

Translational Research Approaches in Land-Grant Institutions: A Case Study of the REDI Movement

David A. Julian, Melissa C. Ross, Kenyona N. Walker,
Gabrielle C. Johnson, and Ana-Paula Correia

Abstract

In this case study we explore the concept of translational research: specifically, how common tools were employed in the context of the translational research process to design and implement a formal intervention to address racism at the individual and structural level. This approach to translational research focuses on the implementation of evidence-based interventions to address issues in communities, schools, and other organizations and is ideally suited to support researchers and practitioners in the nation's land-grant institutions. We discuss the suitability of translational research as an approach to identifying and resolving issues and implications for training and day-to-day operations of translational research organizations. Finally, we point to the necessity of incorporating principles of equity and engagement in the translational research process.

Keywords: translational research, equity, program development

This case study summarizes a formal intervention designed to address racism. The context in which racism occurs is an important factor in understanding the story that follows. Violence perpetuated against Black people (Curtis et al., 2021; Sharif et al., 2021), the Black Lives Matter Movement (McCoy, 2020), and controversies over how racial history is taught in schools (Leonardo & Grubb, 2018) capture elements of the social and historical context of racism in the United States. What might be defined as a racial awakening is currently under way and provides language and space for associates of the organization that developed the intervention described in this article to explore historical and current issues directly related to racist practices. In addition, as one associate notes, the social isolation that went along with the COVID-19 quarantine promoted a feeling of "we're all in this together" that is creating the conditions for the broader organizational community to understand their own personal experiences related to racism and the experiences of their colleagues.

Racism might be thought of as prejudice,

or antagonism directed toward people based on race (National Education Association, 2021; Shiao & Woody, 2021). It is clear that racism is a complex construct composed of multiple social phenomena (Harro, 2000a, 2000b; Shiao & Woody, 2021). In a broad review of the sociological literature, Shiao and Woody suggested that racism has historically been conceptualized in terms of four constructs: (1) individual attitudes, (2) cultural schema, (3) the dominance of specific racial groups, and (4) systems that maintain racial dominance. In this case study, racism is viewed from two different vantage points: individual attitudes and actions (individual level) and norms, laws, practices, and policies that tend to perpetuate racism (structural level).

Given the strong connection between racism and health and well-being (American Public Health Association, 2021; Villarosa, 2022), efforts must be undertaken to conduct meaningful research and, ultimately, achieve outcomes that effectively reduce racist practices. Algeria and O'Malley (2022) provided an illuminating discussion of the intricacies inherent in research aimed at establishing causal relationships between

intervention and the reduction of inequality. According to Algeria and O'Malley, designing and carrying out studies of causal mechanisms are problematic due to conceptual issues, the role of the environment in shaping outcomes, and confounding factors present in complex systems. Of course, the inability to establish causal mechanisms can also be seen as limiting the effectiveness of efforts to ameliorate racism through formal interventions.

Questions on how to effectively address issues related to racial justice have particular relevance to Cooperative Extension and the nation's land-grant institutions. Throughout its history, the Cooperative Extension Service, like many other institutions, has operated in ways that perpetuated racism (Harris, 2008). Gavazzi (2020) summarized the historical mission of land-grant institutions as focused on teaching, conducting research, and providing services to local communities. However, Gavazzi noted that in the 21st century, land-grant institutions must fill the role of "servant universities" and put more emphasis on providing for the development and well-being of local communities (Gavazzi, 2020; Gavazzi & Gee, 2018).

There may be no other imperative more relevant to health and well-being than addressing racism in all its forms. This case study describes aspects of the translational research process and specific tools that may be useful to researchers and practitioners situated in land-grant institutions and, more specifically, to researchers and practitioners intent on addressing racism. This case study also provides a description of how research-based knowledge and tools are being used to address the critical issue of racism through the implementation of an intervention referred to as the Racial Equity, Diversity, and Inclusion (REDI) Movement. Here, an intervention is defined as an intended, planned, and targeted operation relevant to a setting or group of people with the aim of removing or preventing an undesirable phenomenon (Loss, 2008). The REDI Movement is currently being implemented in a translational research center located at a research-intensive university in the Midwestern United States (hereafter referred to as the Center).

Translational Research Defined

Translational research is generally defined

as a process for moving scientific innovations into routine use to promote health and well-being (McCartland-Rubio et al., 2010; Woolf, 2008). Abernethy and Wheeler (2011) defined translational research in terms of three distinct activities: (1) research and development, (2) translation or implementation, and (3) policy development. Research and development often yield new insights and/or evidence-based interventions. In addition, theory and research constitute a body of knowledge that can be drawn upon to develop interventions tailored to specific issues and situations. *Translation or implementation* refers to the procedures necessary to use evidence-based interventions or practices to effectively address identified issues in specific settings (Wilson et al., 2011). Policy development focuses on the widespread uptake of innovations across multiple jurisdictions.

Development of the Racial Equity, Diversity, and Inclusion (REDI) Movement

In June 2020, the college in which the Center is located issued a call to action focused on racial equity and social justice that emphasized organization, self-reflection, and engagement in hopes of transforming the communities in which we live and work. REDI emerged from this call to action. The REDI vision states that individuals, organizations, and other societal institutions will make racial equity a day-to-day priority, resulting in settings that are inclusive, safe, and welcoming and where White privilege is acknowledged and has no negative influence on how individuals of color fare. The developers of REDI decided to start with a focus on Black people. This approach was based on the premise that effectively addressing equity for Black people would ultimately result in the enhanced experience of equity for other marginalized populations. It was also anticipated that the evolution of REDI as implemented to address the Black experience would better position the Center to address the unique concerns of other marginalized populations in future versions of REDI.

