

Article

Diminished Returns of Educational Attainment on Unpaid and Paid Maternity Leave of Mothers Giving Birth in Poverty

Shervin Assari ^{1,2,3,4,*}, Mojgan Azadi ⁵, Hossein Zare ^{6,7}

¹ Department of Internal Medicine, Charles R. Drew University of Medicine and Science, Los Angeles, CA, United States

² Department of Family Medicine, Charles R. Drew University of Medicine and Science, Los Angeles, CA, United States

³ Department of Urban Public Health, Charles R. Drew University of Medicine and Science, Los Angeles, CA, United States

⁴ Marginalization-Related Diminished Returns (MDRs) Center, Los Angeles, CA, United States

⁵ Montgomery College-Takoma Park, Takoma Park, MD, United States

⁶ Department of Health Policy and Management, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, United States

⁷ School of Business, University of Maryland Global Campus (UMGC), Adelphi, United States

*Correspondence: Shervin Assari (assari@umich.edu)

Abstract:

Background: Maternity leave, whether paid or unpaid, is a critical resource that can significantly impact maternal well-being and newborn outcomes. However, its availability and utilization among mothers living in poverty remain understudied. Education is widely recognized as a key factor that increases access to both paid and unpaid leave. However, the theory of Minorities' Diminished Returns (MDRs) posits that structural racism, segregation, and labor market discrimination limit the benefits of socioeconomic resources, such as education, for Black and Latino individuals. This suggests that the effects of education on maternity leave may not be uniform across racial and ethnic groups. **Objective:** This study aimed to examine the MDRs of education on access to unpaid and paid maternity leave among Black and Latino mothers compared to White mothers giving birth while living in poverty. **Methods:** We utilized baseline data from the Baby's First Years Study (BFY), a longitudinal investigation of the effects of poverty on child development. The sample consisted of 1,050 mothers living in poverty who had recently given birth. Maternity leave (paid and unpaid) was assessed via self-report, and educational attainment was measured in years of schooling. Structural equation modeling (SEM) and interaction terms were employed to analyze racial and ethnic differences in the relationship between education and access to maternity leave. **Results:** Educational attainment was positively associated with access to unpaid maternity leave for the overall sample of mothers giving birth in poverty, but this association was weaker for Black and Latino mothers compared to non-Latino White mothers. Education did not significantly increase the likelihood of paid maternity leave, and there were no group differences for this association. **Conclusion:** This study highlights the urgent needs to address structural racism, labor market discrimination, and residential segregation that diminish the impact of education on living conditions for Black and Latino mothers, compared to non-Latino White mothers, even for those living under poverty. Policymakers and practitioners should develop targeted interventions to reduce racial and ethnic disparities in access to paid and unpaid maternity leave and other critical resources, particularly for new mothers living in poverty. Addressing these inequities is essential for improving maternal and newborn health outcomes and promoting social justice.

Keywords: Poverty, Maternity Leave, Women, Newborn, Infants, Inequality, Access

How to cite this paper:

Assari, S., Azadi, M., & Zare, H. (2025). Diminished Returns of Educational Attainment on Unpaid and Paid Maternity Leave of Mothers Giving Birth in Poverty. *Universal Journal of Obstetrics and Gynecology*, 4(1), 1240. Retrieved from <https://www.scipublications.com/journal/index.php/ujog/article/view/1240>

Received: December 9, 2024

Revised: January 17, 2024

Accepted: February 11, 2025

Published: February 21, 2025



Copyright: © 2025 by the authors. Submitted for possible open-access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Maternity leave, whether paid or unpaid, is a vital resource that significantly impacts maternal well-being and newborn outcomes [1, 2]. Access to maternity leave allows mothers to recover from childbirth, bond with their newborns, and establish breastfeeding practices, all of which are critical for long-term maternal and child health [3]. The absence of adequate maternity leave is associated with increased maternal stress, poorer mental health, and reduced developmental outcomes for infants [4]. Maternity leave also protects mothers against postpartum depression [5]. Despite its importance [2, 6-9], access to maternity leave for mothers living in poverty remains unequal and poorly understood.

Education is a reliable social determinant of health and well-being, closely linked to occupational opportunities and living conditions. Higher levels of education improve life circumstances through multiple pathways, such as access to stable and well-paying jobs, reduced stress, better housing security, enhanced access to resources, and the formation of supportive social and marital relationships. Education also equips individuals with problem-solving skills and greater autonomy, enabling them to navigate life's challenges more effectively. However, the protective effects of education are not equally distributed across racial and ethnic groups.

The concept of Minorities' Diminished Returns (MDRs) provides a critical framework for understanding these disparities [10]. MDRs suggest that Black and Latino individuals often experience weaker benefits from socioeconomic resources, such as education, compared to their non-Latino White counterparts [11]. National studies consistently reveal that even highly educated Black and Latino individuals are more likely to work in lower-quality jobs [12], earn less income [13], generate less wealth [14], and remain at greater risk of poverty [15] than similarly educated White individuals. These diminished returns are rooted in systemic inequities, including structural racism, labor market discrimination, and residential segregation, which limit access to quality education, career advancement, and wealth accumulation [16-18].

