

Special Issue: Collective Impact—Strengthening the Science and Practice of Implementation Support: Evaluating the Effectiveness of Training and Technical Assistance Centers

# Collective Impact—Strengthening the Science and Practice of Implementation Support: Evaluating the Effectiveness of Training and Technical Assistance Centers

Evaluation & the Health Professions 2024, Vol. 47(4) 347–352
© The Author(s) 2024
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/01632787241295323
journals.sagepub.com/home/ehp
Sage

Lawrence M. Scheier<sup>1,2</sup> and Abraham Wandersman<sup>3</sup>

#### Abstract

We introduce the second of two special issues that examine the science and practice of implementation support with takeaways for training and technical centers (TTACs). Major goals of both issues were to provide: rationale, concepts, and tools for evaluating training and technical assistance (TTA); an evidence-base for TTACs; and greater understanding of what is required to close the research-practice gap. To achieve these ambitious goals, we encouraged submissions from a broad array of individuals and groups involved in TTA. The seven articles in this second issue were written by a diverse mix of individuals affiliated with TTACs, federal agencies, research-oriented think tanks, and implementation scientists whose focus is on advancing the TTA literature. We felt that the collective wisdom garnered from their experiences would complement the first issue (June 2024) and collectively forge ahead and provide a vision of what is to come. We also thought it would be useful to provide perspectives on what it looks like when readers could examine both issues as a whole. Therefore, we included five commentaries—from the two editors and esteemed colleagues—who help provide a holistic perspective on the present and future of the science and practice of implementation support.

## **Keywords**

implementation support, technical assistance, active ingredients, capacity-building, interactive systems framework for dissemination and implementation

# Introduction

Two related premises guide our thinking in this second special issue of "Collective Impact-Strengthening the Science and Practice of Implementation Support: Evaluating the Effectiveness of Training and Technical Assistance Centers." The first premise states that implementation support is crucial for quality implementation and for scaling up. The second premise states that given the billions of US dollars, time and energy involved in implementing new programs, policies, practices, and processes, we need a strong science and practice of implementation support. Given these premises, the journal Evaluation and the Health Professions and co-editors Scheier and Wandersman sought to strengthen the science and practice of implementation support (Wandersman & Scheier, 2024). Training and technical assistance centers (TTACs) are a major provider of implementation support, and we spotlight the roles of what they offer and what they could offer.

This second issue of the special issue, "Collective Impact— Strengthening the Science and Practice of Implementation Support: Evaluating the Effectiveness of Training and Technical Assistance Centers," extends the contributions of the first issue by continuing to address what is needed to advance training and technical assistance (TTA) and how TTACs can use and advance the science and practice of implementation support. Furthermore, articles in this issue push the science and practice by addressing the composition of TTA; explaining how it can or should be evaluated; defining the roles TTACs play in administering, evaluating, and extending TTA; detailing the strides that have been taken to clarify the way TTA works (e.g., mechanisms); and presenting

<sup>1</sup>LARS Research Institute, Inc, USA

#### **Corresponding Author:**

Lawrence M. Scheier, LARS Research Institute, I 1080 West Pleasant Valley Road, Sun City, AZ 85351, USA.

Email: scheier@larsri.org

<sup>&</sup>lt;sup>2</sup>Prevention Strategies, USA

<sup>&</sup>lt;sup>3</sup>The Wandersman Center, USA

TTA's expected outcomes. Outcomes refer to proximal capacity-building efforts that make an organization, coalition, or practitioner more effective in their work as well as more distal public health and education outcomes that are the ultimate goal of TTA (e.g., lowering disease or problematic behavior incidence). The contributors responded with submissions containing new results, models, frameworks, and roadmaps that will certainly take the field to the next level. Whether or not readers agree with the various positions outlined in the seven articles, the contributors to this second special issue are breaking new ground.

