

# EXPERIENCES OF RACIST EVENTS ARE ASSOCIATED WITH NEGATIVE HEALTH CONSEQUENCES FOR AFRICAN AMERICAN WOMEN

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This study investigated whether experiences of racist events were related to psychological distress, negative health behaviors, and health problems. Participants were 71 African American women (mean age 44.4) who were recruited from an urban cancer-screening clinic as part of a larger longitudinal study on familial risk of breast cancer. Participants completed three study assessments, approximately one month apart, and data were collected via self-report. Correlational analyses revealed that past year and lifetime racism were both related to psychological distress. Among smokers and drinkers, past year racism was positively correlated with number of cigarettes and drinks consumed. Lifetime racism was negatively related to perceived health, and positively related to lifetime history of physical disease and frequency of recent common colds. Analyses using a general linear model revealed that these relationships were largely unaccounted for by other variables. In addition, demographic variables such as income and education were not related to experiences of racism. The results suggest that racism can be detrimental to African American's well being and should be investigated in health disparities research. (*J Natl Med Assoc.* 2003;95:450-460.)

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**Key words:** racism ♦ health disparities ♦ chronic stress

Numerous authors have commented on the ways in which longstanding racism in American society affects African Americans.<sup>1-10</sup> A wide-

ranging literature reveals that African Americans face denigrating images of themselves and their culture in the dominant society, are subjected to discrimination on institutional levels, and experience acts of prejudice (which may include physical violence) on an individual level.<sup>11-21</sup> Moreover, the insidious nature of racism means that African Americans from varied backgrounds are affected.<sup>22-24</sup> As a result, racism has been conceptualized as a chronic stressor in the lives of African Americans.<sup>25</sup> The well documented health disparities between African Americans and European Americans in the United States<sup>26-30</sup> may be due, in part, to experiences with racism.

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If racism represents a chronic stressor, the literature on the effects of chronic stress would suggest that it could have an adverse effect on both the mental and physical health of African Americans.<sup>31</sup> As yet, however, little research has examined how experiences of racism may affect health outcomes. A few studies have provided evidence of a relationship between racism and mental health. For example, data from the National Survey of Black Americans showed that perceptions of racism and racial discrimination were associated with poorer mental health.<sup>32</sup> In addition, discrimination has been shown to be related to lower levels of perceived mastery and higher levels of psychological distress.<sup>33, 34</sup> Other studies report a relationship between experienced racism and intrusive thoughts about the racist event.<sup>35</sup> These studies are likely to have underestimated the extent of the problem, because they utilized single-item assessments of racism, and this approach tends to underestimate discrimination.<sup>36</sup>

For physical health, the literature on the effect of racism is more sparse.<sup>37, 38</sup> In population samples, one recent study found that among a group of varied ethnicities, perceived racism was related to poor self-perceived health status.<sup>39</sup> An association between discrimination and cardiovascular outcomes has been reported, although not in a dose-response relationship.<sup>40,41</sup> Some authors have offered theoretical models of how racism might lead to chronic illnesses such as prostate cancer,<sup>42</sup> but researchers have yet to investigate how these models bear out in practice.

Given that psychological stressors affect health behaviors, some investigations have studied how racism relates to health behaviors. Two studies<sup>43,44</sup> examined the association between racism and smoking. The data shows that African Americans who experience more racial discrimination smoke more. Another study<sup>45</sup> found that transit workers of varied ethnicity who reported higher discrimination also reported more drinks per month, heavy drinking, and alcohol dependence than those who reported less discrimination.

The present study sought to build upon the current evidence by examining the role of experienced racism in psychological adjustment and physical health. Our investigation is undergirded by the biopsychosocial model proposed by Clark et. Al,<sup>25</sup> wherein the perception of racism is hypothesized to lead to adverse health outcomes through psychobiological stress responses, or negative health behaviors. More specifically, we looked at psychological distress, negative health behaviors (drinking, smoking), and health problems (perceived health, frequency of lifetime illness, and frequency of common colds). We hypothesized that higher perceived levels of racist events would be positively related to drinking and smoking behavior. In addition, because chronic stress has been found to be negatively related to physical health and the common cold,<sup>46-49</sup> we hypothesized that racist events would also be positively related to perceived health, lifetime history of disease and the common cold.