Most MDR research has focused on middle-class populations [19], where systemic inequities such as the "glass ceiling" are particularly evident [20-22]. However, less is known about the role of MDRs among mothers living in poverty, who are often presumed to face uniform disadvantages regardless of race or ethnicity. Additionally, while MDRs have been explored in various domains, including income [23-25], employment [26-28], and health [29-32], little attention has been given to their potential influence on access to maternity leave. Understanding whether MDRs affect maternity leave access is critical, as this resource plays a pivotal role in maternal and child health outcomes.

This study addresses these gaps by investigating the hypothesis that the protective effects of education on paid and unpaid maternity leave are weaker for Black and Latino mothers compared to non-Latino White mothers living in poverty. Using baseline data from the Baby's First Years Study [33-35], this research aims to deepen our understanding of how structural inequities and systemic barriers affect maternity leave access, providing insights to inform policies and interventions that promote equity in maternal and child health outcomes.

2. Methods

This study utilizes baseline data from the Baby's First Years (BFY) study [33-35], an ongoing randomized controlled trial (RCT) examining the effects of unconditional monthly cash transfers on families living in poverty. Between May 2018 and June 2019, 1,050 mothers were recruited from postpartum wards in 12 hospitals across four U.S. metropolitan areas: New York City, New Orleans, Omaha, and the Twin Cities (Minneapolis and St. Paul). Recruitment criteria included maternal age of 18 years or older, income below the federal poverty threshold, fluency in English or Spanish, and residency within the state of recruitment with no immediate plans to move. Eligible mothers had

singleton births, with newborns discharged into their care and without requiring intensive neonatal care. Fathers were included when available.

This study has several notable strengths. The randomization process ensured robust group comparisons, while the large and racially diverse sample enhanced the generalizability of findings. Furthermore, the inclusion of both paid and unpaid maternity leave as measures adds depth to the analysis of maternal well-being in the context of poverty. However, the reliance on self-reported data introduces potential biases, including social desirability and recall inaccuracies. Cultural differences in interpreting survey items may also have influenced responses. Additionally, missing income data for a significant portion of the sample limits the ability to fully analyze household financial dynamics.

A total of 1,050 eligible mothers were identified, of whom 1,000 provided consent to participate. At recruitment, all participants reported household incomes below the federal poverty line. Baseline data collection included information on demographic, socioeconomic, health, and behavioral characteristics. Participants were stratified by site and randomly assigned to one of two groups: a “high-cash gift group” receiving \$333 per month or a “low-cash gift group” receiving \$20 per month.

The study protocol was approved by the Institutional Review Board (IRB) at Teachers College, Columbia University, which served as the single IRB of record for the majority of participating sites. Participation in the study was entirely voluntary, and informed consent was collected separately for both participation in the research and receipt of the cash gift to minimize the potential for coercion. Mothers who agreed to participate in the study were compensated for completing the baseline survey.

Maternal Race/Ethnicity: Participants self-identified their race/ethnicity as White, Black, Latino, or Other, with non-Latino White mothers serving as the reference group.

Maternal Education: Measured as self-reported years of formal schooling completed.

Maternal Age: Self-reported age, with participants aged 18 years or older eligible for inclusion.

Maternal Marital Status: Self-reported relationship status with the baby’s father.

Employment Status: Whether the mother had been employed within the last year, self-reported.

Unpaid Maternity Leave: Participants reported whether they had access to unpaid maternity leave at the time of childbirth.

Paid Maternity Leave: Participants also reported whether they had access to paid maternity leave at the time of childbirth.

The analytic strategy included descriptive statistics, bivariate analyses, and structural equation modeling (SEM) to evaluate relationships among demographic, socioeconomic, and health variables. Descriptive comparisons were conducted to assess baseline differences in key variables by race/ethnicity. Chi-square tests were used for categorical variables, and t-tests were employed for continuous variables.

SEM was applied to test hypothesized pathways from race/ethnicity (Black, Latino, and Other, with White as the reference group) to socioeconomic and health outcomes, including unpaid and paid maternity leave. Missing data were addressed using full information maximum likelihood (FIML) within the SEM framework, ensuring robust and unbiased parameter estimates. Internal consistency of scales was evaluated across the full sample and within racial and ethnic subgroups. Adjusted beta coefficients, 95% CI, SE, and p values are reported. P values less than 0.05 were statistically significant.

3. Results

Table 1 and Figure 1 present the results of SEM #1, examining the associations between maternal sociodemographic characteristics and the likelihood of taking unpaid and paid maternity leave. For unpaid maternity leave, older maternal age was positively associated with its likelihood (B = 0.080, SE = 0.025, 95% CI: 0.032, 0.128, p = 0.001), as was

higher maternal education ($B = 0.119$, $SE = 0.025$, 95% CI: 0.071, 0.168, $p < 0.001$). Maternal race/ethnicity also played a significant role, with Black and Latino mothers being less likely than White mothers to take unpaid maternity leave (Black: $B = -0.135$, $SE = 0.046$, 95% CI: -0.225, -0.044, $p = 0.004$; Latino: $B = -0.135$, $SE = 0.047$, 95% CI: -0.228, -0.042, $p = 0.004$). No significant association was found for mothers from other racial/ethnic groups ($B = -0.053$, $SE = 0.036$, 95% CI: -0.123, 0.018, $p = 0.144$). Employment status during the prior year was also a significant predictor, with employed mothers being less likely to take unpaid leave ($B = -0.234$, $SE = 0.028$, 95% CI: -0.289, -0.178, $p < 0.001$). Being married to the newborn's father, was not significantly associated with unpaid maternity leave ($B = -0.012$, $SE = 0.031$, 95% CI: -0.072, 0.049, $p = 0.705$).