# Overview of the Articles in This Special Issue

The articles in this special issue reflect a wide diversity of professional expertise and operational settings. We did not restrict the contributing authors in terms of how they defined TTA, at what level implementation was taking place (e.g., organization, community, or state), or which conceptual frameworks they used (although we did encourage them all to consider how the Interactive Systems Framework for Dissemination and Implementation [ISF; Wandersman et al., 2008] might be useful in order to make it easier to accumulate/synthesize what was in the different articles). As a result, readers will encounter articles from contributors employed by federal government agencies that deal with TTA in the context of national efforts to support violence prevention; inter-agency efforts, which were supported by collaboration between the Department of Defense (DoD) and Centers for Disease Control and Prevention (CDC) to reduce harmful behaviors; and small and large research-based think tanks that operate TTACs and provide TTAs on a routine basis. All of the contributors are looking for ways to strengthen TTA, reinforce its methodological rigor, and sharpen it as a tool for implementation science. In terms of collective impact, the articles reflect upon ways to arrive at clearer definitions regarding what TTA is, how it works, what its expected outcomes are, and which mechanisms underlying TTA are used when conducted in organizational settings. Importantly, whereas the first issue focused mainly on presenting empirical results stemming from the activities of current TTACs, the second issue broadens this focus to include addressing the conceptual issues that undergird TTA, the clarification of which will ultimately mean a more rigorous science of implementation support. Therefore, we encourage readers to take advantage of both issues, which complement each other nicely and whose collective force breaks new ground.

In the first article of this second special issue on TTA, "Barriers and Facilitators in Adopting a Systematic, Proactive, Evidence-Informed Technical Assistance System," Lamont et al. (2024) address the barriers as well as the facilitators that TTACs encounter when they want to advance the technical assistance (TA) system to be more systematic and evidence-informed. The authors use a case example of developing a partnership to advance TA, building upon the

concepts of "proactive and reactive TA." Included in their discussion is the use of a high-quality form of TA called Getting To Outcomes-Technical Assistance (GTO-TA) i.e. being implemented in a TTAC. The goals of their article are both to discern what is required to offer high quality TA and to document how an organization can advance from "TA-asusual" to the evidence-informed GTO-TA system. The focus of GTO-TA is on readiness, which emphasizes providing the right elements of capacity building to address barriers and facilitators involved in implementing interventions. Importantly, the authors realize that TA is part of complex systems (e.g., Hawe et al., 2009; Pfadenhauer et al., 2017), and this requires balancing the capacities of the TTA providers and the needs of the recipients (e.g., practitioners). Their case example of a TTAC i.e. seeking to conduct evidence-based TA is chock full of learned lessons. These lessons attend to finding the right fit (i.e., culture and context) and mix of skills, abilities, knowledge, and attitudes that lend themselves to affording greater capacity (e.g., not everyone is on the same page; see Rushovich et al., 2015) and should resonate with everyone involved in TTA.

In the second article, "The Technical Assistance (TA) Effectiveness Logic Model: A Tool for Systematically Planning, Delivering, and Evaluating TA," Scott et al. (2024) suggest that the research-practice gap can be addressed by outlining a TA effectiveness logic model, which can function as a tool for planning, delivering, and evaluating TA. This will make TA more focused, representative, and manageable in ways most needed—also providing empirical justification for TA and the processes of implementation. A major thrust of their work is to nail down the linkages among program resources/inputs, activities (what the TA model uses for capacity building), outputs, and outcomes as part of the systemization of TTA. This makes explicit the assumptions brought to bear on the TA, the feasibility of the goals of TA, and possible points of program (or theory) failure that will hinder success.

