

Supplemental Table 1. Calls to action across institutions and individuals needed to effectively implement the Racism Exposure and Trauma Accumulation Perpetuate Pain Inequities (RESTORE) model

Level of Change	Call to Action	
	Training/Competency/Policy	Workforce/Professional Engagement
American Psychological Association	<p>Standardize training in core competencies to address racism-based traumatic stress: To support the policies detailed in the APA Council of Representatives' October 29, 2021 resolution, the APA should consider hiring experts to create structured materials and/or curricula that provide antiracism education, cultural humility training, multicultural competency training, and trauma-informed care that can be implemented across graduate programs to ensure that a national standard for competencies in these areas is set.</p> <p>Update policies to address systemic factors: The <i>Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality</i> should consider the role of adverse sociopolitical and environmental factors when designing interventions, seek to reduce racism-based traumatic stress, and advocate for greater access to quality healthcare.</p> <p>Changes to diagnostic criteria: Acknowledgement of the role of stigma and discrimination when considering psychosocial factors influence on mental health.</p>	<p>Reduce bias in trainee selection: Graduate and postdoctoral program admissions are often based on the candidate's "fit" with the mentor, lab, and departmental culture. The APA can create training for faculty and trainees in interview bias to change how "fit" is being assessed to support equitable inclusion of racialized trainees in psychology programs.</p> <p>Create inclusive training spaces: The APA can call on graduate programs to undergo organizational culture assessments to identify program features that support or create a toxic environment for racialized trainees.</p> <p>Improve equity in the accessibility of doctoral degrees: The APA can consider changes in the internship match process for trainees from racialized and economically disenfranchised groups to reduce the financial burden on these trainees.</p>
State Departments of Health and Psychology Licensing Boards	<p>Emphasize skills needed to deliver competent care to racialized individuals: Require continuing education in antiracism, racism-based traumatic stress, cultural humility, and multicultural competency to help psychologists maintain updated competencies in these areas for license renewals.</p> <p>Make continuing education in these areas accessible: Coordinate and offer continuing education webinars on these topics.</p>	<p>Equitably adjust licensure fees: When initially obtaining a license and first-time renewal, state boards can reduce the licensure fees for individuals from racialized and economically disenfranchised backgrounds until they become financially more stable in the workforce.</p>

Create policies to minimize pain inequities: Involve psychologists – particularly from racialized groups – in creating antiracism policies to eliminate pain inequities at the local and state levels.

Pain and Health
Psychology-Related
Organizations
(e.g., *US Association for the Study of Pain, Society of Behavioral Medicine, etc.*)

Confront racism in research: Coordinate organization-wide didactics to educate members about scientific racism in pain and behavioral medicine research, health outcomes of racism, community-engaged research methods, cultural humility in research, and decolonized supervision styles and lab cultures.

Improve diversity and inclusion in research studies across the field: Set up pipelines to help investigators partner with diverse people who have lived experience of pain.

Related Organizations in
Other Disciplines
(e.g., *American Academy of Pain Medicine*)

Increase the impact of multidisciplinary care teams: Educate members on the role of psychologists in pain care, particularly when working with people from racialized groups seeking pain assessment and care.

Engage in activism to reduce pain inequities: Encourage clinicians/researchers to engage in advocacy to eliminate systemic racism in their respective disciplines (e.g., pharmacy, medicine, nursing, etc.) at local, state, and federal levels.

Research Funding
Agencies
(e.g., *National Institutes of Health*)

Change policies related to investigator training: In grant applications, ask for a description of anticipated antiracism education that the study team will participate in as part of responsible conduct of research and good clinical practice training.

Engage people with lived experience in the development of funding opportunities: Create resources to make people with lived experience of pain and racism-based traumatic stress part of the process in developing pain and psychology research policies and research funding announcements.