## METHODS

### Study Design and Sample

The data were gathered as part of a larger longitudinal investigation of women with different levels of familial risk for breast cancer. However, because including family history of breast cancer as a covariate in preliminary analyses did not alter the significant effects reported below, it was not included in the final analyses.

Participants were recruited from an urban cancer screening clinic (The Breast Examination Center of Harlem) that provides comprehensive diagnostic screening services to members of the Harlem community. All services are provided at no out of pocket expense to the client. Ninety-seven percent of the clinic's clientele is Black or Latina, and at the time data was collected for this study, the staff was 95% Black or Latino(a).

The sample was comprised of 71 African American women with a mean age of 44.4 years (range = 26 -72). Eighty-five percent of the sample completed at least some high school, 63%

were currently employed, and 30% were currently married. Income (household) was as follows: < \$10,000 (n=12); \$10,000-\$19,999 (n=31); \$20,000-\$39,999 (n=39); \$40,000-\$59,999 (n=17); \$60,000-\$100,000 (n=8); >\$100,000 (n=1). For statistical analyses, these categories were collapsed into two (<\$40,000, ≥ \$40,000).

To be eligible, participants had to be 25 years

or older, be able to read/write English and be able to provide meaningful informed consent. To reduce sources of heterogeneity in outcome variables, women currently taking prescription medication other than hormone replacement therapy or birth control pills were excluded. Women taking over-the-counter medications were not excluded.

Participants were recruited from the clinic on

**Table 1. PERCENTAGE OF WOMEN WHO EXPERIENCED RACISM IN THE PAST YEAR AND IN THEIR LIFETIME**

<u>Type of racism</u>	<u>Lifetime</u>	<u>Past Year</u>
Treated unfairly by neighbors	30	18
Made fun of, picked on, pushed, shoved, or hit	36	12
Forced to take drastic steps (filing lawsuit, moving away)	37	18
Treated unfairly by people that you thought were your friends	38	27
Accused or suspected of doing something wrong (stealing, cheating)	46	27
Treated unfairly by employers, bosses, supervisors	47	34
Gotten into an argument or fight about something racist	54	17
Called a racist name	55	15
Treated unfairly by co-workers, fellow students, colleagues	61	27
Treated unfairly by teachers and professors	62	22
People misunderstood your intentions and motives	63	47
Treated unfairly by people in helping jobs (doctors, case workers)	66	34
Wanted to tell someone off for being racist but didn't say anything	66	49
How different would your life be now if you HAD NOT been treated u	68	49
Treated unfairly by institutions (schools, police, courts)	70	39
Been really angry about something racist	81	50
Treated unfairly by people in service jobs (store clerks, waiters)	83	69
Treated unfairly by strangers	84	67

Note: Percentages reflect proportion of women who endorsed item (at any degree), as opposed to endorsing "Never" or "Not at all". Item content is abbreviated for space.

scheduled clinic days by an African American female researcher (JG), as follows. The study was briefly described to a group of women in the waiting room. Interested women approached the researcher who verified eligibility criteria and obtained informed consent. Less than 10% of interested women declined participation and consistent with our IRB regulations we have no information on these women. After agreeing to participate, all were given an appointment to meet with the researcher three to four weeks afterwards, to complete study questionnaires at a time when no clinical services were provided. None of the participants had been found to have breast abnormalities. Because volunteers were accepted into the study, and women were not individually invited to participate, refusal rates are not available.

After the first scheduled visit, participants returned twice more to the clinic, solely to complete study assessments, and visits were approximately one month apart. We conducted multiple assessments of critical outcome variables to increase reliability over “one shot” assessments that are more common in the literature. In addition, by aggregating across three assessments, we increased the base rate of outcome variables (e.g., colds). Measures were completed while an investigator was present, so that questions could be answered. However, participants had the option of completing the demographic questionnaire at home and returning it later. Participants were offered \$20 plus the cost of public transportation to and from each visit.

Because so few ( $n=3$ ) of the women who began the study ( $n=74$ ) did not complete all assessments, it was not appropriate to analyze differences between “completers” and “non-completers” on outcome variables.

## Study Variables

All questionnaires were written self-report measures. A standard demographic questionnaire (50) was used to obtain information such as age, marital status, education, employment, and

income.

