produce statistically significant impacts of the black baby vignette compared to no baby in the state definition and reportable offence models. We have estimated the models separately for type of worker

⁹The pictures all come from the City of Minneapolis, located in Hennepin County.

(intake worker, supervisor, caseworker). The main results are robust with respect to alternative model specifications and estimation methods.

To be sure, the differences among the responses for these visual vignettes are minuscule. It is surprising, then, that such small differences produce statistically significant impacts on the report and definition responses. We conclude, therefore, that there are in fact racialized beliefs held by the sampled CPS workers. We cannot draw any conclusions based on the analysis as to *why* there are statistically significant impacts of race of baby on responses, but we can ask whether these differences matter. We can assess the *impacts* of these racialized beliefs on meaningful, policy relevant outcomes. In particular, we wish to know whether racialized beliefs translate into racial disproportionalities in child maltreatment reports, substantiations, or out-of-home placements.

V. The Impacts of Racialized Beliefs on Racial Disproportionalities in County-level Child Maltreatment rates

The previous section documents that there exist racialized perceptions. Respondents who see vignettes with black babies tend to be more likely to say that the situation is reportable or meets the state definition of neglect than persons who see no baby and/or who see a white baby. But, do racialized perceptions matter?

In the next section, we explore whether measures of racialized perceptions among CPS workers at the county level explain the wide variations in racial disproportionality from county to county.

We develop a metric of racialized perceptions, based on the results of the previous section's vignette analysis. The metric reflects any differences in responses within a county to the reporting and definition questions between those viewing the black baby and those viewing no baby or a white baby.

The metric asks whether a) the percentage of persons who viewed the black baby and responded that the situation meets the state definition of neglect or is reportable exceeds b) the response rate of those viewing the white baby, c) the response rate of those viewing no baby, or d) the response rate for those viewing the white or no baby. This is a dichotomous variable equal to one if the response rate for those viewing the black baby exceeds that of the other situations. This metric, R , is equal to one when, at the county level, the average response among caseworkers differs when the picture seen is of a black baby.

Details of the computation of R —The racialized perceptions index is created from the visual vignettes and produces a dichotomous measure equal to 1, if within the county the share of respondents who saw the black baby vignette and who indicated that the situation depicted met the state definition (and/or is reportable) exceeds the share of respondents who saw the white or no baby vignette and who indicated that the situation depicted met the state definition of neglect.¹⁰ We consider three combinations in creating these indices: definition, reportable offense, and definition or reportable offense. We define as missing instances when there was only one respondent surveyed in a county and that respondent viewed the black baby.

¹⁰We attempted to create a continuous version of this index, but it resulted in 40 missing values because individuals in 29 counties only saw pictures of babies other than Black babies, and individuals in 11 counties only saw pictures of Black babies. Thus, missing more than 50 percent of the counties considerably reduced our sample size and did not allow us to perform regression analysis with a continuous version of this index.

$$R_j^h = \begin{cases} 1, & \text{if } (a) > \text{any of } \{(b), (c), (d)\} \\ 0, & \text{if } (a) \leq (b) \text{ and } (a) \leq (c) \text{ and } (a) \leq (d) \\ \cdot, & \text{if only one respondent was surveyed in county } j \text{ and she got the picture of the Black baby} \end{cases} \quad \text{Equation 2}$$

Where,

$$(a) \frac{D_j^B}{M_j^B} \quad (b) \frac{D_j^W}{M_j^W} \quad (a) \frac{D_j^N}{M_j^N} \quad (b) \frac{D_j^W + D_j^N}{M_j^W + M_j^N}$$

$h = D, R, \text{ or } RD$

D Number of respondents who answered that the picture met the definition of neglect

R Number of respondents who indicated that the offense was reportable

RD Number of respondents who answered that the situation was reportable or met the definition of neglect

