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# Resilience resources in low-income Black, Latino, and White fathers

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### ABSTRACT

Background and aim: Resilience resources are associated with positive mental and physical health outcomes. However, we know little about protective factors in low-income or racially or ethnically diverse populations of men. This study examined socioeconomic status and racial/ethnic differences in resilience resources among low-income Black, Latino, and White fathers of infants.

*Methods*: The Community Child Health Network conducted a cohort study of mothers and fathers in five sites across the U.S. A sample of fathers who identified as Black, Latino/Hispanic, or non-Hispanic White were recruited and interviewed at home on three occasions during the first year of parenting (n = 597). Several resilience resources were assessed: mastery, self-esteem, dispositional optimism, approach-oriented coping style, positive affect, social support, and spirituality. The first five resources were interrelated and scored as a composite.

Results: Multivariate analyses adjusted for covariates indicated that Black fathers had higher scores on the resilience resources composite compared to White and Latino fathers. Black fathers were also highest in spirituality, followed by Latino fathers who were higher than White fathers. There were significant interactions between race/ethnicity with income and education in predicting optimism, spirituality, and self-esteem. Higher education was associated with higher scores on the resilience resources composite and spirituality in Black fathers, and higher education was associated with higher self-esteem in Black and Latino fathers. Higher income was associated with higher optimism in White fathers.

Conclusion: These results indicate that levels of individual resilience factors are patterned by income, education, and race/ethnicity in low-income fathers, with many possible implications for research and policy.

### 1. Introduction

Resilience resources are factors that help individuals to maintain physical and mental health in the face of stress or adversity (Cicchetti and Garmezy, 1993; Masten, 2018). Meta-analyses have demonstrated that resilience resources are associated with better health outcomes (Hu et al., 2015; Lee et al., 2013). However, multiple resilience resources have not been examined in fathers, and rarely in low-income and racial or ethnic minority populations. The purpose of this study was to further our understanding of resilience resources as protective factors in a community study of fathers by investigating sociodemographic differences in several resilience resources.

Resilience is the psychological, biological, and social capacity to

overcome threats, challenges, or stressful events (Masten, 2018). Resilience resources are the specific capabilities that individuals have to overcome challenges and manage stress. A review of resilience research proposed a framework and taxonomy of resilience-related resources and the importance of these resources in the context of chronic stress (Dunkel Schetter and Dolbier, 2011). The first year after the birth of a child is a chronically stressful time for parents due to heavy caregiving responsibilities, time demands, sleep and other health behavior changes (Hunter et al., 2009; Montgomery-Downs et al., 2010), and potentially higher relationship conflict (Gottman and Notarius, 2000). Studying resilience resources in fathers of young children contributes to a better understanding of stress processes and protective factors in this understudied group of parents.

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According to our taxonomy of resilience resources (Dunkel Schetter and Dolbier, 2011), personality and dispositional resources are relatively stable traits that are part of resilience capacity. These traits include dispositional optimism, or the tendency to be optimistic about the future, and self and ego-related resources particularly self-esteem and mastery (expectancies outcomes related to control). This taxonomy also includes interpersonal and social resources (e.g., social support), as well as world views and culturally-based beliefs (e.g., spirituality, religious beliefs, collectivism, familism). In addition, behavioral and cognitive skills represent coping resources that individuals may develop. In this study, we examined dispositional optimism and positive affect (personality/dispositional resource), mastery and self-esteem (ego-related resources), approach-oriented coping style (behavioral/cognitive skills), spirituality (world/cultural beliefs), and perceived social support (interpersonal/social resources).

A large body of research has demonstrated that resilience resources are associated with better adjustment and better health outcomes (Hu et al., 2015; Lee et al., 2013). However, considerably less research has explored the relationship between socioeconomic status (SES) and resilience resources among Black and Latino fathers. Previous frameworks on resilience resources such as the reserve capacity model (Gallo and Matthews, 2003) posit that low-income individuals experience higher levels of stress and have fewer protective resources as compared to individuals with higher incomes (Adler and Ostrove, 1999). However, no studies have examined whether low SES (e.g., poverty, low educational attainment) is associated with lower levels of a set of psychosocial resources.