Psychologist's Personal
Education and Behavior
Change

Expand your professional reading list to include critical race theory scholarship: Engage in antiracism education to help identify and take accountability for actions that contribute to systemic racism, develop skills to actively fight against these actions and structural forces, and engage in the lifelong process of developing cultural humility.

Hold structures and people with power accountable for commitments to social justice: With or without a leadership position, advocate for and achieve equitable pain psychological practice/research within the given space (e.g., department, clinic, multidisciplinary care team, etc.). White colleagues should take on some of the heavy lifting in the fight for social justice

Consider RBTS a core competency:

Build competency in trauma-informed care, particularly related to racism-based traumatic stress, by seeking out webinars and readings in this area.

and should not expect gratitude from racialized colleagues for doing so.

Change lab policies to include regular, informed discussion on antiracism: Add readings about the social construction of race, racism's impact on health and wellbeing, and related topics to ongoing journal clubs, weekly lab meetings, or other regular avenues of lab discussion. Foster a space for racialized individuals to feel safe during these discussions.

Collaborate with individuals from racialized groups and appropriately value their time:

Remain open to learning from diverse perspectives on a given research topic to expand beyond your scope of scientific knowledge and personal worldview.

Psychologist's Research
Lab Culture
(Chaudhary et al., 2020)

Evaluate and change lab policies that perpetuate racism: These changes might occur at the level of lab interactions and/or research conceptualization, design, and data collection.

Use in community-engaged research approaches: Whether for a specific research project or overall research lab goals (preferable), consult with people who have lived experience of pain and racism-based traumatic stress in developing research studies and practices.

Engage in training on reflexive supervision grounded in Critical Race Pedagogy and unsettling reflexivity: Reflexive supervision encourages introspection and exploration of how one's beliefs and values influence the therapeutic relationship. Ground this supervision style in Critical Race Pedagogy – an approach of teaching students to draw on personal and learned knowledge to challenge dominant narratives to teach the endemic nature of racism in the US, build awareness of dimensions of power and privilege in society, empower through counternarratives, and use antiracism education/advocacy as key elements of social justice. Also, develop skills in unsettling reflexivity, a supervision style that pushes trainees to identify White colonial practices that might have emerged during a session, sit with any discomfort that arises, and move forward to center and deliver practices preferred by racialized groups.

Create a safe space for trainees from racialized groups to discuss retraumatization: By engaging in critical antiracism and RBTS education, psychologists should also aim to provide a safe and validating space for trainees to discuss retraumatization when working with people who have chronic pain and RBTS.

Psychologist's
Supervision Style
(Tang Yan et al., 2021)

Role in Clinical Interactions

Learn about best practices for assessing RBTS to update the clinic's protocols: Learn about standardized instruments to measure RBTS, such as the UConn Racial/Ethnic Stress & Trauma Survey (a structured clinician-administered interview; Williams et al., 2018) and the Racial Trauma Toolkit (a resource that guides self-assessment of the acute and long-term effects of racialized trauma and steps with daily self-care; Jernigan et al., 2015). In a standardized way, change the structure of clinic pre-intake forms to be strength- or solution-focused with questions regarding the role of RBTS and cultural factors in the experience of pain and emotional wellbeing.

Update policies on documentation and feedback to capture the role of RBTS in pain symptoms: Document and discuss the overlapping symptoms between RBTS and chronic pain with their patients.

Position on multidisciplinary teams to best advocate for people with RBTS and chronic pain: Psychologists can act as *facilitators* to lead the assessment of RBTS on the care team. They should advocate to make sure the patient voice is at the center of all decisions, and lead needs assessments to identify treatment gaps and the MDT. They should always practice cultural humility in interactions with people who have lived experiences of pain and RBTS and use a shared-decision making approach to intervention on pain and RBTS.

Self-care when experiencing retraumatization: Psychologists who have experienced RBTS should seek support and engage in self-care to cope with retraumatization that might occur in discussing the patient's RBTS.