In contrast, the findings for paid maternity leave revealed different patterns. Maternal age showed a marginal positive association with paid leave, although it did not reach statistical significance ($B = 0.048$, $SE = 0.025$, 95% CI: -0.001, 0.098, $p = 0.056$). This association was found to be in the expected direction but not statistically significant. Mother education was not significantly associated with paid maternity leave either ($B = 0.014$, $SE = 0.026$, 95% CI: -0.037, 0.064, $p = 0.595$). However, Latino mothers were significantly more likely to take paid maternity leave compared to White mothers ($B = 0.135$, $SE = 0.049$, 95% CI: 0.040, 0.231, $p = 0.005$), while no significant differences were observed for Black mothers ($B = 0.036$, $SE = 0.048$, 95% CI: -0.057, 0.130, $p = 0.446$) or mothers of other racial/ethnic groups ($B = 0.028$, $SE = 0.037$, 95% CI: -0.045, 0.100, $p = 0.454$). Employment in the prior year was negatively associated with paid maternity leave ($B = -0.182$, $SE = 0.029$, 95% CI: -0.239, -0.124, $p < 0.001$), while marital status again showed no significant association ($B = 0.012$, $SE = 0.032$, 95% CI: -0.050, 0.074, $p = 0.713$).

Table 1. SEM #1 (Without Interactions)

	B	SE	95%	CI	P-value
Unpaid Mother Maternity Leave					
Mother Age	0.080	0.025	0.032	0.128	0.001
Mother Education (Years)	0.119	0.025	0.071	0.168	< 0.001
Mother Race/Ethnicity (Black)	-0.135	0.046	-0.225	-0.044	0.004
Mother Race/Ethnicity (Latino)	-0.135	0.047	-0.228	-0.042	0.004
Mother Race/Ethnicity (Other)	-0.053	0.036	-0.123	0.018	0.144
Mother Employed During Last Year	-0.234	0.028	-0.289	-0.178	< 0.001
Mother Married to the Newborn's Father	-0.012	0.031	-0.072	0.049	0.705
Paid Mother Maternity Leave					
Mother Age	0.048	0.025	-0.001	0.098	0.056
Mother Education (Years)	0.014	0.026	-0.037	0.064	0.595
Mother Race/Ethnicity (Black)	0.036	0.048	-0.057	0.130	0.446
Mother Race/Ethnicity (Latino)	0.135	0.049	0.040	0.231	0.005
Mother Race/Ethnicity (Other)	0.028	0.037	-0.045	0.100	0.454
Mother Employed During Last Year	-0.182	0.029	-0.239	-0.124	< 0.001
Mother Married to the Newborn's Father	0.012	0.032	-0.050	0.074	0.713