The Racial Equity, Diversity, and Inclusion Steering Team

REDI is managed by a formal Steering Team. The primary purpose of the Steering Team is to develop, implement, and evaluate responses consistent with the REDI vision. The Steering Team aspires to operate at the invitation of and on behalf of the Center's

organizational community (all 50+ associates and students, and affiliated faculty) and intentionally centers and amplifies the voices of community members who have lived experiences of racism, minoritization, and/or marginalization. The REDI Steering Team is an initiative of the Center's Senior Leadership Team and currently consists of 18 Center associates (14 females, four males; three who are White, three who are Black, one who is Asian, and one who is of Pakistani descent). The Center's Senior Leadership Team consists of the director, two associate directors, and the finance and human resources managers.

Procedures

Julian et al. (2021) proposed a "translation forward" approach to translational research. This approach places preeminent emphasis on partnering with interested parties to identify and address a specific issue in a specific location or setting. Julian and colleagues further advocated for the use of the

rational planning model (Alexander, 1984; Allmendinger, 2009) as a methodology to support the process of translation. The rational planning model includes several steps: (1) issue identification, (2) consideration of alternative solutions, (3) solution selection, (4) solution implementation, and (5) evaluation. Table 1 and the following paragraphs describe the process of translation as it is practiced at the Center and several foundational tools that support the development and implementation of the REDI Movement.

As indicated in Table 1, movement through the steps in the process of translation (see top row in Table 1) is associated with the application of several distinct tools. Description of the use of this array of tools provides a concrete illustration of what Julian and Ross (2013) referred to as managing the issue resolution process. Julian and Ross defined managing the issue resolution process as initiating appropriate procedures at the appropriate time, fostering relevant

Table 1. The Process of Translation and Selected Translational Research Tools

Tool	Steps in the process of translation				
	Issue identification	Consideration of alternative solutions	Solution selection	Implementation	Evaluation
Facilitated group process	X	X	X	X	X
Project charter	X	X	X	X	
Outcomes template	X	X	X	X	X
Research-based knowledge		X	X		X
Theory of change			X	X	X
Logic model				X	X
Intervention protocol				X	
Work breakdown structure				X	
Work plan				X	
Process improvement planning					X

Note. "X" denotes tool used to support specific step in translational research process.

role-related behaviors, and applying appropriate tools in the appropriate sequence to achieve desired outcomes. The process of translation, as defined by the steps in the rational planning model, provides a scaffolding on which to optimize the use of a variety of tools to support translational research.

Step 1. Issue Identification

A variety of practical and scholarly resources define issue identification (Alexander, 1984; Allmendinger, 2009). Defining an issue implies a set of circumstances or conditions that have been judged unacceptable (Bradshaw, 1972). Issue identification requires clearly stating circumstances, timing, and specific behavior(s) that make observed conditions problematic. The REDI vision statement, noted previously, indicates conditions that represented Center associates' views concerning an issue that warranted attention. The issue statement guiding the development and implementation of the REDI Movement indicated associates' desire to promote antiracism in the Center's operations and business practices. Translational researchers at the Center utilized three primary tools to support issue identification: (1) facilitated group process, (2) outcomes template, and (3) project charter.

A facilitated group process was utilized to develop the REDI Movement vision statement and various descriptions of the issue to be addressed. A subset of Center associates who elected to participate in the REDI Movement formed a Steering Team and engaged in a facilitated process to develop and implement REDI. The Steering Team met once a week in the early stages of REDI development and somewhat less frequently later in the process. The facilitation task was undertaken by various translational research professionals who were, themselves, Center associates. With important modifications, the facilitation process was consistent with recommended procedures designed to facilitate the group process (see Center for Community Health and Development, n.d.; Schwarz, 2002). For example, facilitation was guided by "rules of engagement." Rules of engagement emphasized the identification of microaggressions and facilitator actions to address such transgressions.

The outcomes template was utilized to develop several measurable outcomes (see Chinnman et al., 2004 for a similar treatment of outcomes). The outcomes template

poses several fundamental questions that provide a basis for developing a specific and measurable outcome:

1. What intent will be achieved?
2. Who/what will change?
3. Where or in what location will desired change occur?
4. What indicator(s) will be used to judge if change has occurred?
5. What must be observed relative to identified indicators to conclude that desired change has occurred?
6. What is the time-period over which desired change will occur?

Outcomes connected to the REDI intervention evolved over time and encompassed change at the individual, organizational, and structural levels. Finally, a tool referred to as the project charter was employed to capture the purpose of initiating the REDI Movement as a Center priority. The project charter authorized the existence of a project and provided the project manager (in this case, the REDI Steering Team) with authority to apply organizational resources to project activities (Project Management Institute, 2013). The project charter also included a statement of the issue to be addressed, outcomes to be achieved, and descriptive information related to the intervention(s). In the case of the REDI Movement, the project charter existed as an agreement between Center leadership and the Steering Team.

Step 2. Consideration of Alternative Solutions

The second step in the process of translation focused on identifying various alternative solutions or approaches to addressing individual and structural racism. Translational research professionals utilized four primary tools to support this step: (1) facilitated group process, (2) project charter, (3) outcomes template, and (4) research-based knowledge. The use of the first three tools has been described. However, it is essential to note that the products associated with the use of these tools evolved based on insights that developed during Step 2 activities. Generally, products developed early in the translational research process evolved and ultimately supported subsequent steps in the process.

