Short Communication

Mental and physical health consequences of police brutality toward Black community members in the United States

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ARTICLE INFO

Keywords:
Late adolescent
Racism
Physical health
Mental health

ABSTRACT

Objectives: The current study was the first preliminary examination of physical and mental health outcomes for late adolescents impacted by police killing members of the Black community.

Study design: Cross-sectional online survey research.

Methods: 429 college students completed surveys in September 2020. Physical and mental health specific to police killing members of the Black community and general physical and mental health were measured. Black Lives Matter activism, safety concerns due to police brutality, negative police experiences, and anti-racist behavior were also quantified.

Results: More variance was explained by Black Lives Matter activism factors for models examining physical and mental health specific to the recent killings of Black citizens by police compared with models examining general physical and mental health.

Conclusions: Prevention efforts in healthcare and educational contexts should include screenings and education for those involved in Black Lives Matter activism or who have negative experiences (or worries about such experiences) with police.

In the U.S., the history of police brutality and its harmful effects on health in the Black community have been widely documented [1]. Current efforts to curtail its spread, namely the Black Lives Matter (BLM) and Defund the Police movements, grew considerably in 2020 [2]. Most recently, rates of support for BLM in the U.S. were at 55% [2] and support for BLM is now international. No known research has tested associations of the BLM movement on public health beyond examination of basic knowledge and support of BLM and with only one rating of overall physical health (nonspecific to BLM) [3].

Direct and witnessed racial discrimination have been linked to mental and physical health sequelae [4]. For Black, Indigenous, and other people from communities of color, social support and active coping strategies may mitigate harmful effects of racism [5]. There is a paucity of research examining whether participation in activism like BLM serves a similar function (protecting against health consequences of direct and witnessed racism in policing).

Late adolescents (youth aged 18–25) can engage in unique types of self-exploration and new activities which can shape habits and health for the life course [6]. Those most likely to engage in activism include college-aged individuals [7]. Although awareness of BLM and activism are associated with health benefits [3,8], it is possible that activism through movements like BLM might be associated with greater stress and physical risk, resulting in poorer health outcomes.

The current study aimed to elucidate characteristics of young people who become involved in BLM activism and whether experiences with police and concerns about police brutality impacted physical and mental health outcomes.

1. Method

429 college students (M = 19.32, SD = 1.88 years) from a Mid-Atlantic university completed an online survey 1 month following the death of Jacob Blake. Participants were 42.1% Asian, 33.9% White, 10.8% Multiracial, 8.2% Black, and 4.9% other. Ethnicity primarily included: East Asian (30.0%), non-Latinx and non-Asian (28.2%), Latinx (18.3%), and South Asian (14.3%); between 1.2 and 2.3% of participants identified as African, Southeast Asian, West Asian, or Multiethnic. Participants were predominantly women (69.9%; 1.2% were
transgender or non-binary), from families who did not receive governmental assistance (75.1%), heterosexual (81.4%), and U.S. citizens (87.2%). Recruited students were representative of those at the university. The study was approved by the author’s Institutional Review Board.

Participants completed a demographic survey and questionnaires developed by the author measuring concerns about personal and loved ones’ safety due to police killing Black people (4 items; e.g., “I am worried about the safety of my FAMILY members because of [current events]”), BLM participation (6 items; e.g., “I have participated in or supported (e.g., social media, donation) the #BlackLivesMatter movement”), and anti-racist behavior (6 items; e.g., “I openly confronted a racist comment, joke, or action among those around me”). Participants also completed the Patient Health Questionnaire for Depression and Anxiety (4 items) [9], the Physical Health Questionnaire (15 items) [10], the Multigroup Ethnic Identity Measure-Revised (6 items) [11], and the Police and Law Enforcement Scale (11 items) [12] which was modified to include items specific to witnessed police brutality toward friends and family. The two Health Questionnaires were modified to measure symptoms associated with “current events involving police brutality and killing of members of the Black community like Breonna Taylor and George Floyd”. All scales demonstrated adequate internal reliability (α = 0.72–0.91).

T-tests were used to examine associations between demographic characteristics and study variables of interest. A series of four linear regressions were run to estimate associations of worry about police brutality, BLM participation, negative police experiences, and anti-racist behavior on physical and mental health outcomes specific to BLM (Table 1).

