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Abstract

John Henryism, a construct developed to describe high effort coping, may help explain the observed health disparities between Blacks and Whites. Previous research suggests that John Henryism is associated with negative physical health factors. However, little research has focused on the relationship between John Henryism and psychological distress. Accordingly, in this exploratory study, we examined the relationships between John Henryism, psychological distress, and well-being in a diverse sample of Black women. Results indicate that there is a negative correlation between John Henryism and depressive symptomatology. This finding is in contrast to past research and suggests that John Henryism may be maladaptive to physical health but not mental health. The limitations and implications of the findings are discussed.

Keywords

John Henryism, depression, Black women, social support

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One of the major challenges facing Blacks in the United States is the physical and mental health disparities between Blacks and Whites (e.g., Burt et al., 1995; Das, Olfson, McCurtis, & Weissman, 2006). For example, the mortality rate for cancer is higher in Blacks than in Whites (Greenlee, Hill-Harmon, Murray, & Thun, 2001), and Blacks are also more likely to develop high blood pressure, which leads to increased cardiovascular disease in this population (Burt et al., 1995; Jemal et al., 2005). Blacks have less access to quality physical and mental health care, which can lead to greater unmet mental health care needs (Wells, Klap, Koike, & Sherbourne, 2001). This lack of access likely explains some of the observed disparities in mental and physical health outcomes. Considerable theoretical and empirical research suggests that the stress of living in an oppressive society may also explain these disparities (Clark, Anderson, Clark, & Williams, 1999; Din-Dzietham, Nembhard, Collins, & Davis, 2004). One such explanation is the John Henryism hypothesis.

James (1994) developed the John Henryism hypothesis based on the legend of John Henry, wherein a Black man had the remarkable ability to drive steel pins in railroad tracks. In time, a machine was built to do John Henry's job. Not to become obsolete, John Henry raced against the machine. Although he won the competition, it came at a great cost, as John Henry died from the physical and emotional exhaustion from the competition. Accordingly, John Henryism was defined as the prolonged, high-effort psychological response to psychosocial stressors, as defined by James (1994). John Henryism is the determination to succeed through hard work in the face of great adversity. This style of coping may be especially salient in the Black population due to the experience of historical and contemporary racism and economic adversity (James, 1994). Individuals who employ this style of active coping would have a high sense of control (i.e., "I've always felt that I could make of my life pretty much what I wanted to make of it."), a strong determination to succeed ("When things don't go the way I want them to, that just makes me work even harder."), and a general tendency to not seek help ("Sometimes I feel that if anything is going to be done right, I have to do it myself."). This sense of control promotes an active approach to solving problems, especially in an oppressive society.

John Henryism, then, is particularly relevant to the social experience of Blacks in the United States. Empirical research supports this view, with research demonstrating that this style of coping is more prevalent in Blacks than in Whites (Bennett et al., 2004). Moreover, the John Henry style of coping is conceptually related to the image of a "Strong Black Woman," another iconic figure. Black women are often perceived by others and themselves as being strong, psychologically invulnerable, and emotionally secure (Romero, 2000). Yet these women often face tremendous challenges to their daily functioning and psyches. A "Strong Black Woman" can accomplish multiple tasks, overcome adversities, and be a leader in her family and the community, while managing racism and sexism, all without complaint. "Being strong" is an important and effective coping strategy that enables Black women to deal successfully with life's adversities. According to Shambley-Ebron and Boyle (2006), "When black women internalize stereotypical myths, believing that they possess a greater degree of emotional strength than other women, they are more likely to set high expectations of their own abilities to manage life's difficulties" (p. 204). Being strong and coping with stress through hard work and determination may prevent women from expressing their psychological distress, depressive or anxiety symptoms, or to seek needed psychological services (Gainor, 1992; Greene, 1994; Shambley-Ebron & Boyle, 2006; West, 1995). This effort to be a "strong woman" could lead to worse mental health outcomes, much like the John Henryism hypothesis proposes. With so little research in this area, this has yet to be determined.

Indeed, many studies have shown an association between the John Henry style of active coping and negative physical health outcomes, including higher heart rate and hypertension (Bennett et al., 2004). More recently, an association has been demonstrated between John Henryism and an increased risk of cardiovascular disease (Merritt, Bennett, Williams, Sollers, & Thayer, 2004). The physical consequences of John Henryism in Blacks seem to be moderated by socioeconomic status (SES; James, Hartnett, & Kalsbeek, 1983). The John Henry hypothesis states that high John Henryism has negative effects on health especially for low SES individuals. When John Henryism is high and SES is also high, the association with physical effects appears weaker. Thus, the John Henryism hypothesis has been used to explain why Blacks with high John Henryism (e.g., determination and taking on too much responsibility) combined with a stressful environment (e.g., poor economic conditions or oppressive environment) have disproportionate levels of negative outcomes (e.g., poor health; James, 1994).

There is some evidence of gender differences in the John Henryism hypothesis. In fact, some of the research has found in a negative association between John Henryism and blood pressure in women rather than the positive association found with men (e.g., Dressler, Bindon, & Neggers, 1998). However, Fernander, Duràn, Saab, and Schneiderman (2004) found varied gender differences. Associations between high John Henryism and high blood pressure were found only with low-educated women and high-educated men. Inconsistencies remain throughout the literature, as sometimes John Henryism has a negative effect and sometimes a positive effect.

Although most previous literature cites deleterious associations between John Henryism and physical health, more recent investigations have found contradictory or no evidence of these associations (Fernander et al., 2004; Jackson & Adams-Campbell, 1994). In fact, some recent research has found John Henryism to be associated with better physical health and mental health. For example, Fernander et al. (2005) found that low levels of John Henryism were predictive of more nicotine dependence in Blacks with low-level SES. Also, McDougald et al. (2009) hypothesized that John Henryism would be predictive of psychiatric morbidity in Blacks with sickle cell disease; however, they found that higher levels of John Henryism were associated with lower levels of depressive symptomatology. Furthermore, Kiecolt, Hughes, and Keith (2009) found that a sense of control and John Henryism were both beneficial to mental health (e.g., psychological distress, substance abuse), and SES did not interact with higher levels of John Henryism. John Henryism could represent a resilient and a hardy style of coping with life's stressors.