General psychological distress in the past three weeks was assessed with the Brief Symptom Inventory (BSI), a 53-item standardized measure with strong internal consistency.<sup>51</sup> A general distress index was calculated by obtaining the mean of all items, with higher numbers indicating greater distress. These scores were averaged across three assessments.

Lifetime smoking status was assessed with a single item from the National Health Interview Survey:<sup>52</sup> “During your lifetime, have you smoked at least 100 cigarettes (5 packs)?” To provide an indication of recent smoking, at each study assessment, participants reported how many cigarettes they smoked: “today,” “yesterday,” “two days ago,” and “three days ago”. Occurrence of alcohol consumption was reported for the past month (yes/no), and recent quantity consumed was assessed, as was recent smoking. The responses to these questions were averaged across the three visits.

The women’s perception of their own health was assessed at the initial visit, with a well-established single item assessment: “In general, how is your health compared to other people your age?”<sup>53, 54</sup> Responses were given with a 5-point Likert scale with “1” representing “Excellent” and “5” representing “Poor”. To assess lifetime history of disease, participants reported the occurrence of ever having been diagnosed by a doctor with a system by system checklist of diseases (e.g., gastrointestinal, immunological, infectious, endocrine). The total sum of these lifetime illnesses was used as another index of physical health. During each study assessment participants reported the occurrence and frequency of colds in the past three weeks. These responses were averaged over the three assessments, thus covering a nine week interval. Self-reported cold numbers have been found to be valid in a previous study that confirmed such reports with physical exams.<sup>55</sup>

Experiences with racism were assessed with the Schedule of Racist Events (SRE)<sup>34, 43</sup> at the

first study assessment. The scale is an 18-item self-report inventory that measures the frequency with which African Americans have experienced

racist events (on a 6-point scale ranging from “Never” to “Almost all of the time”). Item content is listed in Table 1. For each item, ratings for

**Table 2. BIVARIATE CORRELATIONS BETWEEN EXPERIENCED RACISM AND HEALTH OUTCOMES**

<u>Outcome Variable</u>	<u>Past Year Racism</u>		<u>Lifetime Racism</u>		<u>Appraisal of Stress</u>	
	Bivariate correlation	p value	Bivariate correlation	p value	Bivariate correlation	p value
Psychological Distress $r^2$	.31 <b>.09</b>	<.01	.40 <b>.16</b>	<.001	.32 <b>.10</b>	<.01
Quantity of cigarettes $r^2$	.37 <b>.14</b>	<.05	.13 N/A	.46	-.005 N/A	.97
Quantity of alcoholic beverages $r^2$	.40 <b>.16</b>	<.05	.23 N/A	.20	.11 N/A	.55
Perceived health $r^2$	.19 N/A	.12	.27 <b>.07</b>	<.05	.01 N/A	.95
Lifetime history of disease $r^2$	.03 N/A	.79	.23 <b>.05</b>	<.05	.03 N/A	.79
Common cold frequency $r^2$	.38 <b>.14</b>	<.01	.41 <b>.17</b>	<.01	.25 N/A	.08

Note: Relations to quantity of cigarettes and alcoholic beverages, and frequency of colds is reported for those individuals who smoked, drank, or had a cold during the study. Means were as follows: quantity of cigarettes= 63.0; alcoholic beverages=2.67; colds=1.66.

$r^2$  was calculated only for significant correlations. N/A, not applicable because correlations were not significant.

the past year and lifetime are requested, as well as the degree of stress associated with each experience. The mean score for responses in each of the three facets are computed.

### Statistical Analyses

To investigate group differences (e.g., past year racism in smokers vs. non-smokers), analysis of variance (SAS statistical package) was used. To investigate the strength of the association between racism and health outcomes, Pearson-product moment correlations were computed. To determine whether discovered relationships could be explained by other variables, SAS general linear model (GLM) was used as a regression model. Thus, if a significant relationship was discerned between experienced racism and a health outcome, the GLM was used to determine if this relationship persisted after controlling for other relevant variables.