Past investigators have shown that mastery (Cheng et al., 2013), self-esteem (Twenge and Crocker, 2002), dispositional optimism (Andersson, 1996), positive affect (DeNeve and Cooper, 1998), social support (Smith et al., 1994), and spirituality (Oman and Thoresen, 2005) are protective factors concerning adjustment to stress and physical and mental health outcomes. One previous study showed that approach-oriented coping style was associated with better mental health outcomes in fathers (Bamishigbin Jr. et al., 2017); however, other evidence suggests no associations (e.g., Littleton et al., 2007). To the best of our knowledge, this is one of the first studies to investigate SES and race/ethnicity concerning resilience resources in fathers from diverse backgrounds.

We hypothesized that fathers of lower SES, operationalized by household income and education, would have lower levels of individual resilience resources compared to those of higher SES (Matthews and Gallo, 2011; Zautra et al., 2010). Spirituality was an exception as it has been negatively correlated with income (Pew Research Center, 2014). Given that resilience resources have been associated with health protective effects, and that racial/ethnic minority men tend to have poorer health than White men (Lee et al., 2013; Williams, 2008), we also hypothesized that Black and Latino fathers would have fewer resilience resources relative to White fathers when SES was controlled. Finally, we tested interactions between race/ethnicity and SES on resilience resources to determine if higher education and income would have differential effects on level of resources in Black, Latino, and White fathers.

# 2. Methods

# 2.1. Community Child Health Network (CCHN) design and recruitment

Detailed descriptions of the design and recruitment protocols of the NICHD-funded Community Child Health Network (CCHN) are provided in the electronic supplement. In brief, CCHN conducted a study of mothers and fathers following birth of a child focused on stress and resilience and racial/ethnic disparities in maternal health (see Dunkel Schetter et al., 2013; O'Campo et al., 2016; Ramey et al., 2015. The sample includes self-identified Black, Latino and non-Hispanic White fathers recruited from five sites designated as high in health disparities (Washington DC, Baltimore, Los Angeles, Lake County, IL, and seven

rural counties in North Carolina). All sites had community partners who were involved in all stages of the research from planning to publication. The present sample included 597 fathers of newborns with complete data over the full year following birth.

### 2.2. Study measures

### 2.2.1. Demographic measures

Demographic measures included self-reported racial/ethnic identity, years of education completed, household income in the previous year, place of birth, age, and partner status (see supplement for details).

#### 2.2.2. Resilience resource measures

All measures of resilience resources were assessed with multi-item scales or measures. Given that most of the resilience resources are relatively stable over time, and to reduce burden on participants, measures were distributed over the three assessments and included mastery, self-esteem, dispositional optimism, approach-avoidant coping, positive affect, perceived available social support, and spirituality (see supplement for details).

### 2.3. Data analysis

All analyses were conducted using Stata 13. Logarithmic transformation was used to achieve normal distributions for negatively skewed distributions on three outcome variables. For regression analyses, cases with high leverage were examined (Belsley et al., 2005) and cases with large residuals were identified by inspecting scatterplots and by assessing Cook's D (Cook, 1977). Regression diagnostics identified three outliers that were influential which were excluded from the analyses. Per capita household income was adjusted for cost of living in each site and was winsorized at the top one percent of the distribution to correct for extreme outliers, then square-root transformed to achieve a normal distribution. Mean replacement was used for missing scale items if 70% of the total scale items were completed.

A Resilience Resources composite score was developed by standardizing and summing scores for five resources (self-esteem, mastery, dispositional optimism, approach coping, and positive affect) based on published research (Rini et al., 1999; Saphire-Bernstein et al., 2011) and factor analysis of resilience resources for the larger cohort of mothers.