The body of knowledge reflecting best prac-

tics related to interventions to address racism represented the primary tool used to support the consideration of alternative solutions. Understanding of the evidence related to racial justice interventions subsumed several distinct bodies of theory and research: (1) human rights, access, equity, and participation; (2) the social ecology of racism; (3) exposure and development of connections or social ties between White and Black individuals; (4) allyship and skill building related to intervening in situations where racism occurs; (5) enhanced individual readiness to address racism; (6) enhanced community/group readiness to address racism; and (7) procedures designed to correct norms, practices, and policies that perpetuate racism.

Human Rights, Access, Equity, and Participation

The principle of human rights acknowledges that a fair and just society validates, protects, and defends the basic rights that are inherent to all people and should be granted without discrimination (UNICEF Finland, 2015). This principle also requires that a government be held accountable when these rights are violated; it has relevance for both individual and structural level interventions. The principle of access refers to the provision of critical services and resources (i.e., food, shelter, health care, education) to all people regardless of socioeconomic status, race, gender, sexuality, or other social identities (Fouad et al., 2006; Storms, 2012). The principle of access requires that the cycle of marginalization be disrupted by intentionally providing equitable access to the resources that directly influence one's quality of life (Cook, 1990). The principle of equity acknowledges the reality of diversity such that different people have different needs and thus require resources that are responsive to those needs (Storms, 2012). Finally, the principle of participation refers to the inclusion of all voices in decision-making and prioritizing the voices of those with lived experience (Toporek & Williams, 2006). For participation to occur, those in positions of power must remove barriers, increase access, and create intentional spaces for the equitable inclusion of the voices and perspectives of marginalized groups.

The Social Ecology of Racism: Intrapersonal, Interpersonal, and Structural Levels

The social-ecological model (Guy-Evans,

2020; Kelly et al., 2000) suggests several levels of influence relevant to addressing racism and issues related to equity, diversity, and inclusion. These levels of influence range from the microsystem to the mesosystem to the exosystem to the macrosystem. The microsystem is composed of elements that encapsulate the individual. The mesosystem is reflected in interactions between elements of the microsystem, whereas the exosystem is composed of elements that indirectly influence the individual, such as mass media and the political environment. Finally, the macrosystem focuses on interactions between the individual and the immediate environment and encompasses social and cultural elements. Harro (2000a, 2000b) captured the notion of levels of influence in what is referred to as the "cycle of socialization" and suggested that we are all unwittingly socialized to operate in a racist culture.

Harro (2000a, 2000b) further contended that our racist actions are perpetuated through a highly complex and largely invisible set of forces and rewards that work to maintain the status quo. According to Harro, these forces and reward systems operate within and between individuals and are reinforced by the policies and practices of institutions and society in general. Harro defined the intrapersonal level as what people believe about themselves and the interpersonal in terms of how we view others and see the world. Harro defined the institutional or structural level in terms of structures, assumptions, philosophies, and, most importantly, the rules, norms, procedures, and roles that dictate behavior. The forces identified by Harro are embedded in the social ecology of modern western cultures. Thus, an intervention designed to address racism and racial justice must focus on altering the social ecology as it pertains to the individual and structural levels.

Exposure and Development of Connections or Social Ties

The "contact hypothesis" (Emerson et al., 2002) represents a critical theoretical perspective that may have significant bearing on the provision of interventions associated with the REDI Movement. The contact hypothesis states that face-to-face interaction and the formation of connections or social ties lead to positive intergroup attitudes (Laurence, 2014). A meta-analysis by Pettigrew and Tropp (2006) found that interaction tended to have a positive effect on

intergroup attitudes. According to Laurence, the contact hypothesis stipulates that interethnic ties are the behavioral mechanism that accounts for positive impacts on attitudes. Furthermore, the link between attitudes and behavior is well established (Glasman & Albarracín, 2006). This line of reasoning suggests that through exposure, individuals become more aware of the Black experience and their own implicit bias. This awareness and development of connections or social ties sets the stage for learning and predisposes individuals to effectively intervene in instances where racist behaviors are observed.

Allyship and Skill Building

Allyship can be described as a process that focuses on acknowledging the limitations of one's knowledge about other people's experiences and is built on the notion of deliberate action. Allies build relationships with members of marginalized communities and are prepared to confront systemic oppression. Allies take on the responsibility to address oppression as their own and transfer the benefits of their privilege to those from whom it has been withheld (Campt, 2018). Allyship is thus conceived as a set of skills related to confronting inequality, inequity, and oppression; shifting power and influence to those with lived experience; functioning in a manner supportive of marginalized groups; completing the individual work necessary to be aware of and mitigate implicit bias; and taking responsibility for addressing racism in all its forms.

Enhanced Individual Readiness to Address Racism

The transtheoretical model (Prochaska & Velicer, 1997) focuses on decision-making and change at the individual level and has historically been used as a model to understand health-related behavior. However, the basic premise on which this theory is based may have application to individual level change relative to a much more comprehensive range of issues (Xiao et al., 2004). The transtheoretical model operates based on the notion that people do not change behaviors quickly or decisively. According to this model, change in behavior occurs due to movement through six stages: (1) precontemplation, (2) contemplation, (3) preparation, (4) action, (5) maintenance, and (6) termination. Movement through these steps might be conceptualized as enhancing "readiness" for change.

In the precontemplation stage, people have no intention of taking action in the near term. In this stage, people are often unaware that their behavior is problematic or produces negative consequences for themselves or others. In the contemplation stage, people intend to start new behavior(s) and recognize that their behavior may be problematic. In the preparation stage, people are prepared to take small steps toward behavior change. In the action stage, people have changed their behavior and intend to maintain the change. In the maintenance stage, people have sustained their behavior change for a significant period, and in the termination stage, people have no desire to return to their past behaviors.