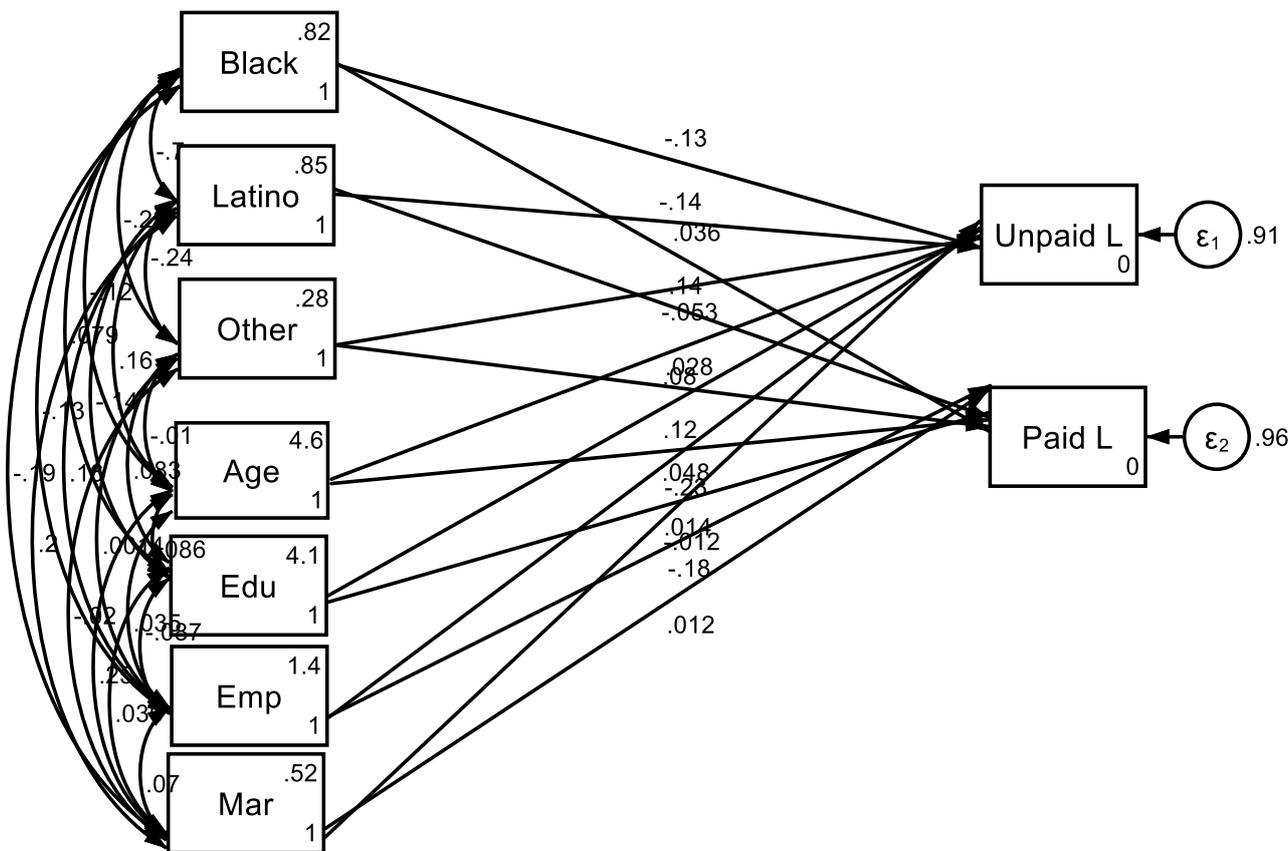


Figure 1. Summary of Structural Equation Model (SEM) #1 (Without Interactions)

Note: Mar: Marital Status, Edu: Education, Emp: Employment, Paid L: Paid Leave; Unpaid L: Unpaid Leave

Table 2 and Figure 2 present the results of SEM #2, which includes interaction terms to examine how the associations between maternal characteristics and the likelihood of taking unpaid and paid maternity leave vary by race/ethnicity. For unpaid maternity leave, maternal education was positively associated with its likelihood (B = 0.245, SE = 0.038, 95% CI: 0.171, 0.319, p < 0.001), with significant variations by race/ethnicity. Specifically, the interaction between maternal education and Black race/ethnicity revealed that the positive association of education with unpaid leave was weaker for Black mothers compared to White mothers (B = -0.500, SE = 0.147, 95% CI: -0.788, -0.211, p = 0.001). A similar trend was observed for Latino mothers, where the education effect on unpaid leave was also significantly attenuated compared to White mothers (B = -0.435, SE = 0.112, 95% CI: -0.655, -0.215, p < 0.001). No significant interaction effect was found for mothers of other racial/ethnic groups (B = -0.148, SE = 0.134, 95% CI: -0.410, 0.115, p = 0.271). Among the main effects, Latino mothers were significantly more likely than White mothers to take unpaid leave (B = 0.220, SE = 0.106, 95% CI: 0.011, 0.428, p = 0.039). Employment status continued to show a strong negative association with unpaid maternity leave (B = -0.260, SE = 0.029, 95% CI: -0.316, -0.204, p < 0.001). Other factors, such as maternal age (B = 0.006, SE = 0.030, 95% CI: -0.052, 0.064, p = 0.840) and marital status (B = -0.004, SE = 0.031, 95% CI: -0.064, 0.057, p = 0.908), were not significantly associated with unpaid maternity leave.

For paid maternity leave, maternal education did not exhibit a significant association (B = 0.039, SE = 0.039, 95% CI: -0.038, 0.116, p = 0.317), and interactions between education and race/ethnicity were also not statistically significant. While Latino mothers were more

likely than White mothers to take paid leave ($B = 0.227$, $SE = 0.110$, 95% CI: 0.011, 0.444, $p = 0.040$), this effect was not observed for Black mothers ($B = 0.009$, $SE = 0.145$, 95% CI: -0.276, 0.294, $p = 0.950$) or mothers of other racial/ethnic groups ($B = 0.164$, $SE = 0.138$, 95% CI: -0.106, 0.434, $p = 0.233$). Similar to unpaid leave, employment in the prior year was negatively associated with paid leave ($B = -0.188$, $SE = 0.030$, 95% CI: -0.246, -0.129, $p < 0.001$), while maternal age ($B = 0.033$, $SE = 0.031$, 95% CI: -0.027, 0.094, $p = 0.279$) and marital status ($B = 0.015$, $SE = 0.032$, 95% CI: -0.047, 0.077, $p = 0.635$) were not significant predictors.