New research has explored the potential positive benefits of John Henryism for mental health. Keyes (2009) concluded that John Henryism might contribute positively to one's sense of dignity and meaning in life. Thus, it is possible that John Henryism could be associated with positive mental health, while simultaneously being linked to negative physical health outcomes. As mentioned above, Kiecolt et al. (2009) found that John Henryism was positively related to mental health in individuals with a sense of control and a higher SES. Having a strong dedication to hard work and a resolve to be successful might be beneficial to a sense of well-being. It could be that John Henryism is more beneficial to those with a higher SES because the individual actually reaps the rewards of their hard work. Conversely, individuals with lower SES may receive little reward for their hard work; and thus, John Henryism is related to negative health effects due to frustration and distress (Wheaton, 1985). Although past research has historically found John Henryism to be deleterious to physical health, given the more recent findings that suggest John Henryism may be beneficial to Black women's mental health, this study took a neutral stance and was more exploratory in nature. Further research is needed to explore the potential positive and negative linkage of John Henryism to mental health, psychological distress, and well-being.

Depression

When considering psychological distress and psychological well-being, depressive symptomatology and social support are relevant factors for Black women. Depression is a multidimensional mental disorder, and symptoms include depressed mood and anhedonia, insomnia, fatigue, feelings of worthlessness, inability to concentrate, and suicidal ideation. Depression and/or depressive symptoms can have major psychological, physical, and psychosocial consequences for individuals. It is important to note the difference between depression and depressive symptomatology; the current study is focused on depressive symptomatology.

Twelve-month prevalence rates of major depression in the general population have been reported with ranges of 4% to 7% (Angst, 1992; Kessler et al., 2003). Also, and most notably, the lifetime prevalence of major depressive disorder in women in the United States tends to be higher, ranging from 6% to 17% (Blazer, Kessler, McGonagle, & Swartz, 1994). There are clear gender differences in the prevalence of depression. Women are diagnosed with depression more often than men. Epidemiological reports have indicated the lifetime prevalence of depression in women to be at a female to male ratio of 3:1 (Blazer et al., 1994; Kessler, 2003).

In addition to gender differences, there are also indications of ethnic and racial differences in the prevalence of depression. Some research shows a higher prevalence of depression in Black women as compared with White women. For instance, Dunlop, Song, Lyons, Manheim, and Chang (2003) reported 12-month prevalence rates in Black women as 8.9% compared with 7.8% in White women. In addition, Blacks are more likely to experience barriers to treatment and less likely to receive effective medical care than Whites (Das et al., 2006). The National Mental Health Association (NMHA; 1996) found that Blacks were unclear about the definition, causes, and symptoms of depression (Mitchell & Herring, 1998). For example, 63% of Blacks believed that depression was a personal weakness, and only 31% of Blacks believed that depressive symptoms could be a health problem. Therefore, the actual prevalence of depressive symptoms among Blacks might actually be underestimated (Sussman, Robins, & Earls, 1987). Depressive symptomatology in Black women may vary due to social contexts and individual differences. Black women who perceive more discrimination may be more likely to experience depression symptoms (Schulz et al., 2006). Furthermore, racial identity attitudes may be predictive of levels of depressive symptomatology in Black women (Pyant & Yanico, 1991). Brown and Keith (2003) have suggested that the psychosocial stressors of being both female and Black may be associated with increased risks for depressive symptoms in Black women.

Although most studies that have reflected the effects of John Henryism have focused on physical health, researchers have begun to examine the relationship between John Henryism and mental health. McDougald et al. (2009) found that high levels of John Henryism were predictive of low levels of

depressive symptomatology in Blacks with sickle cell disease, as measured by the Beck Depression Inventory. Baker (2001) found that Blacks initiated counseling with an alternative presentation of depressive symptomatology, which included being stressed, overwhelmed, and taking on multiple tasks and roles. However, these "John Henry doers" denied that they were overwhelmed and continued to try to master multiple roles despite the deleterious effect on their mental health. Again, the evidence is mixed as to whether John Henryism could promote negative or positive mental health.

Social Support

The protective benefits of perceived social support and the consequences of a lack of social support have been studied across various physical and mental health conditions. Social support is a multidimensional construct generally described as the structure of a social network (e.g., the size of support), the functions of the support (e.g., what is provided and how reliable it is), and the perception of support provided to an individual (Hogan, Linden, & Najarian, 2002). Perceived social support can be provided by family, friends, or formal support. The size and amount of support can vary, and the function can be emotional, instrumental, and/or informational (Hogan et al., 2002). Research indicates that social support is positively associated with overall well-being and quality of health and can protect against decreases in cardiovascular functioning, endocrine functioning, and immune functioning (Cohen & Wills, 1985). For instance, studies with Black women showed strong negative correlations between depressive symptomatology and social support (Bailey, Wolfe, & Wolfe, 1996; Thompson et al., 2000; Warren, 1997). In multiple studies, low social support has been a significant predictor of depressive symptomatology in Black women. Women with low social support were four times as likely to have depressive symptoms than women with high social support (Miller et al., 2004; Schumm, Briggs-Phillips, & Hobfoll, 2006). Brown, Brodey, and Stoneman (2000) found that spousal support in Black women had a strong negative association with depressive symptoms in conditions of low SES. Thus, the more social support that exists, the less depression one experiences. Also, assuming social support is perceived as available, many women may not be open to reaching out to others when experiencing depressive symptoms or other psychological distress. Schreiber, Stern, and Wilson (2000) found, during a qualitative study of West Indian Canadian women, that when misery was experienced, women often withdrew and were isolated because they believed that suffering was part of life.