Community or Group Level Readiness to Address Racism

The stages of community readiness model (Oetting et al., 1995) provides a framework for considering community or group level readiness. Originally developed to address a variety of public health issues, the community readiness model is widely cited as a mechanism for understanding how communities or groups progress through formal stages to address various health and well-being issues. Similar to the transtheoretical model, stages of community readiness can be interpreted in terms of movement on the part of community members from low levels of awareness and intention to act to higher levels. According to the community readiness model, communities progress through nine stages of readiness.

These stages include (1) no awareness of a particular issue; (2) denial or resistance to the idea of the status quo as an issue; (3) vague awareness of the issue as problematic; (4) preplanning or the sense that the issue is problematic; (5) preparation or a growing group awareness of the issue; (6) agreement that the issue is problematic and acknowledgment that the group is responsible for taking action; (7) stabilization characterized by active group engagement and ongoing investment of resources; (8) widespread agreement about the importance of the issue; and, finally, (9) ownership where group members have detailed and comprehensive knowledge, evaluation is under way, and diversified investment of resources has occurred.

Identification and Action to Address Community or Group Level Racism

Theory and research also point to several general principles or guidelines germane to developing and implementing group level interventions aimed at reducing structural racism. Several reviewers have started with a focus on education and awareness (Shim, 2020). According to this body of knowledge, awareness appears to be a fundamental precursor to action. Assuming group or community readiness, Bailey et al. (2017) suggested that insights derived from a systems perspective might be helpful in addressing structural level racism. These authors pointed out that system level interventions must cross multiple subsystems (see social ecology of racism) and disrupt leverage points through the application of “focused, external force.”

Building on ideas proposed by Meadows (1999), Abson et al. (2017) defined leverage points as places in complex systems where a slight shift might lead to fundamental changes in the system as a whole. Abson et al. suggested that efforts to promote change too often focus on weak leverage points that have little potential to address the root causes of critical societal issues.

Policy development and implementation are identified as powerful tools for acting on leverage points (Shim, 2020). A policy can be thought of as a law, regulation, procedure, administrative action, incentive, or voluntary action that advances goal-related behavior (Centers for Disease Control and Prevention, 2022). For example, policies that result in a more equal distribution of power may significantly reduce group level racism (Shim, 2020). Finally, accountability to outcomes also appears to be a fundamental principle associated with efforts to address group level racism (Shim, 2020). Table 2 provides an overview of the research-based guidelines that provide a foundation for the continued development and implementation of the REDI Movement.

Step 3. Solution Selection

Selecting a solution was the third step in the process of translation. Solution selection signified that a formal response to an identified issue was selected and ultimately implemented. As indicated in Table 1, several tools were employed to support the selection of solutions to address racism at the Center: (1) facilitated group process, (2) project charter, (3) outcomes template,

Table 2. Research-Based Principles on Which the REDI Movement Is Based

Guidelines consistent with research-based knowledge
Effective intervention to address racial justice should be based on underlying principles of human rights, access, equity, and participation.
Effective intervention should address multiple ecological levels (individual and structural).
Effective intervention should focus on individual level change, not as a precursor to structural level change, but as a potential accelerant.
Effective intervention should enhance awareness of the personal experience of racism.
Effective intervention should seek to increase contact and social ties between relevant groups.
Effective intervention should promote self-awareness relative to the propagation of racism.
Effective intervention should elucidate factual information and educate relevant individuals.
Effective intervention should build allyship skills and normalize confrontation.
Effective intervention should be promoted by outside force(s).
Effective intervention hinges on the development and implementation of policies that act as system levers.

(4) research-based knowledge, and (5) development of a theory of change. As in previous steps, the project charter, articulation of outcomes, and understanding of the research-based knowledge evolved as the project proceeded. A theory of change represented a primary tool utilized in Step 3. Of course, the facilitated group process served as a vehicle for developing REDI's theory of change. Serrat (2017) suggested that a theory of change is a highly elaborate model that presents a strategic picture of multiple interventions aimed at producing early and intermediate outcomes that ultimately lead to desired long-term change.

Step 4. Implementation

Implementation was the fourth step in the process of translation. Implementation focused on promoting the routine use of and/or initiating the specific steps to employ evidence-based tools supporting REDI (Bauer et al., 2015). As indicated in Table 1, several tools were employed to support the implementation of REDI: (1) facilitated group process, (2) project charter, (3) outcomes template, (4) theory of change, (5) logic models, (6) intervention protocol, (7) work breakdown structure, and (8) work plans. As in previous steps, the project charter, outcomes, and theory of change evolved as insights accrued. Logic models, work breakdown structure, intervention protocols, and work plans were the primary tools that supported the implementation of the REDI Movement.

The logic model provided a systematic and visual way to present and share the understanding of relationships among resources (human, financial, organizational, and community) and how those resources were used to achieve desired outcomes (W.K. Kellogg Foundation, 1998). Separate logic models were developed for most of the components of the REDI Movement indicated in Table 2. Such models specified linkages between actions and desired outcomes. The primary value in such models was the degree to which assumptions about linkages were reviewed and tested based on available knowledge and experience. The articulation of the assumptions contained in the project logic model and the description of how the REDI intervention was to be provided in narrative form was referred to as an "intervention protocol." As indicated previously, individual logic models were combined to produce a comprehensive theory of change.

According to the Project Management Institute (2013), a work breakdown structure is a hierarchical decomposition of a scope of work carried out by team members necessary to accomplish project objectives. Work breakdown structure often corresponds to the parts of an intervention as defined by a logic model. Center associates use a variation of the Project Management Institute approach where the REDI scope of work is broken down into projects (components of REDI indicated in Table 2); projects are broken down into products (specific and tangible elements such as meetings, documents, events, results, services, etc.), and products are broken down into work tasks (the steps necessary to produce a product). Work tasks are summarized in a work plan. A work plan is commonly described as a schedule of work tasks and responsibilities (Leonard, 2018). The Center's work plan format specifies a set of work tasks, associates responsible for each task, and the projected date when each task will be completed.