### 2. Results

A series of t-tests indicated women had significantly more physical health problems (p = .007) and mental health problems (p = .001) specific to current events involving police killing Black citizens. Black (p = .010 and p = .018) and multiracial (p = .001) race were associated with significantly more physical and mental health problems, respectively. Latinx ethnicity (p = .019) was associated with significantly more mental health (but not physical health) problems, while East Asian ethnicity was associated with significantly fewer mental (p = .003) and physical health (p < .001) problems.

Another series of t-tests indicated Black (p < .001), multiracial (p = .002), and Latinx (p = .001) participants reported significantly more safety concerns, BLM activism (p < .001; p < .001; p = .002, respectively), and anti-racist behaviors (p = .005; p = .001; p = .001, respectively) compared with participants self-identifying with other racial groups. Multiracial participants presented with significantly more negative experiences with police (p = .006), while Black and Latinx participants did not. East Asian participants reported significantly lower levels of BLM activism (p < .001) and anti-racist behavior (p < .001). South Asian participants reported significantly more anti-racist behaviors (p = .025). Linear regressions were run to test factors associated with physical and mental health specific to current events involving police killing members of the Black community (see results in Table 1).

### 3. Discussion

The proposed study found that physical and mental health problems were associated with worry about safety due to police brutality and prior negative police encounters. In addition, engagement in BLM activism and more anti-racist behavior were also significantly associated with more health problems. Findings from this study diverge from the only other study that examined similar phenomena [3], perhaps because this study asked about symptoms specific to current events including police brutality/BLM whereas previous research asked about nonspecific health problems. Indeed, study results indicated that BLM-related experiences and concerns significantly impacted self-reported health in important ways but had no effect on general physical wellness and had limited influence on mental health.

Results also underscore previous research that has demonstrated clear associations between negative experiences with police and greater physical and mental health problems [1]. Further, effects of concerns about personal safety and safety of one’s loved ones due to police brutality are undereexamined but this study showed they are meaningful experiences to include in future research on policing, health, and activism. Future research should also examine how experiences of direct and indirect trauma - particularly experiences associated with policing brutality and racism - impact outcomes for those engaged in activism against police brutality.

Findings have two major implications for health care professionals, academics, and other professionals working with young people. First, findings suggest the need to screen for stress about police brutality, concerns about personal and loved ones’ safety due to police brutality, and negative police experiences. This should occur with greater regularity during times of heightened media exposure concerning police brutality toward members of the Black community. Screenings should be followed by activities promoting health and social support. Second, prevention efforts should be implemented in high schools and on college campuses to buffer against negative physical and mental health outcomes from stress and concerns about safety due to police brutality, and negative direct and witnessed experiences with police. Findings indicate women and Black and multiracial students are especially susceptible to physical and mental health disparities specific to current events involving police brutality toward members of the Black community. Tailoring screenings and prioritizing preventative efforts to these groups is warranted.

The current study had several limitations. Only self-report data were collected; using behavioral data or social media as additional indicators might strengthen study findings. Data were also cross-sectional [1], so causal links in observed associations could not be evaluated. Follow-up

### Table 1

|                          | Physical Health Problems | Mental Health Problems |
|--------------------------|--------------------------|------------------------|
|                          | Specific to BLM          | General                |
|                          | Specific to BLM          | General                |
| R²                       | .30                      | .14                    |
| Worry about Safety and   | .13**                    | .05                    |
| Police Harm              | .17***                   | .10                    |
| BLM Movement Participation | .16**                    | .10                    |
| Negative Experiences with | .15**                    | .04                    |
| Police                   | .20***                   | .08                    |
| Anti-Racist Behavior     | .25**                    | .05                    |
| Age                      | .02                      | .07                    |
| Gender (Man)             | -.05                     | -.17**                 |
| Race (White reference group) | -.06                    | -.17**                 |

Note. * = p < .050; ** = p < .010; *** = p < .001. BLM = Black Lives Matter-related current events or the killing of Black citizens by police; LGBQ+ = lesbian, gay, bisexual, questioning one’s sexual orientation, and other sexual orientations.
data could be collected from these participants, or participants could be followed over time to get a better sense of how these experiences impact physical and mental health. Lastly, participating students were not representative of all students in the United States, so replication in different geographic locations and communities is needed.

**Funding**

None.

**Ethical approval**

Obtained from the first author’s institutional review board.

**Contribution**

The sole author materially participated in the research and article preparation, including study design, data collection, data analysis, and manuscript development and editing.

**Declaration of competing interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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