Generally, the evidence demonstrates that social support is valuable in the lives of Black women as a protective factor against stressors. However, social support may not always be beneficial and can be experienced as a "double-edged sword." According to Gray and Keith (2003), social support for Black women can be experienced as involving responsibilities, duties, and obligations. Also, relationships with family, friends, and romantic partners can be a source of stress due to conflicts, expectations, and demands. Obligations, multiple demands, and role strain arising from one's social support network can compromise Black women's psychological well-being. In knowing this "double-edged sword," it may be particularity relevant to examine the lived experience of social support in Black woman.

Research on the relationships between of John Henryism and social support is very limited. One study indicated a positive association between John Henryism and social support (Jackson & Adams-Campbell, 1994). Thus, individuals that had higher John Henryism had perceived less social support. However, with so little research, the relationship between John Henryism and social support is inconclusive. It could be that individuals who are hard working, John Henry active-copers would seek out extra support or have an ample pool of support already in place, and thus, the association between John Henryism and social support would be positive. On the other hand, John Henry active-copers could conceivably refuse support in an attempt to master multiple tasks on their own without help, in which case the association between John Henryism and social support would be negative. Thus, more research is needed before conclusions about John Henryism and social support can be made with confidence.

Study Rationale

Past research suggests that John Henryism is negatively associated with physical health outcomes, yet some conflicting evidence exists which suggests that John Henryism may be associated with positive mental health outcomes. In order to help to explain these conflicting findings, we examined the relationships between John Henryism, depressive symptomatology, and perceived social support in a sample of Black women. Because past research suggests that SES may moderate the relationship between John Henryism and physical health outcomes, we also conducted exploratory analyses aimed at examining how SES might alter the relationship between John Henryism and depressive symptomatology.

In this study, we examined the following research questions:

- *Research Question 1*: What are the relationships between John Henryism, depressive symptomatology, and perceived social support in Black women?
- *Research Question 2*: Does John Henryism contribute to the prediction of depressive symptomatology above and beyond social support in Black women?
- *Research Question 3*: Does SES moderate the relationship between John Henryism and depressive symptomatology in Black women?

Method

Participants

This study was part of a larger study funded by the National Institute of Mental Health (Grant # 1R24MH65482-01). The original study was designed to research the relationship between internalized negative cultural stereotypes and mental health of Black women. Three hundred fourteen Black women participated in this study. As shown in Table 1, participants' ages ranged from 18 years to 70 years, and the average age of participants was 38 years (SD = 11). The mean income bracket for participants was \$30,000 to \$49,000, and 32% of the sample was included in this bracket. Additionally, 69% of the participants identified themselves as having full time employment, and 37% of the participants were college graduates.

Procedures

Participants for the larger study were recruited at a Black women's exposition in a major Midwestern city using flyers with study information and booth location. Prior to completing the survey, participants read the parameters and consented through signature. They were given a \$10 incentive to complete the measurements and were told it would take approximately 20 to 30 minutes to complete. Participants volunteered to complete surveys and were then directed to the booth area and tables where they completed the survey. After completing the survey, all participants were given local community mental health resources in the event they needed to debrief after completing the survey. The principal investigator and two licensed psychologists were available in the event that on-site debriefing was necessary.

Characteristic	%	n	
Age (years)			
18-28	22.0	68	
29-39	33.4	107	
40-50	30.5	97	
51-60	10.0	32	
61-70	2.4	8	
Education			
Partial high school	1.6	5	
High school	12.9	41	
Partial college	27.6	88	
College graduate	37.0	118	
Graduate/professional training	17.2	55	
Employment status			
Unemployed	11.3	36	
Part-time	18.8	60	
Full-time	69.3	221	
Income			
\$0-14,999	11.9	38	
\$15,000-29,999	20.1	64	
\$30,000-49,999	32.3	103	
\$50,000-69,999	16.3	52	
\$70,000-99,999	11.9	38	
\$100,000+	6.9	22	

Table I. Demographic Characteristics

Measures

Demographics. A demographic information questionnaire, developed by the research team, was administered. This measure included age, gender, race, education categories (i.e., graduate training, college, partial college, high school graduate, partial high school, junior high, and less than 7 years), household income categories, employment status (i.e., unemployed, parttime, and full-time), and occupation (i.e., executive, manager, administrative, clerical, skilled manual, semi-skilled, or unskilled).

John Henryism. John Henryism or active coping with psychosocial stressors was measured using the John Henryism Scale of Active Coping (JHAC12; James et al., 1983). The JHAC12 is a 12-item measure developed by James

et al. (1983) and based on the three main themes: (a) advantageous psychological and physical strength, (b) strong dedication to hard work, and (c) resolve to be successful. The items are measured on a 5-point Likert-type scale rating how true or false each item was (1 = completely true and 5 = completelyfalse). The JHAC12 includes items such as "I've always felt that I could make of my life pretty much what I wanted to make of it" and "Once I make up my mind to do something, I stay with it until the job is completely done." Scores can range from 12 to 60, with lower scores indicating higher John Henryism. However, for this study, John Henryism was reversed coded so that higher scores indicated higher John Henryism. Discriminant validity of the JHAC12 has been found with Black samples in a number of studies. In Weinrich, Weinrich, Keil, Gazes, and Potter (1998), John Henryism was found to be independent from Type A behavior patterns. In Light et al. (1995), John Henryism was found to be independent from anger and hostility, and in Fernander, Duràn, Saab, Llabre, and Schneiderman (2003), John Henryism was found to be independent from the emotion-focused and behavioral disengagement subscales of the COPE inventory. Convergent validity has been demonstrated with strong positive correlations with the six subscales of the COPE inventory in a Black sample (Fernander et al., 2003). Furthermore, construct validity and reliability was demonstrated with Cronbach's alphas ranging from .65 to .87 in Black samples (Fernander et al., 2003; Neighbors, Njai, & Jackson, 2007). The current study found the JHAC12 to be reliable with a Cronbach's alpha of .87.