M Number of respondents who received the particular vignette

B Picture of black baby

W Picture of white baby

N Picture without a baby

J Counties

Note that the individual respondents discussed in the paper come from each of the counties in the state of Minnesota. We can aggregate the responses from the county workers and produce an index of racialized beliefs. We wish to know whether this index, R_j , measured for the j^{th} county is statistically related to the size of the disproportionality in child welfare in the j^{th} county, d_j . The specific types of child welfare disproportionalities include: disproportionalities in reported maltreatment, substantiated maltreatment (conditioned or unconditioned upon reports), and out-of-home placements (conditioned or unconditioned upon substantiations). These different forms of disproportionalities can be denoted by d^k , where k equals type of child welfare system outcome. Each k represents a different transition point within the system. Reports can be substantiated or not. Substantiations can result in out-of-home placements or not. These measures of disproportionality are given as:

$$\text{Report } \delta = \frac{\%Blacks \text{ (reported)}}{\%Blacks \text{ (population)}}$$

$$\text{Substantiation (unconditional) } \delta = \frac{\%Blacks \text{ (substantiated)}}{\%Blacks \text{ (population)}}$$

$$\text{Substantiation (conditional) } \delta = \frac{\%Blacks \text{ (substantiated)}}{\%Blacks \text{ (reported)}}$$

$$\text{Out-of-home placement (unconditional)} \delta = \frac{\%Blacks (OHPgiven)}{\%Blacks (population)}$$

$$\text{Out-of-home placement (conditional)} \delta = \frac{\%Blacks (OHPgiven)}{\%Blacks (substantiated)}$$

The dependent variable in the county-level analysis is the observed disproportionality, δ^k , of the k^{th} type that depends on a vector of characteristics of the county, x , and the index of racialized perceptions, R .

Thus, the relationship of interest can be given by:

$$\delta_j^k = \phi_0^k + \sum_{i=1} \phi_i^k x_{ij} + \rho^k R_j + \omega_j^k \quad \text{Equation 3}$$

The X vector includes: percentage of respondents who are white, share of county maltreatment cases that are sexual abuse cases, percentage of county population that is white, percentage of persons living in rural areas, county poverty rate, percent of the population between ages 18 and 34, mean household income squared, population density, and crime rate squared. These variables were chosen to control for demographic and socio-economic characteristics in different counties in the state of Minnesota.

Fifteen variations of Equation 3 were estimated, with alternative measures of δ^k and R . The dependent variable for models 1–3 is black disproportionality in reported child maltreatment cases. It is the ratio of blacks among those reported to the percentage of blacks among those in the child population. R is measured in model 1 for “meets the state definition of neglect.” In model 2, R is measured for “meets the state definition” or “represents a reportable offense.” For model 3, R is measured for “represents a reportable offense.” Models 4–6 the dependent variable is disproportionality in substantiation, with R measured respectively by “meets state definition,” either “meets state definition” or “is a reportable offense,” and “is a reportable offense.”

In models 7–9, the dependent variable is disproportionality in conditional substantiation, that is the ratio of the percent of blacks among those who are substantiated, given a report to the percentage of blacks among reports. The measurement of R is given in models 7–9 respectively by: “meets state definition,” either “meets state definition” or “is a reportable offense,” and “is a reportable offense.”

In models 10–12, the dependent variable is out-of-home placement disproportionality. It is measured by the ratio of the black percentage of out-of-home placement to the black percentage of the child population. The measurement of R is given in models 10–12 respectively by: “meets state definition,” either “meets state definition” or “is a reportable offense,” and “is a reportable offense.”

In models 13–15, the dependent variable is the disproportionality in conditional out-of-home placement for blacks. It is measured by the ratio of the percentage of out-of-home placements that is black to the percentage of the substantiations that is black. The measurement of R is given in models 13–15 respectively by: “meets state definition,” either “meets state definition” or “is a reportable offense,” and “is a reportable offense.”

Based on the five different definitions of disproportionality and the three definitions of racialized perceptions, we obtain 15 different models. These models are estimated using ordinary least squares. We tested for aggregation bias. Two size variables could bias the estimates of the coefficients: the county's size and the number of caseworkers interviewed in each county. First, we estimated each equation with each of the size variables included. The estimated coefficients on size were statistically insignificant. Then, we estimated the 15 models with weighted least squares. No substantive changes in the results emerged. We concentrate, therefore, on the ordinary least squares results.

Since we used several variables to control for county characteristics, we could expect to find high correlation among the variables. Therefore, we ran diagnostic tests to detect collinearity among the independent variables. We used the variance inflation factor (VIF), which is inversely related to the tolerance¹¹ value: $VIF = 1/Tolerance$. Large VIF values (a usual threshold is 10 (Haan, 2002), which corresponds to a tolerance level of 0.10) indicate a high degree of collinearity among the independent variables. We report when our results are subject to high collinearity among the independent variables.