Step 5. Useful Evaluation

Evaluation was the final step in the process of translation. Evaluation was described as systematic inquiry focused on the activities, characteristics, and results of programs, policies, or other forms of intervention to make judgments, improve effectiveness, and inform decisions (Patton, 2008). As indicated in Table 1, several tools were employed to support the evaluation of the REDI Movement: (1) facilitated group process, (2) outcomes template, (3) research-based knowledge, (4) theory of change, (5) logic models for each component of the REDI Movement, and (6) process improvement planning. As in previous steps, outcomes, the research-based knowledge supporting the development of REDI, the theory of change, and logic models depicting the components of REDI evolved as the implementation of project activities moved forward. Process improvement planning represented a primary tool that supported the evaluation of the REDI movement.

Process improvement planning was based in a quality assurance/total quality management philosophy. Quality assurance activities focused on the continual improvement of products or services based on customer or user satisfaction and relied on the understanding of systems of production, strategic planning, process improvement, and data as a driving force in decision-making (Ahire

et al., 1995). Members of the REDI Steering Team reviewed evaluation data and reflected on their own experiences on a regular basis. To date, most data have been derived from qualitative assessments of experiences and short questionnaires completed by participants in the REDI Movement.

For example, on two occasions, brief non-scientific surveys indicated that respondents felt the time they invested in REDI activities was manageable; participation in REDI was “very,” “somewhat,” or “extremely” impactful; and feedback received from their colleagues was positive. In addition, respondents said participation in REDI increased their awareness, reduced stereotypical thinking, and increased their commitment to racial justice. Such information was used on an ongoing basis to assess and modify component parts of REDI. Finally, over the last 12 months, Steering Team members began planning a more formal evaluation of the REDI Movement, which was slated for launch in 2023.

Results

Components of the REDI Movement

As indicated in Table 3, Steering Team members selected several specific components to address individual and structural racism. In July 2020, the Center began offering monthly professional development sessions designed to increase individual associates’ awareness of how racial injustice manifests itself and to create opportunities for associates to increase their readiness for change. Optional book-study sessions focused on recent titles related to racism were patterned after a book club and offered to White associates. Short “centering Blackness” experiences were intended to build associates’ awareness and reduce stereotypical thinking. White affinity groups provided safe, constructive, and productive spaces to engage in difficult conversations and supported ongoing dialogue to enhance awareness of the Black experience. White affinity group members also engaged in a seven-session series designed to support

Table 3. Components of the REDI Movement

Component	Level of intervention	Description
Professional development sessions*	Individual and/or structural	Formal information programs provided via face-to-face interaction
Book study	Individual and/or structural	Book club style review of recent titles focused on relevant topics
Centering Blackness experiences*	Individual	Video clips and explanation illustrating the Black experience of racism conducted by Black associates for White associates
White affinity groups*	Individual	Meetings where White associates could build knowledge, skills, and confidence in their role as allies
Black affinity groups	Individual	Meetings where Black associates could seek support and/or restore themselves
Critical allies groups	Individual	Cross-racial groups where experiences could be shared and discussed
Getting REDI curriculum	Individual	Curriculum composed of readings, self-assessment, and procedures for developing an individualized learning plan
Team equity inventory & organizational planning	Structural	Formal process for developing and implementing policies to address structural racism

**Core REDI component.* Participating in REDI requires some level of participation in these three core REDI components. Other components are viewed as enhancements to core components. Change at the structural level requires the implementation of the team equity inventory and organizational planning process.

associates' efforts to operationalize allyship and increase associates' sense of competence and confidence in applying allyship skills to address racism in all its forms.

Black affinity group meetings serve as a space for Black associates to restore themselves, support each other, and build consensus relevant to their roles as leaders and participants in the REDI Movement. Critical allies groups provided cross-racial opportunities to dialogue with colleagues about how associates might mitigate the role of race in organizational practices and policies. These groups also identified strategies for how Center associates might impact systems by leveraging their privilege. Steering Team members also designed a curriculum called Getting REDI that includes self-assessments and informational modules that engage REDI Movement participants in ongoing and sustained personal and professional development. Finally, the team equity inventory and the associated organizational planning process are designed to support the Center's program areas in prioritizing and implementing practices and policies to address structural racism.

This case study describes programming aimed at addressing racial/social justice that resulted from the application of a translation-forward approach to translational research. It is important to note that recent criticism suggests that many initiatives that claim to address equity and engagement may be less effective than thought (Zheng, 2022). In a recent review, Ding and Riccucci (2022) indicated that empirical evidence suggests mixed results and pointed out that, if not managed effectively, such interventions can be counterproductive. The REDI Movement is based on a comprehensive review of relevant literatures and decades of research related to effective intervention. More specifically, use of the translational research process, as a means of development and implementation, ensures that as new evidence accumulates it will be incorporated in futures versions of REDI.

Discussion

The mission of Cooperative Extension located in land-grant universities focuses on disseminating knowledge and promoting the identification and resolution of critical community issues (Gavazzi, 2020; Gavazzi & Gee, 2018). The discussion summarized in this case study has several important implications. First, this discussion suggests that

the translational research framework is a viable model to support the mission of land-grant institutions. Second, this discussion suggests specific roles for practitioners and researchers in these institutions. Finally, we suggest that principles of equity and engagement are integral to the translational research process. The following paragraphs briefly explore each of these implications.