Depression. Depressive symptomatology was measured using the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). The 20 items are measured using a 4-point scale assessing the frequency of occurrence of specific symptoms during the past week (>1 day = rarely or none and 5-7 days = most or all days). Items include statements such as "I was bothered by things that don't usually bother me and I had crying spells." The four items of the positive affect subscale, for example, "I enjoyed life," were reverse coded, so that higher scores on the CES-D were indicative of more depression symptoms. Higher scores indicate more depressive symptomatology, and total scores range from 0 to 60, with scores of 16 or greater generally distinguishing those who have significant depressive symptomatology versus those who do not. Additionally, the 20 items of CES-D can be factored into four subgroups: depressed affect, positive affect, somatic complaints, and interpersonal problems. Concurrent validity has been found with strong correlations to the Profile of Mood States depression subscale, as well as the Bradburn Negative Affect Scale (Conerly, Baker, Dye, Douglas, & Zabora, 2002; Radloff, 1977). Discriminant validity has been demonstrated with

strong negative correlations in comparison to the Bradburn Positive Affect Scale (Radloff, 1977). Convergent validity has been demonstrated with strong positive relationships to the Zung Depression Scale and the Hamilton Depression Test (Shinar et al., 1986). Reliability has been demonstrated with Cronbach's alphas of .85 in Whites and .85 to .90 in Blacks (Conerly et al., 2002; Kohout, Berkman, Evans, & Cornoni-Huntley, 1993; Roberts, 1980). Internal consistency has been shown to be stable and range from .85 to .90 (Radloff, 1977). The current study found the CES-D to be reliable with a Cronbach's alpha of .89.

Perceived social support. Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). The 12 items are measured on a 7-point Likert-type scale (1 = very strongly disagree and 7 = very strongly agree). The items include statements such as "There is a special person around when I am in need and I can talk about my problems with my friends." Scores can range from 12 to 84, with higher scores indicating higher social support. Additionally, the 12 items of MSPSS can be factored into three subgroups: significant other, family, and friend. Construct validity of the MSPSS has been demonstrated with perceived social support correlating negatively with both anxiety and depression (Kazarian & McCabe, 1991). Convergent validity has been demonstrated with the MSPSS correlating strongly with the Social Support Behaviors Scale, and discriminant validity has been demonstrated in a sample of Blacks with the correlations of the MSPSS subscales to the Adolescent Family Caring Scale subscales (Canty-Mitchell & Zimet, 2000; Kazarian & McCabe, 1991). Total measure reliability has been demonstrated with a Cronbach's alpha of .88 in a White sample and .89 in a Black sample. The reliability of the subscales range from .85 to .91 in Whites (Zimet et al., 1988) and .86 to .94 in Blacks (Bradley, Schwartz, & Kaslow, 2005). The current study found the MSPSS to be reliable with a Cronbach's alpha of .94.

Data Analysis

All analyses were conducted using SPSS (Version 16). Means, standard deviations, and reliability coefficients were conducted to provide descriptive information about our sample and to test the reliability of our measures. Additionally, Pearson correlations were conducted between education, income, depressive symptomatology, John Henryism, and perceived social support to examine the associations between all these variables. Also, hierarchical regression analyses were conducted to examine the contribution of John Henryism and perceived social support in predicting depressive

n	М	SD	Observed range	Potential range	α
302	14.9	10.7	0-50	0-60	.89
309	49.5	7.9	16-60	12-60	.87
306	62.7	14.8	12-84	12-84	.94
	21.2	5.9	4-28	4-28	.90
	20.3	5.8	4-28	4-28	.90
	21.0	5.2	4-28	4-28	.89
	302 309	302 14.9 309 49.5 306 62.7 21.2 20.3	302 14.9 10.7 309 49.5 7.9 306 62.7 14.8 21.2 5.9 20.3 5.8	302 14.9 10.7 0-50 309 49.5 7.9 16-60 306 62.7 14.8 12-84 21.2 5.9 4-28 20.3 5.8 4-28	302 14.9 10.7 0-50 0-60 309 49.5 7.9 16-60 12-60 306 62.7 14.8 12-84 12-84 21.2 5.9 4-28 4-28 20.3 5.8 4-28 4-28

 Table 2.
 Summary Table of Participants Means, Standard Deviations, Ranges, and

 Reliabilities
 Participants Means, Standard Deviations, Ranges, and

Note: CES-D = Center for Epidemiological Studies-Depression Scale; JHAC12 = John Henryism Scale for Active Coping Scale; MSPSS = Multidimensional Scale for Perceived Social Support; MSPSS Sig. Other = MSPSS Significant Other Subscale; MSPSS Friend = MSPSS Friends subscale.

symptomatology, and finally, two hierarchical moderated regression analyses, both predicting depressive symptomatology, were conducted, as specified by Aiken and West (1991), to determine if John Henryism and SES interacted to predict depressive symptomatology. All variables were centered to reduce multicollinearity between the interaction terms and other predictor variables as recommended by Frazier, Tix, and Barron (2004).

Results

The sample was composed of individuals with large range and variance in age (18-60 years), education (partial high school to graduate/professional training), and income (0-14,999 to >100,000). See Table 1. It is interesting to note that nearly 39% (n = 108) of participants scored above the clinical threshold (>15) for significant depressive symptomatology on the CES-D. On the JHAC12, 76.7% of the participants scored in the upper quartile (from 45 to 60). This is not surprising as high scores of John Henryism have been commonly reported (typically averaging 50-54 out of 60) and have been attributed to possible social desirability biases in the JHAC12 scale (Bennett et al., 2004; James, Strogatz, Wing, & Ramsey, 1987). The overall scores on the MSPSS total were also moderately high, M = 62.67, SD = 14.84, a pattern that was also reflected in each of the subscales. Means, standard deviations, and reliability coefficients can be found in Table 2.