The authors present two types of TA logic models—basic and context-sensitive. While both articulate how TA works (and this is certainly beneficial to the field), the core difference is that a contextual logic model embraces the setting characteristics further down the line and incorporates setting features that may diminish "fit" into the logic model. In contrast, a basic logic model is more elementary and used to guide the early stages of planning, delivering, and evaluating TA. The use of a basic logic model can often occur when capacity-building resources (inputs) are minimal, but the TA recipients still want an explanation of how things will occur to aid implementation. Since logic models provide a framework for accountability, they can speak directly to the reasons TA may fail or succeed. Failure can arise for a variety of reasons: (1) the program theory can be faulty or missing linkages, (2) the process, practice, or policy may not be implemented correctly, (3) the tools used to measure program success may not be valid, and/or (4) the evaluation component may be Scheier and Wandersman 349

misaligned with how change occurs and how it can be monitored statistically. Programs can also fail because they are too complex, but a logic model forces both the TA provider and recipient to be transparent about the different training components, the underlying mechanisms of behavior change, and features of the TA delivery and characteristics of the TA recipient that may amplify or reduce program success. This will help establish expectations about what will happen during TA and what is expected to happen following exposure (e.g., outputs and outcomes). In brief, a logic model clarifies the different components that make accountability possible and offers a new method of evaluation to improve TA.

In the third article "Strategic Inter-agency Capacity Building for Primary Prevention of Harmful Behaviors in the Military: Current and Future Directions," Gallagher et al. (2024) describe the planning, implementation, and evaluation of a prevention support system designed to prevent harmful behaviors (e.g., sexual assault, suicide, substance use, and domestic abuse) in the military. A key issue is that designing a system based on a public health approach required cooperation between federal agencies to formulate integrated prevention activities. This involved an inter-agency agreement between the DoD and the CDC's Division of Violence Prevention (DVP). There is no question that it is important to mitigate harmful behaviors that can diminish the ability of the armed forces. This requires TTA to endeavor to implement capacity building on a grand scale in order to build and guide a DoD prevention workforce. The DVP responded by developing an Integrated Prevention Technical Assistance Center where training of a prevention workforce could occur. The Center and its efforts are framed by the ISF (Wandersman et al., 2008) with the latter augmented by the Evidence-Based System for Innovation Support framework (EBSIS; Wandersman, Chien, & Katz, 2012) to provide important guidance on how to achieve certain outcomes. The authors provide details on how DoD and CDC worked together to frame the center, and the collaboration is worth noting. This is followed by considerable detail on the activities performed as part of TTA and whether recipients were receptive given the nature of the military with hierarchical leadership. The details describe the tools, training, TA, and quality assurance/quality improvement that is in the process of taking place both within the Integrated Prevention Technical Assistance Center and as a result of the organized efforts to engage prevention activities. Taken as a whole, the enterprise described in this article shows great promise as a model to be translated and applied to civilian, multi-level, complex organizations.

In the fourth article, "Improving School Mental Health via National Learning Collaboratives with State and Local Teams: Components, Feasibility and Initial impacts," Bohnenkamp et al. (2024) focus on TTA in the context of school mental health and implementation of learning collaboratives. The authors provide an in-depth discussion of the construction, operation, and evaluation of a national multilevel learning collaborative (LC) targeting comprehensive school mental

health systems change. The LC framework is based on the Institute for Healthcare Improvement Breakthrough Series Model, and evaluation of the LCs involved three cohorts comprised of 12 states and one national agency. State leadership then drilled down to the site level, with 93 sites participating, that were comprised of school mental health teams derived from tribal communities, local education authority, charter organizations, regional entities or districts, and even local youth and family advocates. Each state conducted a myriad of prevention-based activities involving the sites and focused on continuous quality improvement (CQI), while simultaneously monitoring the utility and uptake of activities, including routine data submission.