Table 2. SEM #2 (With Interactions)

	B	SE	95%	CI	P-value
Unpaid Mother Maternity Leave					
Mother Age	0.006	0.030	-0.052	0.064	0.840
Mother Education (Years)	0.245	0.038	0.171	0.319	0.000
Mother Race/Ethnicity (Black)	0.271	0.139	-0.002	0.544	0.051
Mother Race/Ethnicity (Latino)	0.220	0.106	0.011	0.428	0.039
Mother Race/Ethnicity (Other)	0.045	0.131	-0.213	0.303	0.732
Mother Employed During Last Year	-0.260	0.029	-0.316	-0.204	0.000
Mother Married to the Newborn's Father	-0.004	0.031	-0.064	0.057	0.908
Black x Mother Education (Years)	-0.500	0.147	-0.788	-0.211	0.001
Latino x Mother Education (Years)	-0.435	0.112	-0.655	-0.215	0.000
Other x Mother Education (Years)	-0.148	0.134	-0.410	0.115	0.271
Paid Mother Maternity Leave					
Mother Age	0.033	0.031	-0.027	0.094	0.279
Mother Education (Years)	0.039	0.039	-0.038	0.116	0.317
Mother Race/Ethnicity (Black)	0.009	0.145	-0.276	0.294	0.950
Mother Race/Ethnicity (Latino)	0.227	0.110	0.011	0.444	0.040
Mother Race/Ethnicity (Other)	0.164	0.138	-0.106	0.434	0.233
Mother Employed During Last Year	-0.188	0.030	-0.246	-0.129	0.000
Mother Married to the Newborn's Father	0.015	0.032	-0.047	0.077	0.635
Black x Mother Education (Years)	0.011	0.154	-0.290	0.313	0.941
Latino x Mother Education (Years)	-0.110	0.117	-0.339	0.120	0.349
Other x Mother Education (Years)	-0.150	0.141	-0.425	0.126	0.287

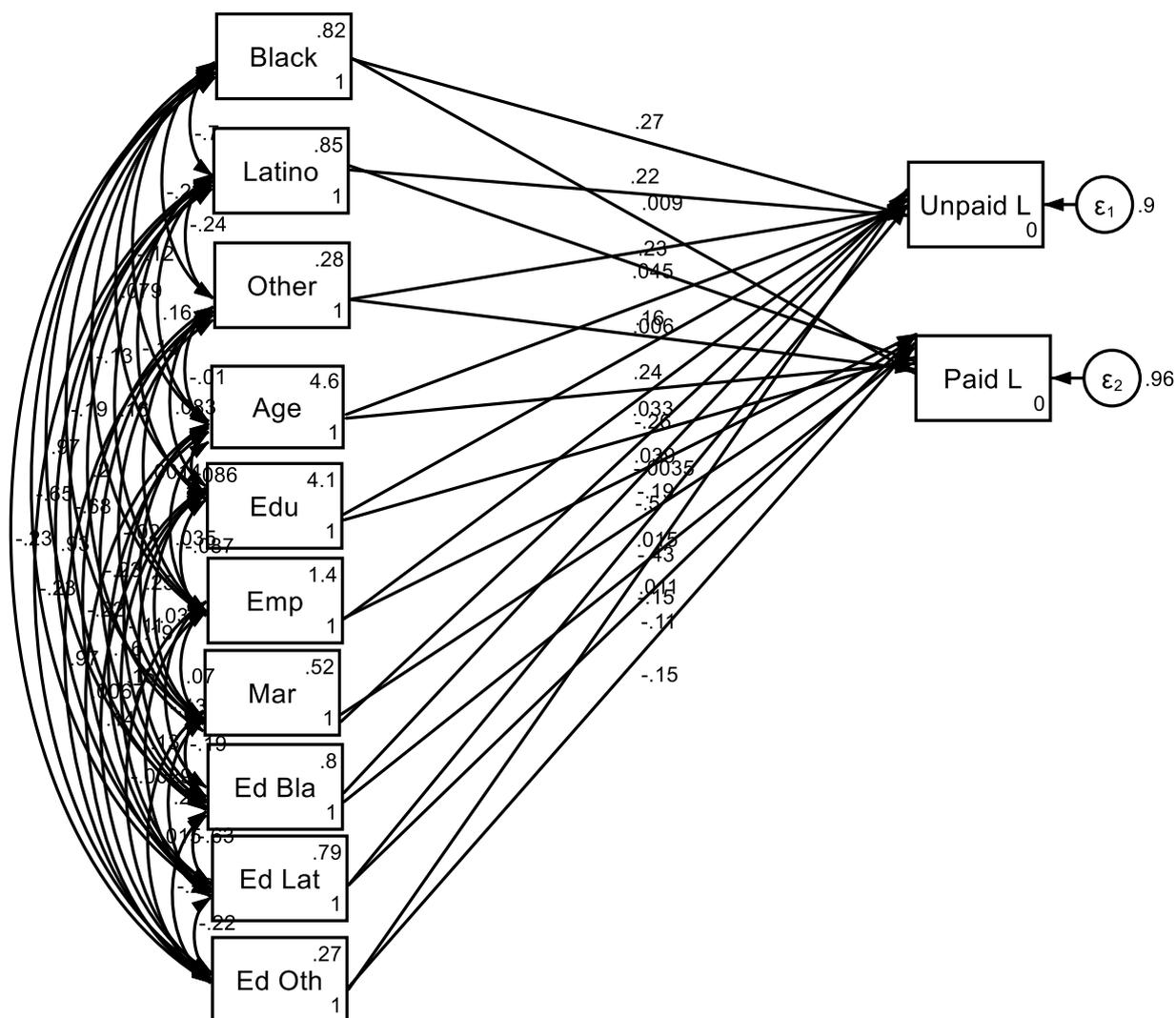


Figure 2. Summary of Structural Equation Model (SEM) #2 (With Interactions)