To determine whether those above the CES-D clinical cutoff were significantly different from those who scored at or below the clinical cutoff,

Variables	Ι	2	3	4	5	6	7	8
I. CES-D total	_	40**	30**	−.27**	−.31**	18**	.18**	.07
2. JHAC12		—	.18**	.18**	.21**	.09	.06	.11
3. MSPSS total			—	.88**	.88**	.87**	.10	.09
4. MSPSS Sig. Other				_	.66**	.66**	.11	.07
5. MSPSS Family					_	.68**	.12*	.08
6. MSPSS Friend						_	.05	.07
7. Income								.24**
8. Education								—

Table 3. Correlation Matrix

Note: CES-D = Center for Epidemiological Studies-Depression Scale; JHAC12 = John Henryism Scale for Active Coping Scale; MSPSS = Multidimensional Scale for Perceived Social Support; MSPSS Sig. Other = MSPSS Significant Other Subscale; MSPSS Friend = MSPSS Friends subscale. *p < .05. **p < .01.

the means of these groups were examined. CES-D scores were dichotomized between individuals with less than 16 (low scorers) and 16 or higher (high scorers). Significant mean group differences in JHAC scores were found between low scorers (M = 51.7, SD = 6.1) and high scorers (M = 46.5, SD = 8.9) on the CES-D, t(176) = 5.48, p < .001. Thus, those women who scored above the CES-D clinical cutoff had significantly lower John Henry scores than those who scored below the mean on the CES-D.

What Are the Relationships Between John Henryism, Depressive Symptomatology, Perceived Social Support, and Demographic Characteristics?

As shown in Table 3, depressive symptomatology correlated negatively with perceived social support (r = -.30, p < .01). John Henryism was negatively related to depressive symptomatology (r = -.40, p < .01) and positively related to overall social support (r = .18, p < .01). Additional correlations showed that depressive symptomatology was significantly negatively correlated with income (r = -.17, p < .01) but not significantly related to education. Thus, higher income was related to lower depressive symptomatology scores.

Variable	n	ΔR^2	R ²	ΔF	F	df	В	β
Step I	275		.03		3.8*	2, 273		
Income							-1.17*	16
Education							-0.30	03
Step 2	275	.09**	.12	27.19	11.90**	3,272		
Income							-1.0*	14
Education							-0.08	01
Social Support							-0.21**	30
Step 3	275	.11*	.23*	39.21	19.98**	4,271		
Income							-1.0*	14
Education							0.24	02
Social Support							-0.16**	22
John Henryism							-0.47**	35

Table 4. Hierarchical Regression Analysis of Income, Education, Perceived SocialSupport, and John Henryism Predicting Depression (N = 275)

*p < .05. **p < .01.

How Much Does John Henryism Contribute to the Prediction of Depressive Symptomatology Above and Beyond Demographic Variables and Social Support?

Using hierarchical regression, income and education were both entered into the first step as controls (Table 4). Perceived social support was added in the second step, and John Henryism was added in the final step. The first step containing the demographic variables was significant with income and education accounting for 3% of the variance in depressive symptomatology $(R^2 = .03, p < .05; F(2, 273) = 3.88, p < .05)$. In the second step, perceived social support attained significance and accounted for 9% of additional explained variance in depressive symptomatology $(R^2 = .12, p < .01;$ $F\Delta(1, 272) = 27.19, p < .01)$. The final step entered John Henryism, which significantly explained an additional 11% of unique variance in the prediction of depressive symptomatology $(R^2 = .23, p < .01; F\Delta(1, 271) = 39.21,$ p < .01). After controlling for the variance associated with the demographic variables, both perceived social support and John Henryism were significant predictors of depressive symptomatology together explaining 23% of the variance.

Variable	ΔR^2	R ²	F	В
Model I		.18	31.97**	
John Henryism				-0.54**
Income				-1.09**
Model 2	.002	.18	21.5**	
John Henryism				-0.54**
Income				-1.16**
John Henryism $ imes$ Income				0.05

Table 5. Regression Analysis and Summary for the Interaction of John Henryism and Income Predicting Depression (N = 291)

*p < .05. **p < .01.

Table 6. Regression Analysis and Summary for the Interaction of John Henryism and Education Predicting Depression (N = 284)

Variable	ΔR^2	R ²	F	В
Model I		.16	27.29**	
John Henryism				54**
Education				30
Model 2	.000	.16	 8. 3 **∗	
John Henryism				54**
Education				29
John Henryism $ imes$ Education				.01

*p < .05. **p < .01.

Does SES (i.e., Education and Income) Moderate the Relationship Between John Henryism and Depressive Symptomatology?

Two hierarchical moderated regression analyses, both predicting depressive symptomatology, were conducted. The first was with education and the second was with income as the moderator variable (Tables 5 and 6). For both analyses, main effects were entered at Step 1 and interaction effects at Step 2. The results of the first regression were significant ($R^2 = .18$), F(2, 289) = 31.97,

p < .01. When examined together, both John Henryism and income were significant predictors of depressive symptomatology. However, the interaction of John Henryism and income was not a significant predictor of depressive symptomatology. The results of the second regression were also significant ($R^2 = .16$), F(2, 282) = 27.29, p < .01), with John Henryism as the only significant predictor of depressive symptomatology ($R^2 = -.54$, p < .01). Education and the interaction of John Henryism and education were not significant predictors of depressive symptomatology.

Discussion

This study is one of few that has investigated John Henryism as it relates to depressive symptomatology and perceived social support in a diverse sample of Black women. Generally, findings from previous literature support that John Henryism is detrimental to the physical health of Blacks. However, some studies provide an inconsistent picture about the association of John Henryism and physical and mental health. The findings of the current study are aligned with emerging literature that suggests that John Henryism is related to positive mental health outcomes and, thus, may exert a beneficial influence.