Importantly, their work and the ensuing discussion yield much-needed insight into how TTA works on a larger scale in the mental health sector, including how it stimulates networking and collaboration, shared knowledge production and learning, information exchange, and accountability. Of note, LCs operated at the intersection of all three ISF systems by centering their respective efforts on increasing motivation. Thus, careful attention is paid to tracking participation and commitment in LC activities as a barometer of involvement. The authors include empirical data based on analyses of participants from the three cohorts, which provides a very detailed look at the LC's feasibility (e.g., attendance and data submission) and impacts (e.g., changes in CQI practices and achieving greater accountability). They offer recommendations that support future efforts to scale up LCs in the mental health sector and possibly other venues. What makes this article particularly interesting is that the activities intended to strengthen school mental health programs rely on the interface of detection (screening), prevention, and treatment. This is the place where both the support and delivery systems collectively shoulder a heavy investment in finding (and implementing) evidence-based programs. This knowledge can be sought from the synthesis and translation system, as detailed in the ISF.

In the fifth article, "Building Technical Assistance Provider Capacity: A Case Example of Strengthening the Fidelity of Technical Assistance Across Multiple Training and TA Centers," Holdheide et al. (2024) provide a case example of how TA can be strengthened through standardization efforts that extend to multiple TA centers. Here, we also get to see the internal workings of how a large contract-based organization that provides TA takes stock of how well they are doing. Crucial to the success of TA is having a common language (standardized core TA principles), promoting adherence to program components, and providing the necessary resources, knowledge, and skills to match TA objectives with practitioner needs (the perennial adaptation vs. fidelity debate; see, e.g., Castro et al., 2004, for a prevention science view on this and Movsisyan et al., 2019, for an implementation science view). The authors describe efforts to grow a TA evidence base internally, using a two-phase approach: Phase I involves developing the core TA principles—drawing off their consultation experiences, working groups, and literature review; Phase II engages in capacity building within their own organization to increase awareness and equip staff with the appropriate skills, knowledge, and attitudes to apply the principles. Interestingly, this process involves "organizational change in culture"—similar to what they would expect if they were delivering TTA to a delivery-system organization.

In the sixth article, "Embracing Complexity: Developing a Framework for Evaluating a Multi-faceted Training and Technical Assistance System," Stanley et al. (2024) outline the mechanics of the Violence Prevention Technical Assistance Center (VPTAC), a CDC-funded TA center that seeks to build and strengthen both general and innovation-specific capacity in coalitions and communities, state and local health departments, and nonprofit organizations that receive CDC funding. The goal of the VPTAC is to centralize the provision and evaluation of TTA in an effort to offset years of relying on siloed assistance to funded recipients. Operationally, VPTAC can provide a comprehensive approach to violence prevention i.e. both cross-cutting, in terms of the different violence prevention programs it supports, and cost-effective—the latter because it streamlines planning, training, and evaluation activities among multiple providers of TTA. The VPTAC provides a single, unified TTA system that can support a myriad of prevention activities, while offering strategic efficiencies in determining what type of training works, for whom, and under what conditions.

The complexity in developing such a system arises because many communities may want tailored or individualized approaches to TTA, given their special needs or circumstances. The VPTAC offers capacity building at different levels (e.g., community and organizational) but also tailors these efforts to address more individualized needs. Their offerings align with Scott et al. (2024; this issue) who propose logic models that are context-specific to address local needs. Many of the funding recipients from the CDC's DVP are themselves funders (e.g., state health departments) and, therefore, must learn how to plan, implement, and evaluate their own TTA to their funding recipients (e.g., local coalitions, schools, and communities). This creates a need for two levels of capacity building within the VPTAC, one in which agencies can be both part of the support system and also the delivery system, while another focuses only on agencies that are solely operating in the delivery system. The authors thoroughly outline the building of VPTAC (including centralized data collection capabilities), discuss different training approaches, and describe built-in CQI to help the system grow and be responsive to TTA recipient needs. The latter includes relevancy (of training content) and demand as well as how motivated the TA recipients are to continue training and incorporate the lessons learned into their daily practice.