## RESULTS

### Descriptives

The mean for past year racism (PYR) was 1.71 (SD= .65), lifetime racism (LTR) was 2.36 (SD= .98) and appraisal of stress (AOS) was 2.79 (SD=1.32). Given that a score of "1" indicates "Never" experiencing the racist event listed in the item, and "2" indicates "Once in a while," there was not a high level of racism experienced in the sample. Bivariate correlational analyses revealed no significant relationships between any demographic variables (i.e., age, marital status, education, income, or employment status) and any facet of experienced racism. Income was positively related to lifetime history of disease,  $r = .23$ ,  $p < .01$ , and cold frequency,  $r = -.25$ ,  $p < .05$ . Income was not significantly related to drinking or smoking.

Table 1 shows the item-by-item frequency of past year and lifetime experienced racism in the sample. As can be seen, most participants had experienced some racism in their lives, including more severe events such as having to take drastic steps regarding the racist event (e.g., lawsuit).

### Health Outcomes and Racism

Table 2 shows the bivariate correlations, significance levels and  $r^2$  values for the three facets of experienced racism and each health outcome. As can be seen, experienced racism was positively correlated with overall psychological distress.

None of the facets of experienced racism were related to ever being a lifetime smoker. However, for individuals who were smokers ( $n=34$ ), PYR was related to how many cigarettes were smoked. Distress did not account for the relationship between PYR and smoking, as adding it to the model did not eliminate the significance of the relationship,  $F^{2, 31} = 5.03$ ,  $p < .05$ , as shown in Table 3.

PYR was related to whether or not women drank in the past month, but this was an inverse relationship; non-drinkers experienced more racism than drinkers,  $F^{1, 69} = 5.44$ ,  $p < .05$ . Again, however, among drinkers ( $n=33$ ), PYR was positively related to how many drinks were consumed, as shown in Table 2. The relationship between PYR and quantity of drinks did not appear to be accounted for by distress; adding distress to the model did not eliminate the significance of the relationship,  $F^{2, 30} = 5.78$ ,  $p < .05$ , as shown in Table 3.

With regard to perceived health, women who had experienced more LTR rated their overall health as poorer, as shown in Table 2. When distress, drinking and smoking were added to the model, the relationship between LTR and perceived health was no longer significant. Drinking and smoking did not account for the relationship, as racism remained significant with these variables. However, distress appeared to be a mediator, as including it by itself in the model eliminated the significance of the relationship,  $F^{2, 67} = 2.12$ ,  $p = .15$ , as shown in Table 3.

LTR was positively related to lifetime history of disease, as shown in Table 2. Including distress, smoking and drinking in the model did not affect this relationship,  $F^{4, 65} = 4.88$ ,  $p < .05$ . For the common cold, only PYR was positively relat-

ed to having a cold in the nine weeks assessed,  $F_{1, 68} = 5.33, p < .05$ . However, among women who had colds ( $n=47$ ), both PYR and LTR were significantly related to the *number* of colds women experienced (see Table 2). The relationship between racism and cold frequency was not explained by distress, drinking or smoking. After adding these variables to the model, PYR still remained significant,  $F_{4, 42} = 4.83, p < .05$ , as did LTR,  $F_{4, 42} = 5.09, p < .05$ , as shown in Table 3.

Discussion

The results of the present study supported the hypotheses that individuals who reported having experienced racism would have higher levels of psychological distress, negative health behaviors and physical health problems. More specifically, greater experienced racism (higher scores on the Schedule of Racist Events) was associated with higher distress, greater alcohol and cigarette consumption, more common colds, and more lifetime illnesses. The study's findings are concordant with those in the literature, but also introduce new findings with drinking behavior, and, to the best of our knowledge, provide the first data to show a relationship between experienced racism and physical health outcomes outside of the cardiovascular system.

It is important to note that experienced racism did not vary significantly by a variety of demographic variables including age, income or education, evidence of the widespread nature of racism. It is also noteworthy that the women in this sample did not report extreme levels of experienced racism. Some researchers contend that recognition of discrimination may adversely affect self-esteem and perceptions of control, and as a result, these experiences may be denied or minimized.<sup>37</sup> The vast majority of the present participants reported having experienced some form of racism during their lives, including having to take drastic steps such as lawsuits to remedy the situation. It is possible that these reports even underestimate the actual level of experienced racism. Given that the relationships were found with relatively low levels of racism,

African Americans who experience more severe levels may be at even greater risk for poor health outcomes.