In contrast with the majority of previous studies, which demonstrate a negative association between John Henryism and physical health, this study found a positive relationship between John Henryism and mental health. Higher amounts of the John Henry style of active coping were related to lower amounts of depressive symptoms. Individuals with less depressive symptomatology were likely to have more John Henryism. Additionally, John Henryism was a significant unique predictor of depressive symptomatology. Similarly, Kiecolt et al. (2009) found that John Henryism was inversely related to psychological distress and the presence of any mental disorder and positively related to a sense of control. Thus, it is not surprising that in this study, the effortful, active coping style of John Henryism was related to less depression. Income was inversely related to depression. It seems that having a lower income is connected with having more depressive symptoms. The relationships between income, education, and depression are not surprising and consistent with previous research (e.g., Kessler et al., 2003).

Similar to Jackson and Adams-Campbell's (1994) findings, this investigation found that John Henryism was positively related to perceived social support. In other words, individuals who endorsed active coping were likely to perceive more social support in their lives. Additionally, John Henryism was significantly related to perceived social support even while controlling for depressive symptomatology, income, and education. Perceived family support had the strongest relationship with John Henryism; and interestingly, although the relationship between John Henryism and perceived family support was strong, perceived friendship did not have a significant relationship. This may be indicative of relative differences between family involvement and friend involvement in these Black women's support systems. As expected and consistent with extant literature, depressive symptomatology was inversely related to perceived social support, with perceived family social support having the strongest negative relationship with depressive symptomatology.

Limitations

The limitations of this study are important to note. First, there are limitations to the generalizability of this study. The overall sample was unique, in that it was composed of a lower to middle class Black women. Although there was a considerable amount of variance and range in educational attainment and income, these results are not representative of all Black women. Second, there were possible limitations to the internal validity of this study. First, the presence of confounding variables may have influenced our final results in ways that we did not measure. Only 24% of the variance in depressive symptomatology was explained by the variables in this investigation, indicating that many other untested variables (i.e., trauma, spirituality/religiosity, and personality) are likely related to depressive symptomatology in Black women. Clearly, many other variables need to be investigated in conjunction with John Henryism. Third, self-selection may have been an issue in this study. The sample is comprised mostly of women that were employed (68%). Also, due to the nature of the John Henryism construct (hard-working and determined), it may be that women that score higher in John Henryism were more motivated to volunteer for research. Thus, self-selection could have skewed the data by overestimating John Henryism.

Implications

Despite the limitations of this study, the findings have some important implications for psychologists. First, John Henryism could be beneficial because individuals with high John Henryism may demonstrate determination, dedication, and the ability to work hard even in difficult situations. John Henryism may empower Black women in coping with psychosocial stressors and buffer against psychological distress. Thus, it would be important for psychologists to recognize this helpful coping style and assist Black women in developing and maintaining effective active coping skills. On the other hand, Black women also receive the message that it is important to mask or contain signs of depression (Richardson & Wade, 1999). For instance, Schreiber et al. (2000) found that the women attempted to "manage their depression with grace and to live up to the cultural imperative to be strong" (p. 4). The women thought that suffering was a normal part of life and that one endured personal misery privately. Therefore, the results of the current study might mean that Black women with high levels of John Henryism are less likely to report depressive symptoms due to their investment in working hard and "being strong." Thus, the negative association between John Henryism and depressive symptomatology could be an indication of either a buffering effect or a masking effect. This idea complicates our understanding of depression in Black women, suggesting that the presence of John Henryism in Black women may either buffer or mask depressive symptoms.

This study provides further evidence that perceived social support in Black women is linked to less depressive symptoms. For practitioners, insuring that Black women are connected to supportive friends and family in their community is important. Finally, this study demonstrated that perceived social support, a variable typically associated with psychological well-being, is positively related to John Henryism. Thus, Black women who are active copers may perceive more social support in their lives. The positive association between John Henryism and social supports adds to the potential mental health benefits of John Henryism in Black women.

Future research should consider the potential of John Henryism as having a positive and/or beneficial impact on individual's well-being. For example, John Henryism may serve as moderator between significant stress (e.g., perceived racism) and depression or other mental health constructs. Additionally, examinations of John Henryism as a measure of strength, empowerment, or resilience in specific high-stress situations (e.g., domestic violence) could be explored. On the other hand, the high effort coping of John Henryism might actually serve to mask psychological symptoms. Thus, teasing apart the mechanism underlying John Henryism would be critical. Kiecolt et al. (2009) speculated that John Henryism might have a curvilinear relationship with mental health where until a certain threshold it has a positive effect, but beyond that point John Henryism might increase psychological distress. Moreover, it would be interesting to note how John Henryism relates to Black women's willingness to seek professional help for mental health issues.

Conclusion

This study extended previous research in a number of consequential ways. First, it expanded our understanding of John Henryism as it relates to psychological distress and psychological well-being. John Henryism has typically been associated with negative physical health outcomes; however, this study provided an alternative view of this style of active coping. Moreover, given that we know so little about the experience of Black females that have depressive symptoms, this knowledge provides a broader understanding of John Henryism, depressive symptomatology, and perceived social support in Black women. These results add to a new and upcoming perspective that John Henryism may not be always harmful but may actually prove advantageous. John Henryism has the potential to have a positive influence on mental health and could be a source of resilience, empowerment, and well-being in Black women.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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References

- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Angst, J. (1992). Epidemiology of depression. Psychopharmacology, 106, S71-S74.
- Bailey, D., Wolfe, D., & Wolfe, C. R. (1996). The contextual impact of social support across race and gender: Implications for Black women in the workplace. *Journal* of Black Studies, 26, 287-307.
- Baker, F. M. (2001). Diagnosing depression in Blacks. *Community Mental Health Journal*, *37*, 31-38.
- Bennett, G. G., Merritt, M. M., Sollers, J. J., III, Edwards, C. L., Whitfield, K. E., Brandon, D. T., & Tucker, R. D. (2004). Stress, coping and health outcomes among Blacks: A review of the John Henryism hypothesis. *Psychology and Health*, 19, 369-383.
- Blazer, D. G., Kessler, R.C., McGonagle, K. A., & Swartz, M. S. (1994). The prevalence and distribution of major depression in a national comorbidity sample: The National Comorbidity Study. *American Journal of Psychiatry*, 151, 979-986.
- Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low-income, Black women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress*, 18, 685-696.