In the final article in this special issue, "Advancing the Science of Training and Technical Assistance to Improve the Equitable Implementation of Evidence-Based Practices," Acosta et al. (2024) address the need to incorporate an equity focus within the day-to-day operations of TTACs. This is part

of the clarion call we had issued in the beginning when we asked contributors to break new ground. Addressing health equity puts a paradigm shift into motion—from retaining a deficit approach to accentuating a more positive outlook regarding what people can achieve once we address the structural causes that hinder equal access to care (e.g., Brownson et al., 2022; Gómez et al., 2021). The authors build on the existing ISF framework and then provide a step-by-step guide to help researchers, practitioners, and TTA providers understand the requirements needed to arrive at equityfocused implementation strategies. By this, the authors mean building into TTACs (and the processes involving TTA) the ability to overcome those factors that contribute to health inequity (e.g., poverty, discrimination, unfair labor practices, inadequate housing, and under-resourced education). The effort to integrate equity with TTA processes will help TA providers and practitioners find a better fit for capacitybuilding that "enables" or "empowers" communities, coalitions, and TTACs. In many ways, the arguments posed by Acosta et al. (2024) are reminiscent of the origins of empowerment theory that contributed to the emphasis on capacity building (e.g., imparting skills, boosting self-regulation, increasing competence, making resources more accessible, and building collaborative partnerships) and reduced social, economic, cultural, and structural barriers that impede practitioner effectiveness-factors upon which much of TTA is built (e.g., Fawcett et al., 1995; Zimmerman et al., 1992). By drilling down into the reasons for health inequity and providing remedies based on the ISF framework, Acosta et al. (2024) advance the field with an objective, tangible, and holistic means of addressing the disparities that affect communities most in need of TTA.

# **Commentaries**

The special issue closes with commentaries obtained from several eminent colleagues who are themselves implementation scientists and practitioners. Providing comments was a Herculean task, as it required these individuals to first read the six articles in the first issue and then repeat this effort with the seven articles in the current issue. To begin with, the two guest editors contributed to commentaries that reflect on their "take on things," including how they view the field, given their respective (and different) backgrounds and professional acumen. For Scheier (2024), the key active ingredient in all of TTA is motivation, and the problem is the lack of attention to conceptualizing this psychological construct and then inducing motivation experimentally. In other words, Scheier wishes to see greater application of rigorous methodological tools like those used in prevention science. He proposes using classic mediation frameworks that can be used to examine the processes involved with TTA and determine if the outcomes change in the manner hypothesized. This involves greater clarity on the intervention modality (e.g., the different forms of training), a clearer picture of the intervening mechanisms (e.g.,

Scheier and Wandersman 351

motivation), and greater elaboration of the expected proximal and distal outcomes.

For Wandersman et al. (2024), the collective and collaborative nature of the two special issues provided an opportunity to enhance and expand the ISF after carefully digesting the contents of the 13 special issue articles. This facilitates the prospect of ISF adapting to grow with the field. The three remaining commentaries touch on issues related to international perspectives on TTA in lower- and middle-income countries (Chen et al., 2024); the perspective of two implementation scientists employed by a federal agency, providing a perspective on the importance of TA and the need for further research (Chambers & Neta, 2024); and eight priorities that can help advance the science and practice of implementation support (Bumbarger et al., 2024). The latter effort includes guidelines for a new "ecosystem" to support TTA on a broader international scale. While each commentary provides a basis for extending the field to include new horizons, new applications, and naturally, new questions, collectively the commentaries and all of the articles provide tangible theories and research that strengthen the science and practice of implementation support. As the many articles and commentaries in this and the prior issue point out, we have at our fingertips the ability to improve readiness for the field as whole. This includes a substantive base that can capitalize on the billions of US dollars spent on implementation support to be more efficient and effective.