A series of hierarchical multiple regression analyses tested models predicting separate individual resilience resource and the resources composite scores as outcomes. The effects of race, ethnicity, adjusted per capita income, education, place of birth (US vs foreign-born), marital status (married/not married), and cohabitation status (cohabiting/not cohabiting) were tested in the first set of models. An additional set of models tested the interactions of the race/ethnicity with each of the SES variables, with separate models testing for interactions with income and education.

### 3. Results

## 3.1. Unadjusted SES and racial/ethnic differences in resilience resources

Bivariate correlations revealed that greater per capita household income and higher education were each associated with higher scores on the resilience resources composite and social support but lower spirituality (see Supplement for correlation matrix). Pairwise group comparisons indicated that Black and White fathers were significantly higher than Latino fathers on the resilience resources composite, and components of mastery and self-esteem. White fathers were higher than Black and Latino fathers on perceived social support. Black fathers were significantly higher in spirituality and approach coping than Latino fathers, who were in turn significantly higher than White fathers in spirituality (see Table 1).

Table 1
Means, standard deviations, and one-way analysis of variance or chi-square analyses by race/ethnicity for major study.

	African American (n = 264)		White ${(n=172)}$		$\frac{\text{Latino/Hispanic}}{(n=161)}$		F	p
	Mean	SD	Mean	SD	Mean	SD		
Resilience Variables								
Resources Composite	$0.51_{a}$	3.58	$0.30_{a}$	3.61	$-0.88_{\rm b}$	3.02	8.64	.0002
Mastery (T1)	$29.17_{a}$	3.95	$29.31_{a}$	3.81	$27.71_{\rm b}$	3.83	8.39	.0003
Self-Esteem (T1)	$26.50_{a}$	3.06	26.77 <sub>a</sub>	2.58	$25.68_{b}$	2.73	6.69	.0013
Optimism (T2)	$31.58_{a}$	4.99	31.91 <sub>a</sub>	5.57	$31.40_{a}$	4.40	0.14	.8735
Approach Coping Style (T3)	$3.14_{a}$	0.56	$3.03_{ab}$	0.51b	$2.97_{\rm b}$	0.51	5.25	.0055
Positive Affect (T3)	36.49 <sub>a</sub>	7.26	35.61 <sub>a</sub>	5.81	35.46 <sub>a</sub>	2.98	1.49	.2267
Social Support (T1)	84.62 <sub>a</sub>	17.40	89.94 <sub>b</sub>	13.46	84.80 <sub>a</sub>	18.31	5.33	.0051
Spirituality (T2/T3)	1.19 <sub>a</sub>	2.01	$-1.49_{\rm b}$	2.82	$-0.18_{c}$	2.23	70.30	<.0001
Demographic Variables								
Education (years complete)	$12.42_{a}$	2.00	$15.10_{\rm b}$	3.33	$10.85_{c}$	2.95	106.32	<.0001
Income (per capita adjusted)	14,081 <sub>a</sub>	17,056	$23,857_{\rm b}$	18,716	$8,292_{c}$	9,004	58.09	<.0001
Age at enrollment	27.81 <sub>a</sub>	7.14	$33.11_{b}$	$6.74_{\rm b}$	$27.75_{a}$	5.86	38.50	<.0001
							$\chi^{2}(2)$	p
Relationship to baby's mother								
Not married or cohabitating		18.5		2.4		3.5	133.71	<.0001
Cohabitating, not married		52.5		14.2		31.7		
Married		29.0		83.4		48.3		
Place of birth (% foreign born)		2.3		5.8		76.4	132.41	<.0001

(n = 597).

Note. T1 = one month post birth; T2 = six months after birth; T3 = one year after birth.

Variables with differing subscripts within rows are significantly different based on post hoc pairwise comparisons adjusted using the Bonferroni correction for multiple comparisons. Means for variables that were log-transformed variables prior to use in statistical analyses are reported above without transformation for ease of interpretation.