Translational Research as a Viable Issue Resolution Process

The Abernethy and Wheeler (2011) conception of translational research has three distinct components: research and development focused on knowledge generation; translation focused on the implementation of evidence-based practices in a specific setting or settings; and policy development focused on uptake of evidence-based practices and interventions across multiple jurisdictions. Julian et al. (2021) presented a conception of a translation forward, translational research process that may have significant potential as a model for addressing complex issues in communities across the United States. This potential is illustrated by our review of the process of translation used to develop and manage the implementation of the REDI Movement in a university-based translational research center. We have described a five-step process: (1) issue identification, (2) consideration of alternative solutions, (3) solution selection, (4) implementation, and (5) evaluation. We have also described how an array of commonly used planning and evaluation tools have relevance to the translational research process. We suggest that translational research is a viable approach to identifying and addressing significant issues in communities, schools, and other organizations.

The Role of University-Based Personnel

We also argue that the translational research process provides a viable mechanism for addressing society's most pressing issues. This possibility has significant implications for the nation's land-grant institutions and university-based personnel engaged in translational research. The translational research model proposed by Abernethy and Wheeler (2011) implies that translational research professionals must be competent researchers, implementation specialists, and policy professionals. Recognized bodies of knowledge and skills are associated with each of these activities. It is unlikely that any one individual will be proficient in all

these areas. Thus, translational research professionals are more likely to be successful to the extent that they are specialists in one of these processes and part of teams composed of multiple members with complementary specializations. This need for collaboration suggests that units such as Cooperative Extension must employ individuals with various skills consistent with the brand of translational research described here. This argument also has significant relevance for training programs. Potential translational research professionals must have access to relevant training to develop the specialized skills noted above (i.e., use of the tools indicated in Table 1).

Equity and Engagement as a Foundation of Translational Research

We suggest that principles of equity and engagement must undergird all aspects of the translational research process. Principles of equity require a focus on outcomes and processes to ensure that diverse perspectives are represented in the issue resolution process. Procedures must also ensure that outcomes related to health, well-being, educational achievement, and economic prosperity are experienced equally by all population subgroups. This argument recognizes that current arrangements are inadequate to fully address health disparities and other community issues. In addition, practitioners must consider the processes employed to address societal issues. Such processes must be structured to accommodate diverse opinions and must shift power and authority to individuals who have experienced the very issues that society is trying to address. Thus, equity considerations must permeate all aspects of the translational research process.

Next Steps

It is accurate to portray REDI as in its early stages of development. Ongoing implementation in the Center is proceeding. In addition, nine other organizations are implementing major portions of REDI in a current project. Significant evaluation is under way both relative to the Center experience and in the nine organizations currently implementing REDI. Developers are already at work on modifications to the REDI Movement based on qualitative feedback. As empirical evaluation data are available, additional modifications may be considered. Developers envision a formal program of implementation and research relative to the effectiveness and efficacy of the REDI Movement. As research findings accumulate, efforts will be made to employ REDI in other settings.

This discussion supports the potential of university-based personnel located in the nation's land-grant and other institutions to address critical community issues. Management of the processes that result in the identification of issues and development of effective interventions is a long-standing role of university-based personnel. The three-component model of translational research (Abernethy & Wheeler, 2011) provides an approach to fulfilling this role. Research can be directed to developing viable responses to critical issues, translation to providing a mechanism for implementing such responses in specific settings, and policy development to implementing interventions across multiple jurisdictions. It is also clear that such procedures hold significant promise for improving quality of life and well-being to the extent that equity and social justice are underlying principles infused throughout the translational research process.



About the Authors

David A. Julian is a research scientist at the Center on Education and Training for Employment in the College of Education and Human Ecology at Ohio State University. His research interests focus on community engagement and translational research. He received his PhD in psychology from Michigan State University.

Melissa C. Ross is an associate director and program director in the Ohio State University's Center on Education and Training for Employment. Her research interests focus on racial justice and translational research. She received her PsyD from the Wright State University School of Professional Psychology.

Kenyona N. Walker is the director of equity at Columbus City Schools in Columbus, Ohio. She focuses on the intersections of education, equity, and race, specifically using a systemic approach to increase the capacity of educators to enact principles of equity to decrease predictable outcomes for students. Kenyona received her PhD in school psychology from the Ohio State University.

Gabrielle C. Johnson is a research administration management consultant at the Center on Education and Training for Employment (CETE) at the Ohio State University. Gabrielle is also a codirector of CETE's Racial Equity, Diversity, and Inclusion Movement (REDI). Her research and practice focus on equitable systemic change, primarily within educational institutions. She received her PhD in educational studies (school psychology) from the Ohio State University.

Ana-Paula Correia, PhD, is a professor of learning technologies and the director of the Center on Education and Training for Employment at the Ohio State University, Columbus, Ohio, USA. Correia's research is focused on learning technologies, learning design, and curriculum development. Her work has been published in over 100 refereed papers and book chapters.