## **Declaration of Conflicting Interests**

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

#### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## **ORCID iD**

Lawrence M. Scheier https://orcid.org/0000-0003-2254-0123

#### References

- Acosta, J., Shearer, A., & Chinman, M. (2024). Advancing the science of training and technical assistance to improve the equitable implementation of evidence-based practices. *Evalu*ation and the Health Professions, 47, 446–466. https://doi.org/ 10.1177/01632787241290227
- Bohnenkamp, J., Robinson, P., Connors, E., Carter, T., Orenstein, S., Reaves, S., Hoover, S., & Lever, N. (2024). Improving school mental health via national learning collaboratives with state and local teams: Components, feasibility and initial impacts. *Evaluation and the Health Professions*, 47, 402–419. https://doi. org/10.1177/01632787241288850
- Brownson, R. C., Shelton, R. C., Geng, E. H., & Glasgow, R. E. (2022). Revisiting concepts of evidence in implementation science. *Implementation Science*, *17*(2), 26. https://doi.org/10.1186/s13012-022-01201-y

- Bumbarger, B., Moore, J. E., & Crane, M. E. (2024). Commentary: Evidence-based implementation support considering motivation and capacity within the ecosystem of training and technical assistance. *Evaluation and the Health Professions*, 47, 488–493. https://doi.org/10.1177/01632787241293457
- Castro, F. G., Barrera, M., & Martinez, C. R. (2004). The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention Science*, *5*(1), 41–45. https://doi.org/10.1023/B:PREV.0000013980.12412.cd
- Chambers, D. A., & Neta, G. I. (2024). Commentary: Charting progress in the science of technical assistance for implementation of evidence-based interventions. *Evaluation and the Health Professions*, 47, 484–487. https://doi.org/10.1177/01632787241293447
- Chen, H., Chuengsatiansup, K., Wong, D. R., Sihapark, S., Krisanaprakornkit, T., Wisetpholchai, B., Tongsiri, S., Hinton, L., Gallagher-Thompson, D., Wandersman, A., Marques, A. H., Lamont, A., & Levkoff, S. (2024). Commentary: Strengthening system readiness for health interventions: Lessons for implementing interventions and implementation support in low-and middle-income countries. Evaluation and the Health Professions, 47, 475–483. https://doi.org/10.1177/01632787241295322
- Fawcett, S. B., Paine-Andrews, A., Francisco, V. T., Schultz, J. A., Richter, K. P., Lewis, R. K., Williams, E. L., Harris, K. J., Berkley, J. Y., Fisher, J. L., & Lopez, C. M. (1995). Using empowerment theory in collaborative partnerships for community health and development. *American Journal of Community Psychology*, 23(5), 677–697. https://doi.org/10.1007/BF02506987
- Gallagher, S., Maxwell, S., Jones, K., Fortson, B. L., & Kelley, L. M. (2024). Strategic inter-agency capacity building for primary prevention of harmful behaviors in the military: Current and future directions. *Evaluation and the Health Professions*, 47, 386–401. https://doi.org/10.1177/01632787241291043
- Gómez, C. A., Kleinman, D. V., Pronk, N., Wrenn Gordon, G. L., Ochiai, E., Blakey, C., Johnson, A., & Brewer, K. H. (2021). Addressing health equity and social determinants of health through Healthy People 2030. *Journal of Public Health Man*agement and Practice, 27(Supplement 6), S249–S257. https:// doi.org/10.1097/PHH.0000000000001297
- Hawe, P., Shiell, A., & Riley, T. (2009). Theorising interventions as events in systems. *American Journal of Community Psychology*, 43, 267–276. https://doi.org/10.1007/s10464-009-9229-9
- Holdheide, L. R., Osher, D. D., Cirks, V. L., & Chagnon, E. (2024).
  Building technical assistance provider capacity: A case example of strengthening the fidelity of technical assistance across multiple training and technical assistance centers. *Evaluation and the Health Professions*, 47, 420–436. https://doi.org/10.1177/01632787241291052
- Lamont, A. E., Watson, A., Cook, B. S., Romero, A., Schalter, K., Nellis, A., Clark, K., Domlyn, A., & Wandersman, A. (2024). Barriers and facilitators in adopting a systematic, proactive, evidence-informed technical assistance system. *Evaluation and* the Health Professions, 47, 353–368. https://doi.org/10.1177/ 01632787241293756
- Movsisyan, A., Arnold, L., Evans, R., Hallingberg, B., Moore, G., O'Cathain, A., Pfadenhauer, L. M., Segrott, J., & Rehfuess, E.