Table 3 reports the results. The last row (row 11) of the independent variables in each panel reports the effects of crime rates on disproportionality. These effects are small and statistically insignificant throughout. Row 10 reports the effects of population density. Generally, high population density is associated with lower report and substantiation disproportionalities, although in some instances it is associated with higher out-of-home placements. Row 9 reports the impacts of household incomes. Counties with higher household incomes experience lower racial disproportionality rates. Row 8 reports the effects of the share of the population that is 18–34 years of age. This age group is the age group among younger family heads, who often are at greatest risk of abusing or neglecting their children. Larger shares of persons in this age group are associated with higher report and unconditional substantiation disproportionalities, but the impacts on conditional substantiations and out-of-home placement disproportionalities are often negative and/or statistically insignificant.

Row 7 reports the impacts of poverty on disproportionality rates. The impacts are negative and statistically significant for substantiation disproportionalities. Poverty rates in Minnesota are especially high in the Twin Cities' Hennepin and Ramsey counties, which happen to have lower disproportionality rates than rural counties. Row 6 reports the impacts of rural percentage of a county, and these effects are uniformly insignificant. Row 5 reports the effects of racial composition of the county. The only statistically significant impacts of the percent of whites in a county are on out-of-home placements. Counties with higher percentages of white residents experience lower rates of black disproportionality in removal of children and placement in foster care. The other coefficients in the report and substantiation models are positive but not statistically significant. Row 4 reports the effects of the share of maltreatment cases that are sexual abuse cases. Not surprisingly, these effects are generally negative but not statistically significant, since blacks are less likely to be sexually abused than are whites.

The racial composition of a county's child protective services workers, as measured by the percent of respondents who are white, has strong negative impacts on disproportionalities in reports and substantiations. Higher fractions of whites among county child protective

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¹¹Tolerance is the amount of variability in the independently selected variable that is not explained by the other independent variables. It is obtained by making each independent variable a dependent variable and then running a regression with the remaining independent variables. Tolerance values approaching zero indicate that the variable is more highly collinear with the other predictor variables.

services respondents are associated with *lower* black disproportionality rates, as seen in the third row of each panel. This counter-intuitive finding conflicts with the hypothesis that white case workers harbor racialized beliefs that contribute to higher disproportionality rates in reports, substantiations, or out-of-home placements. Recall, however, that race of respondent did not always predict racialized perceptions. Whites did not always respond that a situation is reportable or meets the state definition of neglect when viewing a black baby versus no baby or a white baby. Even black respondents often chose the black baby over the white or no baby when indicating that a situation was reportable or met the state definition of neglect.

Row 2 presents the main findings of this research. Coefficients on R , the measure of racialized perceptions, are reported. Positive (but insignificant) coefficients on R are reported for each of the report disproportionality measures. Positive and statistically significant coefficients are found for five out of six substantiation disproportionality models. None of the coefficients on racialized beliefs are statistically significant in the out-of-home placement models.

The results show consistently large and significant impacts of the racialized beliefs on substantiation rates. There are no impacts of CPS workers' racialized perceptions on the report disproportionality or on the out-of-home placement disproportionality. This finding is not surprising since caseworkers are not the primary source of reports. Among mandated reporters, law enforcement and schools rank highest among sources of neglect reports. Moreover, some but not all of out-of-home placements originate from CPS offices. Many of these placements come about as a result of court orders (e.g., parents who are incarcerated or incapacitated). The one aspect of the chain of events over which caseworkers have the largest control—investigation and substantiation—is the one area that we find is most consistently related to racialized beliefs and perceptions.

To test whether there are confounding influences of racial composition of a county and racial composition of the county child protective services workforce, we re-estimated all 15 equations but without the percent of residents who are white. Once again we obtain positive coefficients on the racialized perceptions variable in predicting racial disproportionalities in substantiation rates. Even without controlling for the race of caseworker, the positive impacts of racialized perceptions on substantiation are statistically significant in three out of six of the models. The coefficients are generally smaller, suggesting that high correlation between race of respondents and race of persons in a county produces an upward bias in the estimated impacts of racialized perceptions (despite our test of multicollinearity that suggests otherwise).