References

- Abernethy, A. P., & Wheeler, J. L. (2011). True translational research: Bridging the three phases of translation through data and behavior. *Translational Behavioral Medicine*, 1(1), 26–30. <https://doi.org/10.1007/s13142-010-0013-z>
- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46, 30–39. <https://doi.org/10.1007/s13280-016-0800-y>
- Ahire, S. L., Landeros, R., & Golhar, D. Y. (1995). Total quality management: A literature review and agenda for future research. *Productions and Operations Management*, 4(3), 277–306. <https://doi.org/10.1111/j.1937-5956.1995.tb00057.x>
- Alexander, E. (1984). After rationality, what? A review of responses to paradigm breakdown. *Journal of the American Planning Association*, 50(1), 62–69. <https://doi.org/10.1080/01944368408976582>
- Algeria, M., & O'Malley, I. S. (2022). *Opening the black box: Overcoming obstacles to studying causal mechanisms in research on reducing inequality*. William T. Grant Foundation. https://wtgrantfoundation.org/wp-content/uploads/2022/03/Alegria-Omalley_WTG-Digest-7.pdf
- Allmendinger, P. (2009). *Planning theory* (2nd ed.). Palgrave.
- American Public Health Association. (2021). *Racism is a public health crisis*. <https://www.apha.org/topics-and-issues/health-equity/racism-and-health/racism-declarations>
- Bailey, Z. D., Krieger, N., Agénor, M., Graves, J., Linos, N., & Bassett, M. T. (2017). Structural racism and health inequalities in the USA: Evidence and interventions. *The Lancet*, 389(10077), 1453–1463. [https://doi.org/10.1016/S0140-6736\(17\)30569-X](https://doi.org/10.1016/S0140-6736(17)30569-X)
- Bauer, M. S., Damschroder, L., Hagedorn, H., Smith, J., & Kilbourne, A. M. (2015). An introduction to implementation science for the non-specialist. *BMC Psychology*, 3, Article 32. <https://doi.org/10.1186/s40359-015-0089-9>
- Bradshaw, J. (1972). Taxonomy of social need. In G. McLachlan (Ed.), *Problems and progress in medical care: Essays on current research* (7th series; pp. 71–82). Oxford University Press.
- Campt, D. W. (2018). *The White allyship toolkit workbook: Using active listening, empathy, and personal storytelling to promote racial equity*. I AM Publications.
- Center for Community Health and Development. (n.d.). Developing facilitation skills. In *Community tool box*. University of Kansas. <https://ctb.ku.edu/en/table-of-contents/leadership/group-facilitation/facilitation-skills/main>
- Centers for Disease Control and Prevention (2022). *CDC policy process*. <https://www.cdc.gov/policy/paeo/process/>
- Chinnman, M., Imm, P., & Wandersman, A. (2004). *Getting to outcomes: Promoting accountability through methods and tools for planning, implementation and evaluation*. Rand Corporation.
- Cook, S. W. (1990). Toward a psychology of improving justice: Research on extending the equality principle to victims of social injustice. *Journal of Social Issues*, 46(1), 147–161. <https://doi.org/10.1111/j.1540-4560.1990.tb00278.x>
- Curtis, D. S., Washburn, T., Lee, H., Smith, K. R., Kim, J., Martz, C. D., Kramer, M. R., & Chae, D. H. (2021). Highly public anti-Black violence is associated with poor mental health days for Black Americans. *PNAS*, 118(17), Article e2019624118. <https://doi.org/10.1073/pnas.2019624118>
- Ding, F., & Riccucci, N. M. (2022). How does diversity affect public organizational performance? A meta-analysis. *Public Administration*, 101(4), 1367–1393. <https://doi.org/10.1111/padm.12885>
- Emerson, M. O., Kimbro, R. T., & Yancy, G. (2002). Contact theory extended: The effects of prior racial contact on current social ties. *Social Science Quarterly*, 83(3), 745–761. <https://doi.org/10.1111/1540-6237.00112>

- Fouad, N. A., Gerstein, L. H., & Toporek, R. L. (2006). Social justice and counseling psychology in context. In R. L. Toporek, L. Gerstein, N. Fouad, G. Roysircar, & T. Israel (Eds.), *Handbook for social justice in counseling psychology: Leadership, vision, and action* (pp. 1–16). Sage.
- Gavazzi, S. (2020). The land-grant mission in the 21st century: Promises made and promises to be kept. *Animal Frontiers*, 10(3), 6–9. <https://doi.org/10.1093/af/vfaa016>
- Gavazzi, S., & Gee, E. G. (2018). *Land-grant universities for the future: Higher education for the public good*. Johns Hopkins University Press.
- Glasman, L. R., & Albarracín, D. (2006). Forming attitudes that predict future behavior: A meta-analysis of the attitude-behavior relation. *Psychological Bulletin*, 132(5), 778–822. <https://doi.org/10.1037/0033-2909.132.5.778>
- Guy-Evans, O. (2020, November 9). Bronfenbrenner’s ecological systems theory. *Simply Psychology*. <https://www.simplypsychology.org/Bronfenbrenner.html>
- Harris, C. V. (2008). “The Extension service is not an integration agency”: The idea of race in the Cooperative Extension Service. *Agricultural History*, 82(2), 193–219. <https://doi.org/10.3098/ah.2008.82.2.193>
- Harro, B. (2000a). The cycle of socialization. In M. Adams, W. J. Blumenfeld, C. Castañeda, H. W. Hackman, M. L. Peters, & X. Zúñiga (Eds.), *Readings for diversity and social justice: An anthology on racism, sexism, and antisemitism, heterosexism, classism, and ableism* (pp. 45–52). Routledge.
- Harro, B. (2000b). The cycle of liberation. In M. Adams, W. J. Blumenfeld, C. Castañeda, H. W. Hackman, M. L. Peters, & X. Zúñiga (Eds.), *Readings for diversity and social justice: An anthology on racism, sexism, and antisemitism, heterosexism, classism, and ableism* (pp. 618–625). Routledge.
- Julian, D. A., Bussell, K., Correia, A.-P., Lepicki, T., Qi, R., Ross, M., & Walker, K. (2021). Common models and sub-processes inherent to translational research: Public health examples of science for the public good. *Journal of Community Engagement and Scholarship*, 13(2). <https://doi.org/10.54656/WXKQ2041>
- Julian, D. A., & Ross, M. (2013). Strengthening infrastructure and implementing functions to support collaborative community problem-solving. *Journal of Planning Literature*, 28(2), 124–134. <https://doi.org/10.1177/0885412213477134>
- Kelly, J. G., Ryan, A. M., Altman, B. E., & Stelzner, S. P. (2000). Understanding and changing social systems: An ecological view. In J. Rappaport & E. Seidman (Eds.), *Handbook of community psychology* (pp. 133–159). Kluwer Academic Publishers.
- Laurence, J. (2014). Reconciling the contact and threat hypothesis: Does ethnic diversity strengthen or weaken community inter-ethnic relations? *Ethnic and Racial Studies*, 37(8), 1328–1349. <https://doi.org/10.1080/01419870.2013.788727>
- Leonard, K. (2018, August 3). Definition of a work plan. *Chron*. <https://smallbusiness.chron.com/definition-work-plan-39791.html>
- Leonardo, Z., & Grubb, W. N. (2018). *Education and racism: A primer on issues and dilemmas*. Routledge. <https://doi.org/10.4324/9781315101200>
- Loss, J. (2008). Intervention concepts in prevention. In W. Kirch (Ed.), *Encyclopedia of Public Health* (pp. 808–811). Springer. https://doi.org/10.1007/978-1-4020-5614-7_1864
- McCartland-Rubio, D., Schoenbaum, E. E., Lee, L. S., Schteingart, D. E., Marrantz, P. R., Anderson, K. E., Platt, L. D., Baez, A., & Esposito, K. (2010). Defining translational research: Implications for training. *Academic Medicine*, 85(3), 470–475. <https://doi.org/10.1097/ACM.0b013e3181ccd618>
- McCoy, H. (2020). Black lives matter, and yes, you are racist: The parallelism of the twentieth and twenty-first centuries. *Child and Adolescent Social Work Journal*, 37, 463–475. <https://doi.org/10.1007/s10560-020-00690-4>
- Meadows, D. (1999). *Leverage points: Places to intervene in a system*. The Sustainability Institute. https://donellameadows.org/wp-content/userfiles/Leverage_Points.pdf
- National Education Association. (2021). *Racial justice in education: Key terms and definitions*. NEA Center for Social Justice.