- (2019). Adapting evidence-informed complex population health interventions for new contexts: A systematic review of guidance. *Implementation Science*, *14*(7), 105. https://doi.org/10. 1186/s13012-019-0956-5
- Pfadenhauer, L. M., Gerhardus, A., Mozygemba, K., Lysdahl, K. B., Booth, A., Hofmann, B., Wahlster, P., Polus, S., Burns, J., Brereton, L., & Rehfuess, E. (2017). Making sense of complexity in context and implementation: The Context and Implementation of Complex Interventions (CICI) framework. *Implementation Science*, 12(1), 21. https://doi.org/10.1186/s13012-017-0552-5
- Rushovich, B. R., Bartley, L. H., Steward, R. K., & Bright, C. L. (2015). Technical assistance: A comparison between providers and recipients. *Human Service Organizations: Management, Leadership & Governance*, 39(2), 362–379. https://doi.org/10.1080/23303131.2015.1052124
- Scheier, L. M. (2024). Commentary: Theories of change, training and technical assistance: Where the rubber meets the road. *Evaluation and the Health Professions*, 47, 467–474. https://doi.org/10.1177/01632787241289595
- Scott, V. C., Chagnon, E., & Wandersman, A. (2024). The technical assistance (TA) effectiveness logic model: A tool for systematically planning, delivering, and evaluating TA. *Evaluation and* the Health Professions, 47, 369–385. https://doi.org/10.1177/ 01632787241285561
- Stanley, A. R., Jamison, C., Chen, A., Barranco, L., Welsh, D., & Jones, K. (2024). Embracing complexity: Developing a framework for evaluating a multi-faceted training and technical assistance system. *Evaluation and the Health Professions*, 47, 437–445. https://doi.org/10.1177/01632787241269069

- Wandersman, A., Chien, V. H., & Katz, J. (2012). Toward an evidence-based system for innovation support for implementing innovations with quality: Tools, training, technical assistance, and quality assurance/quality improvement. *American Journal* of Community Psychology, 50(3-4), 445–459. https://doi.org/10. 1007/s10464-012-9509-7
- Wandersman, A., Cook, B., Lamont, A., Watson, A., Clark, K., & Flaspohler, P. (2024). Commentary: Bridging and reducing the gaps between research and practice: Pathways to outcomes and the interactive systems framework for dissemination and implementation 2.0. Evaluation and the Health Professions, 47, 494–506. https://doi.org/10.1177/01632787241299820
- Wandersman, A., Duffy, J., Flaspohler, P., Noonan, R., Lubell, K.,
  Stillman, L., Blachman, M., Dunville, R., & Saul, J. (2008).
  Bridging the gap between prevention research and practice:
  The interactive systems framework for dissemination and implementation. *American Journal of Community Psychology*, 41(3-4), 171–181. https://doi.org/10.1007/s10464-008-9174-z
- Wandersman, A., & Scheier, L. M. (2024). Strengthening the science and practice of implementation support: Evaluating the effectiveness of training and technical assistance centers. *Evaluation* & the Health Professions, 47(2), 143–153. https://doi.org/10. 1177/01632787241248768
- Zimmerman, M. A., Israel, B. A., Schulz, A., & Checkoway, B. (1992). Further explorations in empowerment theory: An empirical analysis of psychological empowerment. *American Journal of Community Psychology*, 20(6), 707–727. https://doi.org/10.1007/BF01312604