# 3.2. Multivariate analyses of SES and race/ethnicity in resilience resources

Adjusted analyses (see Table 2) controlling for covariates showed that more years of education were associated with higher scores on the resilience resources composite, and the components of self-esteem and optimism but not with social support or spirituality. Greater income was only associated with lower spirituality. In these multivariate models, race/ethnicity of fathers explained a significant amount of the variance in the resilience resources composite (F (2,581) = 6.78, p = .001), and components of self-esteem (F (2,581) = 3.17, p = .04), positive affect (F (2,581) = 3.28, p = .04), approach coping (F (2,581) = 8.94, p = .0001), and the separate index of spirituality (F (2,581) = 65.91, p < .0001) but not social support. Adjusted pairwise comparisons indicated that Black fathers had higher adjusted means on the resources composite score and the approach coping scale as compared to Latino and White fathers. The adjusted mean for self-esteem in Black fathers was higher than that for White fathers, and the adjusted mean for positive affect in Black fathers was higher than that for Latino fathers. Adjusted analyses also showed

that Black fathers were highest in spirituality, followed by Latino fathers who were in turn significantly higher than were White fathers.

# 3.3. Interactions analyses for income, education, race/ethnicity, and resilience

In analyses adjusted for education, US/foreign birth, marital and cohabitation status, income interacted with race/ethnicity in predicting fathers' dispositional optimism, (F change (2, 579) = 3.58, p < .05) (Fig. 1a); higher income was associated with higher levels of optimism for White fathers (b = 0.0005, SE = 0.0002, p = .02) but not for Black or Latino fathers.

In analyses adjusted for income, US/foreign birth, marital and cohabitation status, education interacted with race in predicting the following resilience resources for fathers: dispositional optimism (F change (2, 579) = 4.98, p < .01), self-esteem (F change (2, 579) = 3.13, p < .05), and spirituality (F change (2, 579) = 5.61, p = <.01). More years of education were associated with higher levels of optimism for both Black (b = 0.02, SE = 0.005, p < .001) and White fathers (b = 0.01,

**Table 2**Results of multiple regression models predicting resilience resources.

	Resources Composite ( $n = 589$ )	Mastery ( <i>n</i> = 589)	Self-Esteem $(n = 589)$	Optimism ( <i>n</i> = 589)	Positive Affect $(n = 589)$	Approach Coping (n = 589)	Social Support $(n = 588)$	Spirituality (n = 589)	
	β	В	β	β	β	β	β	В	
African-American Race	0.164**	0.074	0.126*	0.120*	0.079	0.152**	-0.054	0.588**	
Latino Ethnicity	-0.045	-0.042	0.018	0.122	-0.098	-0.129	-0.100	0.256**	
Foreign Born	0.033	-0.059	-0.025	0.015	0.138*	0.166*	0.000	-0.032	
Education (Years Completed)	0.138**	0.066	0.156**	0.231**	0.077	0.020	0.016	-0.024	
Per Capita HH Income (COLA)	0.024	0.045	0.062	-0.011	-0.082	0.029	0.040	-0.094*	
Cohabitation Status Marital Status	0.061 0.090	-0.007 0.108*	0.052 0.130**	0.088 0.028	-0.013 $0.013$	0.033 0.028	0.219** -0.014	-0.001 0.179**	

Note. \*p < .05; \*\*p < .01; \*\*\*p < .001. All coefficients reported are standardized. All statistics for a given independent variable were computed at the step that the variable entered the equation. Foreign birth coded as 0 = US Born, 1 = Foreign Born. Cohabitation Status coded as 0 = living with baby's father, 1 = most living with baby's father, Marital status coded as 0 = not married to baby's father, 1 = married to baby's father. Sample sizes vary from 1329 to 134.