- engagement/tools-tips/racial-justice-education-key-terms-and#
- Oetting, E. R., Donnermeyer, J. F., Plested, B. A., Edwards, R. W., Kelly, K., & Beauvais, F. (1995). Assessing community readiness for prevention. *The International Journal of the Addictions*, 30(6), 659–683. <https://doi.org/10.3109/10826089509048752>
- Patton, M. Q. (2008). *Utilization-focused evaluation*. Sage.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783. <https://doi.org/10.1037/0022-3514.90.5.751>
- Prochaska, J., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion*, 12(1), 38–48. <https://doi.org/10.4278/0890-1171-12.1.38>
- Project Management Institute. (2013). *A guide to the project management body of knowledge (PMBOK Guide)* (5th ed.).
- Schwarz, R. (2002). *The skilled facilitator*. John Wiley & Sons.
- Serrat, O. (2017). Theories of change. In *Knowledge solutions* (pp.237–243). Springer. https://doi.org/10.1007/978-981-10-0983-9_24
- Sharif, M. Z., Garcia, J. J., Mitchell, U., Dellor, E. D., Bradford, N. J., & Truong, M. (2021). Racism and structural violence: Interconnected threats to health equity. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.676783>
- Shiao, J., & Woody, A. (2021). The meaning of “racism.” *Sociological Perspectives*, 64(4), 495–517. <https://doi.org/10.1177/0731121420964239>
- Shim, R. (2020). Dismantling structural racism in academic medicine: A skeptical optimism. *Academic Medicine*, 95(12), 1793–1795. <https://doi.org/10.1097/ACM.0000000000003726>
- Storms, S. B. (2012). Preparing students for social action in a social justice education course: What works? *Equity & Excellence in Education*, 45(4), 547–560. <https://doi.org/10.1080/10665684.2012.719424>
- Toporek, R. L., & Williams, R. A. (2006). Ethics and professional issues related to the practice of social justice in counseling psychology. In R. L. Toporek, L. H. Gerstein, N. A. Fouad, G. Roysircar, & T. Israel (Eds.), *Handbook for social justice in counseling psychology: Leadership, vision, and action* (pp. 17–34). Sage.
- UNICEF Finland. (2015). *Introduction to the human rights based approach: A guide for Finnish NGOs and their partners*. https://unicef.studio.crasman.fi/pub/public/pdf/HRBA_manu-aali_FINAL_pdf_small2.pdf
- Villarosa, L. (2022). *Under the skin: The hidden toll of racism on American lives and the health of our nation*. Doubleday.
- Wilson, K. M., Brady, T. J., Lesesne, C., & NCCDP Working Group on Translation. (2011). An organizing framework for translation in public health: The knowledge to action framework. *Preventing Chronic Disease*, 8(2), Article A46. <https://pubmed.ncbi.nlm.nih.gov/21324260/>
- W.K. Kellogg Foundation. (1998). *Evaluation handbook*.
- Wolf, S. H. (2008). The meaning of translational research and why it matters. *Journal of the American Medical Association*, 299(8), 211–213. <https://doi.org/10.1001/jama.2007.26>
- Xiao, J. J., Newman, B. M., Prochaska, J. M., Leon, B., Bassett, R., & Johnson, J. L. (2004). Applying the transtheoretical model of change to consumer debt behavior. *Financial Counseling and Planning*, 15(2), 89–100. <http://tinyurl.com/3mhethw2>
- Zheng, L. (2022, December 1). The failure of the DEI-industrial complex. *Harvard Business Review*. <https://hbr.org/2022/12/the-failure-of-the-dei-industrial-complex>