In short, the results from Tables 3 and 4 confirm that for at least some types of racial disproportionalities in child maltreatment, racialized beliefs or perceptions of child protect service workers adversely affect county-level disproportionalities. Small differences in underlying perceptions about what constitutes a situation that meets the state definition of neglect or what signifies a reportable offence translate into sizeable differences in observed county-by-county substantiation rates. Thus, the link between almost inconsequential individual behavioral differences and aggregate differences in outcomes is apparent in these findings. This is an important discovery in that it demonstrates that large racial disproportionalities in such outcomes as substantiated child maltreatment rates do not necessarily require comparably large disparities in perceptions and beliefs. Relatively minor differences in individual behaviors can generate large differences in outcomes in the aggregate.

VI. Conclusions

Wells, et al. (1991) detail the pathways from reports to substantiations. Allegations of abuse and neglect become known to child protective services initially through reports. These reports come from both mandated reporters (teachers, nurses and doctors, social workers, and law enforcement officers) and also from friends or family members. These reports result in investigations. Then there is a substantiation process, which is followed by possible placement, removal of children, filing of criminal charges, and/or referral for social services. Note that while there are often reports that do not result in investigations, the vast majority of specific allegations, as opposed to general allegations, are investigated. Wells, et al. also point out that there are wide variations from one agency to another in screening practices.

Alan J. Dettlaff (2011) underscores a critical element of how it is possible for wide racial disparities in child maltreatment to persist in a system dedicated to improving the well-being of children:

As is the case with many federal and state social service systems, child welfare agencies have traditionally functioned in isolation. Historically, child welfare agencies have viewed themselves as the sole provider of child protection services and calls to broaden these services to improve outcomes have focused solely on expansions within the system. This is supported by the multitude of federal and state laws and policies that direct the functions and practices of child welfare agencies, creating a culture lacking in collaboration. This isolation has resulted in a social service system that is largely separated from the families and communities whom it serves. (Dettlaff, 2011, p. 97)

But, Drake (2011) in confirming that the racial disparity in child maltreatment exists at the “front end” of the system, questions whether the disparity is in fact a bad thing if the result is that African American children receive services they need. He writes:

“If officially validated child maltreatment Black/White disproportionality is consistent with estimates of actual maltreatment, why would we seek to change that? A policy goal of reducing disproportionality may have a socially just intent, but may, in fact, work against social justice.” (Drake, 2011, p. 100)

He goes on to assert, based on the claim that actual abuse and neglect disparities are comparable to reported and substantiated disparities, “Reducing Black/White disproportionality should not be a general policy goal.” (Drake, 2011, p. 101)

Much of the controversy over whether in fact there is racial disproportionality in actual child maltreatment arises from the differing data used to establish maltreatment rates by race and ethnicity (Farrow, et al., 2011). Whereas the NCANDS data refer to reported and substantiated cases, the NIS data measure primarily allegations of maltreatment by mandated reporters to child protective services. The NCANDS data show wide racial disparities in reported and substantiated maltreatment (Fluke, et al., 2011) whereas the NIS data for most years show no statistically significant racial disparities (Sedlak, McPherson & Das, 2010), although more recent data from NIS with improved collection protocols do show underlying racial disparities. But, as Hill (2011) points out, whether one finds statistically significant differences in actual abuse or neglect in the NIS-3 or NIS-4 data depends on which standard of measurement of harm or endangerment is adopted. Drake's claim that the NIS-4 evidence shows racial disproportionality exists on the front end of child protective services overstates what the evidence actually shows. In fact, for some types of abuse (e.g., sexual abuse) whites have higher rates than blacks. (Hill, 2011; Sedlak, McPherson & Das, 2010).

Unlike stereotype threat models where social stigma of intellectual inferiority borne by certain cultural minorities can undermine their performance (Aronson, Quinn, & Spencer, 1998; Steele, 1997; Steele & Aronson, 1995) and more like implicit association tests (Greenwald, McGhee, & Schwartz, 1998; Gawronski, 2002; Ottaway, Hayden, & Oakes, 2001) vignette models of racialized perceptions are designed to measure whether respondents themselves hold stereotypical views about racial groups. One category of stereotype in child protective services concerns beliefs that black parents and caretakers are more likely to neglect their children than are white parents or caretakers. Because CPS workers are generally well-educated and defensive about allegations of discrimination or racialized beliefs, direct questions about those beliefs (“Do you believe that blacks are more likely to neglect their kids than whites?”) are unlikely to elicit valid or reliable responses. Thus, traditional measures of racialized beliefs are unlikely to be helpful in determining whether these beliefs translate into disproportionate representation of African Americans in the child welfare system.