- Brown, A. C., Brodey, G. H., & Stoneman, Z. (2000). Rural black women and depression: A contextual analysis. *Journal of Marriage and the Family*, 62, 187-198.
- Brown, D. R., & Keith, V. M. (2003). The epidemiology of mental disorders and mental health among African American women. In D. R. Brown & V. M. Keith (Eds.), *In and out of our right minds: The mental health of African American women* (pp. 23-58). New York, NY: Columbia University Press.
- Burt, V. L., Whelton, P., Roccella, E. J., Brown, C., Cutler, J. A., Higgins, M., & Labarthe, D. (1995). Prevalence of hypertension in the US adult population: Results from the Third National Health and Nutrition Examination Survey, 1988-1991. *Hypertension*, 25, 305-313.
- Canty-Mitchell, J., & Zimet, G. D. (2000). Psychometric properties of the Multidimensional Scale of Perceived Social Support in urban adolescents. *American Journal of Community Psychology*, 28, 391-400.
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psycholo*gist, 54, 805-816.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310-357.
- Conerly, R. C., Baker, F., Dye, J., Douglas, C. Y., & Zabora, J. (2002). Measuring depression in Black cancer survivors: The reliability and validity of the Center for the Epidemiologic Study-Depression (CES-D) Scale. *Journal of Health Psychol*ogy, 7, 107-114.
- Das, A. K., Olfson, M., McCurtis, H. L., & Weissman, M. M. (2006). Depression in African Americans: Breaking barriers to detection and treatment. *Journal of Family Practice*, 55, 30-39.
- Din-Dzietham, R., Nembhard, W. N., Collins, R., & Davis, S. K. (2004). Perceived stress following race-based discrimination at work is associated with hypertension in African Americans: The metro Atlanta heart disease study. *Social Science* & *Medicine*, 58, 449-461.
- Dressler, W. W., Bindon, J., & Neggers, Y. (1998). John Henryism, gender and arterial blood pressure in an African-American community. *Psychosomatic Medicine*, 60, 620-624.
- Dunlop, D. D., Song, J., Lyons, J. S., Manheim, L. M., & Chang, R. W. (2003). Racial/ethnic differences in rates of depression among preretirement adults. *American Journal of Public Health*, 93, 1945-1952.
- Fernander, A. F., Duràn, R. E. F., Saab, P. G., Llabre, M., & Schneiderman, N. (2003). Assessing the reliability and validity of the John Henry Active Coping Scale in an urban sample of Blacks and White Americans. *Ethnicity & Health*, 8, 147-161.
- Fernander, A. F., Duràn, R. E. F., Saab, P. G., & Schneiderman, N. (2004). John Henry active coping, education, and blood pressure among urban blacks. *Journal* of the National Medical Association, 96, 2004.

- Fernander, A. F., Patten, C. A., Schroeder, D. R., Stevens, S. R., Eberman, K. M., & Hurt, R. D. (2005). Exploring the association of John Henry active coping and education on smoking behavior and nicotine dependence among Blacks in the USA. Social Science & Medicine, 60, 491-500.
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51, 115-134.
- Gainor, K. A. (1992). Internalized oppressions as a barrier to effective group work with Black women. *Journal for Specialists in Group Work*, 17, 235-242.
- Gray, B. A., & Keith, V. M. (2003). The benefits and costs of social support for African American women. In D. R. Brown & V. M. Keith (Eds.), *In and out of our right minds: The mental health of African American women* (pp. 242-257). New York, NY: Columbia University Press.
- Greene, B. (1994). African American women. In L. Comas-Diaz & B. Greene (Eds.). Women of color: Integrating ethnic and gender identities in psychotherapy (pp. 10-29). New York, NY: Guildford Press.
- Greenlee, R. T., Hill-Harmon, M. B., Murray, T., & Thun, M. (2001). Cancer statistics, 2001. CA: A Cancer Journal for Clinicians, 51, 15-36.
- Hogan, B. E., Linden, W., & Najarian, B. (2002). Social support interventions: Do they work? *Clinical Psychology Review*, 22, 381-440.
- Jackson, L. A., & Adams-Campbell, L. L. (1994). John Henryism and blood pressure in black college students. *Journal of Behavioral Medicine*, 17, 69-79.
- James, S. A. (1994). John Henryism and the health of African-Americans. Culture, Medicine and Psychiatry, 18, 163-182.
- James, S. A., Hartnett, S. A., & Kalsbeek, W. D. (1983). John Henryism and blood pressure differences among Black men. *Journal of Behavioral Medicine*, 6, 259-278.
- James, S. A., Strogatz, D. S., Wing, S. B., & Ramsey, D. L. (1987). Socioeconomic status, John Henryism, and hypertension in Blacks and Whites. *American Journal* of Epidemiology, 128, 664-673.
- Jemal, A., Murray, T., Ward, E., Samuels, A., Tiwari, R. C., Ghafoor, A., & Thun, M. J. (2005). Cancer statistics, 2005. CA: Cancer Journal for Clinicians, 55, 10-30.
- Kazarian, S. S., & McCabe, S. B. (1991). Dimensions of social support in the MSPSS: Factorial structure, reliability, and theoretical implications. *Journal of Community Psychology*, 19, 150-160.
- Kessler, R. C. (2003). Epidemiology of women and depression. Journal of Affective Disorders, 74, 5-13.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., & Wang, P. S. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Study Replication (NCS-R). *Journal of the American Medical Association*, 289, 3095-3105.