Note: Mar: Marital Status, Edu: Education, Emp: Employment, Ed Bla: Education x Black, Ed Lat: Education x Latino, Ed Oth: Education x Other Race/Ethnicity, Paid L: Paid Leave; Unpaid L: Unpaid Leave

4. Discussion

This study provides important insights into the inequities surrounding educational attainment and access to maternity leave among mothers living in poverty, with a particular focus on racial and ethnic disparities. The findings demonstrate that while education is positively associated with access to unpaid maternity leave, this relationship is weaker for Black and Latino mothers compared to non-Latino White mothers. Moreover, education did not significantly influence the likelihood of accessing paid maternity leave for any group, underscoring the systemic barriers faced by marginalized populations. These results align with the theory of Minorities’ Diminished Returns (MDRs), which suggests that socioeconomic resources, such as education, yield smaller benefits for marginalized racial and ethnic groups due to structural inequities.

Access to maternity leave is essential for maternal recovery, newborn health, and long-term family well-being. Unpaid leave, while less ideal than paid leave, provides mothers with the necessary time to bond with their infants and recover from childbirth, while paid leave reduces financial stress during this critical period. Education is often

viewed as a pathway to improved occupational opportunities, including benefits such as maternity leave. However, the results of this study suggest that the benefits of education are not equally distributed across racial and ethnic groups, even among mothers living in poverty. For Black and Latino mothers, structural barriers diminish the extent to which education translates into access to such vital resources.

The diminished returns of education for Black and Latino mothers can be attributed to several systemic mechanisms. Labor market discrimination plays a significant role, as even with comparable educational attainment, Black and Latino mothers are more likely to be employed in low-wage industries or positions that do not provide benefits like paid maternity leave. Additionally, residential segregation limits access to high-quality educational and professional networks, further reducing the ability of education to provide meaningful occupational advantages. These systemic inequities are compounded by the lack of federal mandates for paid maternity leave in the United States, which disproportionately affects marginalized groups. In low-wage sectors, where many Black and Latino mothers are employed, employers are less likely to offer such benefits, exacerbating disparities in leave access.

The role of cultural and social factors should also be considered, as stigma surrounding the use of unpaid leave or differences in how benefits are communicated and accessed may influence disparities in utilization. Structural racism within educational and occupational systems further perpetuates these inequities, limiting the potential of education to serve as an equalizer for marginalized groups. The cumulative effects of these barriers highlight the ways in which systemic inequities undermine the protective effects of education on critical maternal resources like maternity leave.

This paper adds another layer of evidence to the growing body of research on Minorities' Diminished Returns (MDRs) by demonstrating that these disparities are not solely structural or behavioral and cannot be entirely attributed to poverty. Even within a sample where all participants were living below the federal poverty line, we observed weaker associations between education and outcomes for racialized and minoritized mothers, such as access to unpaid maternity leave. This finding challenges the notion that poverty alone drives MDRs and highlights the role of systemic inequities that persist regardless of socioeconomic status. Structural racism, labor market discrimination, and other institutionalized barriers appear to restrict the ability of marginalized groups to convert educational attainment into tangible benefits, even in the most economically disadvantaged contexts. These results underscore the pervasive and multifaceted nature of MDRs, suggesting that addressing disparities requires solutions that go beyond alleviating poverty and focus on dismantling the systemic inequities that disproportionately affect racialized and minoritized populations.

Addressing these disparities requires comprehensive policy and systemic changes. Expanding access to paid maternity leave through federal and state-level mandates is essential to reduce reliance on employer-based benefits, particularly for mothers employed in low-wage jobs. Equitable workplace policies should ensure that all employees, regardless of race, ethnicity, or income, have access to both paid and unpaid maternity leave. Beyond workplace reforms, investments in improving the quality and equity of education for marginalized groups are crucial to reduce disparities in occupational outcomes and enhance the ability of education to translate into meaningful benefits. Community-based initiatives can also play a role by providing alternative support systems for mothers who lack access to formal maternity leave, such as financial assistance, childcare resources, and postpartum mental health services.

4.1. Strengths and Limitations

This study has several strengths, including the use of a racially and ethnically diverse sample, robust analytic methods, and a focus on mothers living in poverty—a population often underrepresented in research on maternity leave. However, there are important

limitations to acknowledge. The reliance on self-reported data introduces potential biases, such as recall inaccuracies and social desirability effects. Additionally, the cross-sectional nature of the data restricts our ability to infer causal relationships.

An important contextual factor that was not addressed in this study is the higher rate of cesarean deliveries (C-sections) among individuals living in poverty, potentially influenced by inadequate access to healthcare services. Unfortunately, we lacked data on C-section rates and could not explore how disparities in healthcare accessibility might intersect with maternity leave outcomes.

Finally, maternity leave policies encompass various components, including differing durations based on the type of delivery. For instance, the typical maternity leave for a vaginal delivery is about six weeks, while for a C-section, it is approximately 12 weeks. Our study did not collect data on the duration of maternity leave, which may vary depending on the type of delivery. This omission limits our ability to fully examine the nuanced effects of maternity leave across different delivery experiences.