We have demonstrated in this paper that it is possible to produce an index of racialized beliefs and perceptions that captures a salient feature of child neglect investigations. We capitalize on the widely held view among caseworkers that a “messy home” provides evidence of neglect. We use a visual vignette of a messy home that permits variation in the race of a baby placed on the bed in the messy room. Using fixed effects estimators we find that respondents who see the vignette with the black baby are more likely to say that the situation depicted in the picture meets the state definition of neglect and/or is a reportable offense according to state law. These responses are aggregated within the county to produce an indicator of racialized beliefs among county workers. We conclude that these indicators are highly correlated with the overrepresentation of black children among substantiated maltreatment cases. We do not find consistent impacts of the racialized beliefs and perceptions of caseworkers on report disproportionality nor on out-of-home placement disproportionality. We conjecture that the strong findings about substantiation arise from the fact that caseworkers exert their greatest control within this sphere of the child protective services process and not within the sphere of reports or placements.

Findings such as these can assist professional organizations that represent child welfare workers to reconceptualize their policy agenda. Wulczyn (2011) writes that *The Positioning Public Child Welfare Initiative* sponsored by AHPA and NAPCWA has embraced the goal of reducing racial and ethnic disparities and addressing disproportionality. Their objective is to assure that quality services are provided to families in need. How to do that and at the same time to address racial disproportionality in child maltreatment depends critically upon knowing the causal connection between attitudes and beliefs of CPS workers and resulting disproportionate outcomes. The methods developed in this paper provide one approach to identifying this connection.

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Highlights

- This paper models racialized perceptions of child welfare workers using visualized vignettes of black and white babies in a messy room
- We find statistically significant impacts of the black baby vignette on the likelihood that respondents believe that the situation meets the state definition of neglect and is reportable
- From these respondent-level results, we construct a county-level index of “racialized perceptions” and test the hypothesis that racialized perceptions contribute to the racial disproportionality in reported and/or substantiated child maltreatment.
- The results show that there are strong and statistically significant impacts of indices of caseworker racialized beliefs on county-level racial disproportionalities in reported and substantiated maltreatment rates.

Figure 1.

Survey Instrument: Bedroom with Black baby **Figure 2.**

Figure 3.

Figure 4.

Figure 5.

Table 1

Characteristics		Minnesota
Caseworkers Surveyed		459
Response rate		87%
Average Age		41 (min 23, max 66)
Race		
	White	84.50%
	Blacks	6.30%
	Asian	2.9%
	American Indians	2.4%
	Other	3.3%
Gender		
	Female	80.83%
Education		
	Some Graduate School/Master's degree	49.2%

Regression Results, Fixed Effects Model, All Respondents Black Baby vs. Other

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Case is Reportable										
Linear Model						Non-linear Model				
Coef.	Std. Err.	t	P>t	Coef.	Std. Err.	z	P>z	dy/dx	Std. Err.	P>z
n=	442.000			n=		442.00				
F-stat=	861.56			Wald-test=		110.88				
R-squared=	0.93									

Note:
Robust standard errors are reported.
*** p<0.001,
** p<0.01,
* p<0.05.