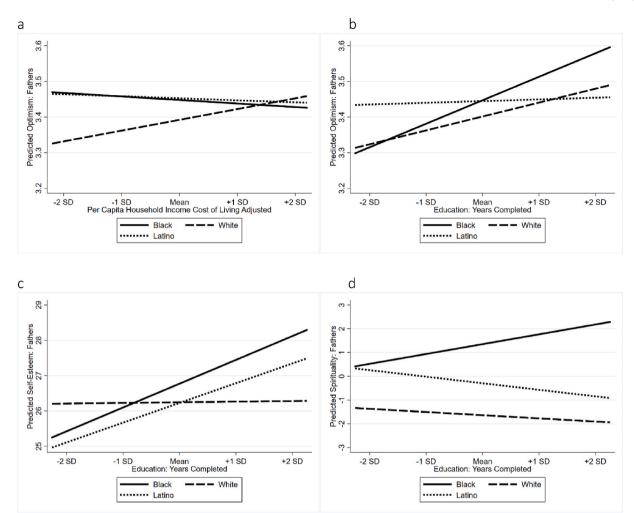


Fig. 1. Graphs of significant Interactions of Race/Ethnicity and Education and Per Capita Household Income Effects on resilience resource variables. Fig. 1a displays simple effects of income on optimism for each race/ethnicity. Fig. 1b displays simple effects of education on optimism for each race/ethnicity. Fig. 1c displays simple effects of education on self-esteem for each race/ethnicity. Fig. 1d displays simple effects of education on spirituality for each race/ethnicity.

SE = 0.004, p = .001) but not for Latino fathers (Fig. 1b). Fig. 1c shows a significant interaction between race/ethnicity and education for self-esteem. More years of education were associated with higher self-esteem for Black fathers (b = 0.24, SE = 0.09, p = .01) and Latino fathers (b = 0.20, SE = 0.07, p = .01) but not White fathers. Education was significantly associated with higher spirituality for Black fathers only (b = 0.15, SE = 0.07, p = .04; Fig. 1d).

### 4. Discussion

This study examined SES and racial/ethnic differences in resilience resources among low-income Black, Latino, and White fathers in a community sample from five sites across the United States experiencing racial/ethnic disparities in maternal and child health. As hypothesized, fathers with lower SES, indexed by either per capita household income or years of education, had lower levels of resilience resources. Adjusting for covariates and race/ethnicity revealed that education was a stronger predictor of most resilience resources, and income predicted only spirituality. Adjusting for SES and other covariates, there were racial/ethnic differences in resilience resources. Black fathers had higher scores than Latino and White fathers on a composite measure of resilience resources composed of self-esteem, optimism, mastery, positive affect, and approach-oriented coping style. Black fathers also had significantly higher levels of spirituality than Latino fathers who, in turn, had higher levels than White fathers.

Furthermore, significant interactions between race/ethnicity and SES indicated that higher income was associated with significantly higher dispositional optimism but only among White fathers. In contrast, more years of education was associated with higher dispositional optimism among Black and White, but not Latino, fathers, and more years of education was significantly associated with higher self-esteem among only Black and Latino fathers. Also, more education was associated with greater spirituality for Black fathers only.

### 4.1. SES and resilience

These findings highlight the importance of income and education in the well-being of low-income Black, Latino and White fathers. Even small gains in income and education may enhance resources known to be protective in the face of stress, namely self-esteem, mastery, optimism, positive affect, approach coping tendencies, perceived support, and spirituality. No prior study has examined a large set of resources in men or women or a community sample such as this.

# 4.2. Race/ethnicity and resilience

Past research indicates that in the U.S. population Black males tend to have poorer health than White males (Lee et al., 2013; Williams, 2008). A published report on stressors in the CCHN study showed that Black fathers had higher chronic stress, and experienced more negative

life events and racial discrimination than White and Latino fathers (Dunkel Schetter et al., 2013). Given the findings showing poorer health outcomes among Black men in the U.S. and higher stress of several types in this cohort, the expected result might have been that Black men would have lower resilience resources than White and Latino men. However, after controlling for relevant covariates, Black fathers reported higher levels of resilience resources overall compared to White and Latino fathers. Few studies have taken a strengths-based approach to understanding men or fathers, let alone communities with high health disparities. These findings demonstrate the importance of examining the strengths of individuals in low-income communities and not underestimating individual capacities.