4.2. Future Research

Future research should build on these findings by exploring the long-term consequences of unequal access to maternity leave on maternal and child outcomes. Longitudinal studies that track families over time would provide critical insights into how disparities in maternity leave access affect maternal mental health, bonding with the child, infant development, and broader family well-being. Understanding these long-term impacts could guide the development of policies and interventions aimed at mitigating the adverse effects of systemic inequities.

Further investigation is needed to identify the specific mechanisms driving the diminished returns of education for Black and Latino mothers, particularly in the context of maternity leave. Qualitative studies could offer a deeper understanding of the lived experiences of marginalized mothers, shedding light on how factors such as labor market discrimination, workplace culture, and access to supportive networks interact to shape their ability to utilize maternity leave. Additionally, studies examining the role of structural racism and residential segregation in limiting educational opportunities and occupational mobility would enhance understanding of the broader systemic factors at play.

Future research should also focus on intersectionality, examining how the interaction of race, ethnicity, gender, and other social determinants affects access to maternity leave. For example, studies could explore how variations in workplace policies, geographic location, or family support systems influence disparities in leave utilization. Furthermore, research could investigate how these factors intersect with other marginalized identities, such as immigrant status or single parenthood, to compound challenges faced by mothers living in poverty.

Comparative studies across different policy contexts, both within the United States and internationally, could provide valuable insights into how variations in maternity leave policies and labor market structures influence outcomes. For instance, examining how mothers in countries with universal paid leave policies fare compared to those in the United States could highlight the benefits of systemic reforms and inform evidence-based policymaking.

Finally, future research should test interventions designed to reduce disparities in access to maternity leave and other critical resources. These could include employer-based programs, community-level initiatives, or policy reforms aimed at addressing structural barriers. Evaluating the effectiveness of these interventions in reducing inequities would be instrumental in informing future efforts to promote maternal and child health equity. By addressing these gaps, future research can contribute to a more comprehensive understanding of the systemic challenges faced by marginalized mothers and provide actionable solutions for improving outcomes.

5. Conclusion

In conclusion, this study highlights the structural barriers that diminish the impact of education on access to critical resources like maternity leave for Black and Latino mothers living in poverty. Although education associates with access to unpaid maternity leave, this link is notably weaker for Black and Latino mothers than for non-Latino White mothers. The findings underscore the urgent need for policymakers and practitioners to address these inequities through targeted interventions and systemic reforms. Ensuring equitable access to both paid and unpaid maternity leave is not only essential for improving maternal and newborn health outcomes but also for advancing social justice and reducing disparities for marginalized families.

Funding:

Hossein Zare's effort was partially supported by the National Institute on Minority Health and Health Disparities (NIMHD) grant U54MD000214.

Author Contributions:

Conceptualization: SA, MA; Methodology: SA; Validation: HZ, MA; Formal Analysis: SA; Resources: SA, MA, HZ; Data Curation: SA; Writing—Original Draft: SA; Writing—Review & Editing: HZ, MA; Visualization: SA; Supervision: MA, HZ; Project Administration: SA. All authors have read and approved the final version of the manuscript.

Data Access:

The data used in this study were publicly available and downloaded from the Inter-university Consortium for Political and Social Research (ICPSR) at the University of Michigan.

Ethics Statement (IRB):

As this study utilized fully identified, publicly available data from ICPSR at the University of Michigan, it was exempt from full IRB review and classified as non-human subject research.

References

- [1] Aitken Z, Garrett CC, Hewitt B, Keogh L, Hocking JS, Kavanagh AM. The maternal health outcomes of paid maternity leave: A systematic review. *Social science & medicine*. 2015;130:32-41.
- [2] Van Niel MS, Bhatia R, Riano NS, De Faria L, Catapano-Friedman L, Ravven S, et al. The impact of paid maternity leave on the mental and physical health of mothers and children: a review of the literature and policy implications. *Harvard Review of Psychiatry*. 2020;28(2):113-26.
- [3] Staehelin K, Berteau PC, Stutz EZ. Length of maternity leave and health of mother and child—a review. *International Journal of Public Health*. 2007;52:202-9.
- [4] Hyde JS, Klein MH, Essex MJ, Clark R. Maternity leave and women's mental health. *Psychology of Women Quarterly*. 1995;19(2):257-85.
- [5] Dagher RK, McGovern PM, Dowd BE. Maternity leave duration and postpartum mental and physical health: implications for leave policies. *Journal of health politics, policy and law*. 2014;39(2):369-416.
- [6] Dahl GB, Løken KV, Mogstad M, Salvanes KV. What is the case for paid maternity leave? *Review of Economics and Statistics*. 2016;98(4):655-70.
- [7] Rossin M. The effects of maternity leave on children's birth and infant health outcomes in the United States. *Journal of health Economics*. 2011;30(2):221-39.
- [8] Chatterji P, Markowitz S. Does the length of maternity leave affect maternal health? *Southern Economic Journal*. 2005;72(1):16-41.
- [9] Fallon KM, Mazar A, Swiss L. The development benefits of maternity leave. *World Development*. 2017;96:102-18.
- [10] Assari S. Health disparities due to diminished return among black Americans: Public policy solutions. *Social Issues and Policy Review*. 2018;12(1):112-45.
- [11] Assari S. Unequal Gain of Equal Resources across Racial Groups. *Int J Health Policy Manag*. 2018;7(1):1-9.
- [12] Hogan T MA, Ndiaye K, Rodriguez B, Najand B, Zare H, Assari S.. Highly Educated Black Americans Report Higher than Expected Perceived Job Demands. *J Rehab Therapy*. 2023(2):11-7.