- Keyes, C. L. (2009). The Black-White paradox in health: Flourishing in the face of social inequality and discrimination. *Journal of Personality*, 77, 1677-1706.
- Kiecolt, K. J., Hughes, M., & Keith, V. M. (2009). Can a high sense of control and John Henryism be bad for mental health? *Sociological Quarterly*, 50, 693-714.
- Kohout, F. J., Berkman, L. F., Evans, D. A., & Cornoni-Huntley, J. (1993). Two shorter forms of the CES-D depression symptoms index. *Journal of Aging and Health*, 5, 179-193.
- Light, K. C., Brownley, K. A., Turner, J. R., Hinderliter, A. L., Girdler, S. S., Sherwood, A., & Anderson, N. B. (1995). Job status and high-effort coping influence work blood pressure in women and blacks. *Hypertension*, 25, 554-559.
- McDougald, C. S., Edwards, C. L., Wood, M., Wellington, C., Feliu, M., O'Garo, K., & O'Connell, C. F. (2009). Coping as predictor of functioning and pain in patients with sickle cell disease (SCD). *Journal of Black Studies*, 13, 47-62.
- Merritt, M. M., Bennett, G. G., Williams, R. B., Sollers, J. J., III, & Thayer, J. F. (2004). Low educational attainment, John Henryism, and cardiovascular reactivity to and recovery from personally relevant stress. *Psychosomatic Medicine*, 66, 49-55.
- Miller, D. K., Malmstrom, T. K., Joshi, S., Andresen, E. M., Morley, J. E., & Wolinsky, F. D. (2004). Clinically relevant levels of depressive symptoms in community-dwelling middle-aged Blacks. *Journal of the American Geriatric Soci*ety, 52, 741-748.
- Mitchell, A., & Herring, K. (1998). What the blues is: Black women overcoming stress and depression. New York, NY: Perigee.
- National Mental Health Association. (1996). *Clinical depression and Blacks*. Retrieved from http://www.nmha.org
- Neighbors, H. W., Njai, R., & Jackson, J. S. (2007). Race, ethnicity, John Henryism, and depressive symptoms: The national survey of American life adult reinterview. *Research in Human Development*, 4, 71-87.
- Pyant, C. T., & Yanico, B. J. (1991). Relationship of racial identity and gender-role attitudes to Black women's psychological well-being. *Journal of Counseling Psychology*, 38, 315-322.
- Radloff, L. S. (1977). The CES-D Scale: A self-reported depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Richardson, B., & Wade, B. (1999). What Mama couldn't tell us about Love: Healing the emotional legacy of racism by celebrating our light. New York, NY: Harper Collins.
- Roberts, R. E. (1980). Reliability of the CES-D Scale in different ethnic contexts. *Psychiatry Research*, 2, 125-134.
- Romero, R. E. (2000). The icon of the strong Black woman: The paradox of strength. In L. C. Jackson & B. Greene (Eds.), *Psychotherapy with African American women: Innovations in psychodynamic perspectives* (pp. 225-238). New York, NY: Guilford.

- Schreiber, R., Stern, P. N., & Wilson, C. (2000). Being strong: How Black West-Indian Canadian women manage depression and its stigma. *Journal of Nursing Scholarship*, 32, 39-45.
- Schulz, J., Gravelee, C. C., Williams, D. R., Israel, B. A., Mentz, G., & Rowe, Z. (2006). Discrimination, symptoms of depression, and self-rated health among Black women in Detroit: Results from a longitudinal analysis. *American Journal* of Public Health, 96, 1265-1270.
- Schumm, J. A., Briggs-Phillips, M., & Hobfoll, S. E. (2006). Cumulative interpersonal traumas and social support as risk and resiliency factors in predicting PTSD and depression among inner-city women. *Journal of Traumatic Stress*, 19, 825-836.
- Shambley-Ebron, D. Z., & Boyle, J. S. (2006). In our grandmother's footsteps: Perceptions of being strong in African American women with HIV/AIDS. *Advances in Nursing Science*, 29, 195-206.
- Shinar, D., Gross, C. R., Price, T. R., Banko, M., Bolduc, P. L., & Robinson, R. G. (1986). Screening for depression in stroke patients: The reliability and validity of the Center for Epidemiologic Studies Depression Scale. *Journal of the American Heart Association*, 17, 241-245.
- Sussman, L. K., Robins, L. N., & Earls, F. (1987). Treatment-seeking for depression by black and white Americans. Social Science & Medicine, 24, 187-196.
- Thompson, M. P., Kaslow, N. J., Kingree, J. B., Rashid, A., Puett, R., Jacobs, D., & Matthews, A. (2000). Partner violence, social support, and distress among Black women. *American Journal of Community Psychology*, 28, 127-143.
- Warren, B. J. (1997). Depression, stressful life events, social support, and self-esteem, in middle class Black women. Archives of Psychiatric Nursing, XI, 107-117.
- Weinrich, S. P., Weinrich, M. C., Keil, J. E., Gazes, P. C., & Potter, E. (1998). The John Henryism and Framingham Type A Scales: Measurement properties in elderly Blacks and Whites. *American Journal of Epidemiology*, 128, 165-178.
- Wells, K., Klap, R., Koike, A., & Sherbourne, C. (2001). Ethnic disparities in unmet need for alcoholism, drug abuse and mental health care. *American Journal of Psychiatry*, 158, 2027-2032.
- West, C. M. (1995). Mammy, Sapphire, and Jezebel: Historical images of Black women and their implications for psychotherapy. *Psychotherapy*, 32, 458-466.
- Wheaton, B. (1985). Personal resources and mental health: Can there be too much of a good thing? *Research in Community and Mental Health*, *5*, 139-184.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52, 30-41.