Table 3

Ordinary Least Squares Estimates of Coefficients in Models of Disproportionality

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15
[1](Constant)	17.135	6.793	19.459	44.507	26.039	48.842	12.270**	10.386*	12.241**	147.352	102.570	147.136	46.165***	42.377***	46.102***
[2]Racialized Perceptions (R)	4.142	6.565	4.271	9.924**	25.580***	10.178**	0.550*	0.896	0.546*	11.458	-5.796	11.391	0.702	-0.118	0.695
[3]% white respondents	-48.340***	-47.902***	-48.692***	-32.902***	-31.594***	-33.679***	1.144	1.240*	1.155	-133.514***	-132.203	-133.341***	-2.688**	-2.552**	-2.650**
[4]% sexual abuse	-26.318	-28.717	-26.099	-23.126	-30.002	-23.030	-1.381	-1.833	-1.310	-49.820	-61.498	-49.204	-5.705	-6.103	-5.463
[5]% pop white	45.127	49.187	43.016	26.280	30.155	22.276	-6.688	-5.753	-6.659	22.284	50.095	22.623	-37.304***	-34.793***	-37.223***
[6]% pop rural areas	-0.126	-1.583	-0.586	4.392	-0.771	3.373	0.522	0.350	0.532	-5.729	-7.146	-5.530	-0.296	-0.442	-0.257
[7]% HH in poverty	-64.462	-51.260	-64.757	-183.719**	-159.125*	-183.221**	-24.046***	-21.831***	-24.146***	-105.792	-59.305	-108.417	-16.857	-12.674	-17.306
[8]% pop ages 18–34	58.780**	63.036***	59.472**	69.046*	78.678**	70.775*	-1.380	-0.667	-1.384	29.510	47.726	29.906	-4.095	-3.360	-4.082
[9]Mean HH income squared	-6.156	-3.221	-6.134	-15.558	-8.016	-15.464	-1.801**	-1.388*	-1.806**	-12.113	-5.440	-12.235	-2.145	-1.628	-2.172
[10]Pop density	-0.005	-0.006	-0.005	-0.005	-0.009*	-0.006	0.000	0.000	0.000	-0.018**	-0.013	-0.018**	-0.002***	-0.002	-0.002***
[11]crime rate squared	-0.333	-0.670	-0.373	-0.012	-1.417	-0.098	0.038	-0.008	0.039	-0.777	-0.562	-0.761	-0.115	-0.115	-0.112
R ²	0.557	0.555	0.560	0.345	0.414	0.345	0.362	0.357	0.368	0.728	0.711	0.728	0.681	0.661	0.683
F	5.788	6.100	6.224	2.421	3.463	2.584	1.646	1.666	1.746	8.813	8.6172	9.372	4.273	4.093	4.515
Multicollinearity problem	No	No	No	No	No	No	No	No	No	No	Yes	No	No	Yes	No

Note:

* 0.10 level of significance

** 0.05 level of significance

*** 0.001 level of significance

Ordinary Least Squares Estimates of Coefficients in Models of Disproportionality, Excluding Race of Case Workers

Table 4

	Model 1	Model 3	Model 5	Model 7	Model 8	Model 9	Model 11	Model 13	Model 14	Model 15					
(Constant)	-15.903	-21.110	-16.188	24.963	0.167	19.009	13.456**	11.247**	13.399**	58.962	37.2453	50.465	40.830***	37.589***	40.831***
Racialized Perceptions (R)	2.456	3.382	1.683	8.654*	15.637**	6.733	0.604*	0.931	0.597*	6.874	-4.89914	4.207	0.610	0.476	0.610
% sexual abuse	-7.228	-9.877	-8.156	-13.462	-	-16.628	-2.102	-2.511	-1.948	-12.529	-17.6717	-16.575	-2.260	-2.797	-2.264
% pop white	37.870	38.710	36.175	21.179	32.423	23.057	-6.904	-5.708	-6.834	8.307	18.93148	11.120	-34.914***	-32.840***	-34.915***
% pop rural areas	1.415	-0.503	0.189	4.702	-0.619	2.727	0.413	0.245	0.435	0.316	-1.0052	-1.835	-0.110	-0.303	-0.111
% HH below poverty line	-78.946	-65.987	-72.226	-202.753**	-*	-186.967*	-23.999***	-21.377***	-24.204***	-153.429	-119.504	-131.489	-13.389	-9.333	-13.383
% pop ages 18-34	31.020	35.293	33.524	53.144	65.505*	58.194	-0.448	0.395	-0.440	-53.778	-45.7801	-50.069	-7.272	-6.483	-7.273
income squared	-7.451	-5.438	-6.695	-17.339	-10.551	-15.727	-1.776**	-1.306*	-1.784**	-18.939	-14.3207	-16.442	-1.957	-1.421	-1.957
Pop density	0.001	0.001	0.002	-0.001	-0.002	0.000	0.000	0.000	0.000	0.001	0.00411	0.002	-0.001**	-0.001	-0.001**
crime rate squared	0.169	-0.081	0.098	0.322	-0.630	0.226	0.020	-0.028	0.022	0.554	0.679005	0.412	-0.084	-0.111	-0.084
R ²	0.079	0.072	0.070	0.202	0.214	0.177	0.323	0.308	0.3268	0.0334	0.0258	0.0279	0.5885	0.5750	0.5915
F	0.465	0.449	0.437	1.376	1.577	1.243	1.641	1.580	1.726	0.138	0.111611	0.121	3.496	3.458	3.700
Multicollinearity problem	No	N	No	N	No	No	No	No	No	No	No	No	No	Yes	No

Note:

* 0.10 level of significance

** 0.05 level of significance

*** 0.001 level of significance