-
- [13] Assari S. Blacks' Diminished Return of Education Attainment on Subjective Health; Mediating Effect of Income. *Brain Sci.* 2018;8(9).
- [14] Assari S. College Graduation and Wealth Accumulation: Blacks' Diminished Returns. *World J Educ Res.* 2020;7(3):1-18.
- [15] Assari S. Parental Education Better Helps White than Black Families Escape Poverty: National Survey of Children's Health. *Economies.* 2018;6(2):30.
- [16] Assari S. Black Americans' Diminished Health Returns of Professional Occupations: A Thirty-Year Follow-Up Study of Middle-Aged and Older Adults. *J Racial Ethn Health Disparities.* 2024.
- [17] Assari S, Bazargan M. Unequal associations between educational attainment and occupational stress across racial and ethnic groups. *International journal of environmental research and public health.* 2019;16(19):3539.
- [18] Assari S, Zare H, Sonnega A. Racial Disparities in Occupational Distribution Among Black and White Adults with Similar Educational Levels: Analysis of Middle-Aged and Older Individuals in the Health and Retirement Study. *J Rehabil Ther.* 2024;6(1):1-11.
- [19] Assari S, Caldwell CH. Racism, Diminished Returns of Socioeconomic Resources, and Black Middle-Income Children's Health Paradox. *JAMA pediatrics.* 2021;175(12):1287-8.
- [20] Young AA. *The minds of marginalized black men: Making sense of mobility, opportunity, and future life chances*: Princeton University Press; 2004.
- [21] Young AA. Experiences in ethnographic interviewing about race: The inside and outside of it. *Researching race and racism*: Routledge; 2004. p. 187-202.
- [22] Pattillo M. Black middle-class neighborhoods. *Annu Rev Sociol.* 2005;31(1):305-29.
- [23] Assari S, Boyce S, Caldwell CH, Bazargan M, Mincy R. Family income and gang presence in the neighborhood: Diminished returns of black families. *Urban Science.* 2020;4(2):29.
- [24] Assari S, Najand B, Sheikhattari P. Household income and subsequent youth tobacco initiation: Minorities' Diminished Returns. *Journal of Medicine, Surgery, and Public Health.* 2024;2:100063.
- [25] Assari S, Zare H. Household Income and Offspring Education Explain Blacks' Diminished Returns of Parental Education. *Open Journal of Psychology.* 2024;4(1):18-29.
- [26] Assari S. Latinos' diminished returns of educational attainment on reducing food insecurity: the role of ethnic disparities in family structure and employment. *Frontiers in Public Health.* 2024;12:1407005.
- [27] Assari S, Mistry R. Diminished Return of Employment on Ever Smoking Among Hispanic Whites in Los Angeles. *Health Equity.* 2019;3(1):138-44.
- [28] Zare H, Assari S. Non-hispanic Black Americans' diminished protective effects of educational attainment and employment against cardiometabolic diseases: NHANES 1999-2016. *Austin journal of public health and epidemiology.* 2021;8(4).
- [29] Assari S. Race, Education Attainment, and Happiness in the United States. *International journal of epidemiologic research.* 2019;6(2):76.
- [30] Assari S, Najand B. Immigration, Educational Attainment, and Happiness in Europe. *International Journal of Travel Medicine and Global Health.* 2022:137-44.
- [31] Cobb S, Javanbakht A, Khalifeh Soltani E, Bazargan M, Assari S. Racial Difference in the Relationship Between Health and Happiness in the United States. *Psychol Res Behav Manag.* 2020;13:481-90.
- [32] Cobb S, Javanbakht A, Khalifeh Soltani E, Bazargan M, Assari S. Racial Difference in the Relationship Between Health and Happiness in the United States. *Psychology Research and Behavior Management.* 2020;13(null):481-90.
- [33] Gennetian LA, Halpern-Meekin S, Meyer L, Fox N, Magnuson K, Noble K, et al. Implementing cash transfers to us families: Insights from the Baby's First Years Study. *Using Cash Transfers to Build an Inclusive Society: A Behaviorally Informed Approach*, University of Toronto Press, Forthcoming. 2022.
- [34] Gennetian LA, Halpern-Meekin S, Meyer L, Fox N, Magnuson K, Noble KG, et al. Cash to US families at scale: Behavioral insights on implementation from the Baby's First Years Study. *Using cash transfers to build an inclusive society: A behaviorally informed approach* University of Toronto Press <https://www.ssrn.com/abstract>. 2023;4286345.
- [35] Noble KG, Magnuson K, Gennetian LA, Duncan GJ, Yoshikawa H, Fox NA, et al. Baby's first years: design of a randomized controlled trial of poverty reduction in the United States. *Pediatrics.* 2021;148(4).