Experiences with racist events accounted for a fair amount of variance in health outcomes ( $r^2$  values). It is not surprising that only 5% of the variance in lifetime history of disease was attributable to lifetime racism, given the important role of other factors such as lifestyle (e.g., diet, exercise) genetics, immune function, physical environment, etc. However, that even 5% of the variance is accounted for by lifetime experienced racism highlights the effect racism has on African Americans. Psychological distress, quantity of cigarettes and alcohol consumed, and frequency of common colds showed higher  $r^2$  values. Again, a range of 14%-17% is not trivial when we consider the number of other variables that may be related to these outcomes. In addition, that racism experienced over a *lifetime* accounted for 16% of the variance in distress experienced in the past *two weeks* is notable.

**Racism and Health Behaviors**

In this study, experienced racism was not related to whether or not women smoked. However, it did predict whether women were drinkers, with those who experienced *less* racism being more likely to drink. This was an unexpected finding. Based on their empirical data, Jackson et al.<sup>32</sup> argue that individuals who perceive whites as wanting to keep blacks down may be more vigilant when it comes to their own physical health; they are more likely to recognize the importance of looking out for themselves. This is a possible explanation for the inverse relationship found in this study. Many African Americans are aware of the disparities in alcohol sales among African American and European American neighborhoods,<sup>56</sup> as well as the targeted marketing of malt liquors and other alcoholic beverages.<sup>57</sup> Thus, those who have more individual experience with racist events might be more vigilant in avoiding substances that are readily connected to racism.

The more consistent finding was that women who engaged in either drinking or smoking did so with increased frequency as a function of experienced racism. Interestingly, this relationship was not mediated by distress levels assessed here. It is possible that distress would act as a mediator if measured by an instrument other than the Brief Symptom Inventory. For example, race-related stress<sup>58</sup> may be more predictive for African Americans than general, global distress.

### Racism and Physical Health

Experienced racism was related to lifetime history of disease and recent experience of common colds. The mechanisms behind this relationship between racism and physical illness bear further exploration. In this study, neither the higher lifetime history of disease, nor the higher frequency of common colds associated with experienced racism were mediated by drinking, smoking or

general distress. It may be that experiences of racism lead to compromised immune functioning. Given that racism represents a source of substantial stress, exposures to racist events may have deleterious effects through multiple pathways.<sup>25</sup> Thus, the role of experienced racism as a contributor to health disparities should be investigated. Institutional racism results in inequalities in living conditions and access to health care,<sup>59</sup> which in turn results in poorer health status for African Americans. However, the present data suggest that individual experiences of racism may be a factor in the disproportionate burden of illness in the African American community. Moreover, conscious awareness of racism as a stressor may not be necessary to result in physiological stress responses. In our study, appraisal of stress due to racism was not related to health outcomes; rather, the frequency of racist events alone predicted negative health outcomes.

**Table 3. RESULTS OF MULTIVARIATE ANALYSIS BETWEEN RACISM AND HEALTH OUTCOMES**

<u>Outcome Variable</u>	<u>Source</u>	<u>DF</u>	<u>Type III SS</u>	<u>Mean Square</u>	<u>F value</u>	<u>Pr &gt; F</u>
Quantity of cigarettes	Distress	1	195.67	195.67	0.07	.79
	<b>PYR</b>	<b>1</b>	<b>14319.01</b>	<b>14319.01</b>	<b>5.03</b>	<b>.03</b>
Quantity of alcoholic beverages	Distress	1	.652	.652	0.05	.82
	<b>PYR</b>	<b>1</b>	<b>71.45</b>	<b>71.45</b>	<b>5.78</b>	<b>.02</b>
Perceived health	Distress	1	2.32	2.32	3.07	.08
	Quant. alcohol.	1	.803	.803	1.06	.31
	Quant. cig.	1	2.47	2.47	3.26	.08
	LTR	1	1.38	1.38	1.83	.18
Cold frequency	Distress	1	.800	.800	1.15	.29
	Quant alcohol.	1	.174	.174	0.25	.62
	Quant cig.	1	1.16	1.16	1.67	.20
	<b>PYR</b>	<b>1</b>	<b>2.87</b>	<b>2.87</b>	<b>4.13</b>	<b>.05</b>



## Limitations of the Present Study and Directions for Future Research

First, because this study is cross-sectional in design, causality between experienced racism and health outcomes cannot be established. Second, we used only self-reports for study variables (e.g., instead of endocrine measures of stress). However, as previously noted, self-reports of colds have been found to be reliable.<sup>55</sup> Third, the sample size was relatively small, and was comprised of urban African American women recruited from a cancer screening clinic, which limits generalizability. Finally, although we found no support for the possibility that relationships between experienced racism and health outcomes were due to confounding demographic variables, we cannot rule out the possibility that other demographic indices (e.g., insurance status, generational wealth) would have yielded different results.