Previous studies of this cohort bolster these results by suggesting the importance of resilience resources in understanding mental health outcomes in Black fathers. In a subsample of 300 Black fathers, Bamishigbin Jr. et al. (2017) found that greater levels of approach coping, self-esteem, perceived social support, and collective efficacy were associated with fewer paternal depressive symptoms. Black fathers also had fewer depressive symptoms than White and Latino fathers in those analyses. However, in multivariate analyses that included resilience resources and stressors as predictors of changes in depressive symptoms, none of the resilience resources remained significant. This suggests that while individual resilience resources may be associated with better mental health, they may not overcome the disproportionate burden of stressors and chronic strains that Black fathers face. As such, structural inequalities such as racism and poverty that disproportionately and adversely affect Black men and their families must be addressed to improve the mental health of this population.

While these findings shed light on Black fathers, they are less illuminating about Latino fathers. Further research is needed that attends to country of origin and acculturation, and that broadens the conceptualization of resilience resources among Latinos to include culturally relevant concepts such as familism (Campos et al., 2008; Cardoso and Thompson, 2010).

### 4.3. SES, race/ethnicity, and resilience

The present study also revealed important interactions of education with race/ethnicity. More years of education was correlated with higher levels of optimism for Black and White fathers but not for Latino fathers. Greater education was also associated with higher self-esteem for Black and Latino fathers but not White fathers, and, more education was significantly associated with higher spirituality for Black fathers only. Although causality cannot be inferred, these results suggest that in this community sample the benefits of incremental increases in education are greater for Blacks and Latinos in enhancing self-esteem, and in Black and Whites in fostering optimism. It is important to note that these men were living in low SES communities where even small increments in education may be instrumental in enhancing some resilience resources.

Considerable research has shown that in the United States, higher levels of education are generally associated with lower spirituality (Pew Research Center, 2017) and that Black individuals are highest in spirituality and religiosity compared to other racial/ethnic groups (Pew Research Center, 2017; Raney et al., 2017). In this study, we found that more years of education were associated with higher – not lower – spirituality among Black fathers whereas there were no associations with education in Latino or White fathers. Possibly religion and spirituality are notable resources for some Black men with slightly higher educational attainment (Teti et al., 2012).

### 4.4. Strengths and limitations

One strength of this study is that participants were sampled from communities in five regions of the U.S. yielding a large sample of mostly low-income men of three major ethnic groups. Another strength is the strong conceptualization and measurement of multiple dimensions of resilience resources, which is uncommon in studies on protective factors. However, there are also limitations. For example, the study findings were not based on a representative sample of the U.S. population, and we did not compare this sample to a higher SES sample and thus cannot infer how differences in resilience by race/ethnicity would look with a broader distribution of income and educational achievement. Thus, these findings may not apply to middle-to higher-income Black, Latino, or White fathers. The Latino men in the current study were also quite heterogenous in country of origin, years in the US, and acculturation, and further research is very much needed to evaluate the meaningful variability in resilience resources among Latinos.

### 5. Conclusion

We examined resilience and strengths in five U.S. communities with high rates of adversities in maternal and child health. The findings point to the importance of SES, especially more years of education, as a likely contributor to higher levels of many resilience resources in fathers from diverse racial/ethnic backgrounds. Other findings also highlight interactions of variation in lower SES with race/ethnicity that deserve scrutiny and further research. However, the current study's patterns of findings do *not* suggest that fathers who are low in income or from marginalized communities are consistently lower in resilience resources; rather, these fathers bring considerable resilience resources to the challenge of fatherhood in the context of chronic stress.

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# Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.socscimed.2021.114139.

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