African American men, as well as the larger community of individuals of African descent should be the subject of future research. Much of the research on racism has been conducted with African Americans, as opposed to individuals from the Caribbean or the African continent who reside in the United States. Clearly, it is unlikely that other groups in the Diaspora are immune to the effects of racism, and there may be a different picture regarding health consequences. For example, in the Caribbean, race is not often viewed as a deterrent to political or economic empowerment, and racism may not be experienced as much of a reality.<sup>60</sup> Thus, individuals from the Caribbean may not recognize racist behaviors as readily as African-Americans, as they may not have been sensitized to such events in the same way. If this is true, perhaps the same health outcomes would not emerge.

Future research should examine the effects of the more pervasive, “invisible” level of racism. Our study focused on immediate, individual-level racism: discrete experiences such as being called a racist name, or being discriminated against by service workers. Discrimination is not simply

random acts of unfair treatment, but a socially structured and sanctioned phenomenon, justified by ideology.<sup>61</sup> This deeper level of racism, which structures the everyday life of American society, has direct bearing on quality of life issues such as nutrition, clothing, shelter, medical care, safety and education and is a source of substantial stress.<sup>62</sup> In addition, “vicariously-experienced” racism such as police brutality in the community is also likely to affect the emotional and physical health of African Americans. Indeed, some researchers have argued that the belief that one is living in a discriminatory society may itself be detrimental to health.<sup>39</sup>

Future research should also consider the variables that may act as mediators or moderators of the relationship between racism and health. As previously discussed, with the exception of perceived health, the relationships found in the present study were largely unaccounted for by other variables (e.g., general distress, smoking). While income was related to lifetime history of disease and cold frequency, this variable could not mediate the relationship between racism and these outcomes, as it was not significantly related to the predictor variable, racism. A mediating variable must be significantly related to both the predictor and outcome variables.<sup>63</sup> It is possible that variables that were not assessed in this study, such as physiological reactivity to acute stressors,<sup>5, 64</sup> or positive health behaviors, such as exercise or diet may play a role. Other variables that are likely candidates might be cultural identity and internalized racism. Internalized racism has been defined as the acceptance of negative messages about ability and intrinsic worth: “. . . it is characterized by their not believing in others who look like them, and not believing in themselves. It involves accepting limitations to one’s own full humanity...”<sup>65</sup> African Americans who think poorly about themselves may be more likely to engage in negative health behaviors, having less belief in their intrinsic worth. It has been suggested that engaging in positive health behaviors is impeded not only by cultural oppression,

but also by internalization of those ideologies.<sup>66</sup> Indeed, there is some evidence that internalized racism leads to negative health outcomes.<sup>67</sup>

Some data suggests that a non-Africentric orientation can be detrimental<sup>68, 69</sup> and other studies show that an Africentric orientation can be protective against negative health outcomes<sup>70</sup> and is positively related to health-promoting behaviors.<sup>71</sup> An individual's racial identity<sup>72</sup> or cultural worldview may be a moderating variable between experienced racism and health outcomes and should be examined in future studies. For example, perhaps individuals who are more inclined to expect racism develop a cognitive schema to deal with the stressor, whereas those who are surprised by incidents of racism suffer negative health outcomes. As research begins to determine the mechanisms involved in negative health outcomes, interventions can begin to be formulated. Ultimately, our goal may not be to eradicate racism, but to neutralize its negative effects on health.

## ACKNOWLEDGEMENTS

Support for this study was provided by a research grant from the National Institutes of Health (NCI-CA 72457), as well as postdoctoral training grants from the Department of Defense (DOD, DAMD17-99-1-9303, DAMD17-01-1-0334).

We are required to indicate that the views, opinions and findings contained in this report are those of the author and should not be construed as an official Department of Defense position, policy or decision unless so designated by other documentation.

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