

Suggestion of literature about adaptation

Compiled by Ana A. Baumann, Borsika Rabin, Shannon Wiltsey Stirman and Christopher J. Miller
November 2020 and updated by Borsika Rabin in May and December 2022

Notes: some papers may fit several categories, but we listed them only once to avoid duplication. This is not meant to be a complete list and we are certainly missing important papers.

1. Adaptation is important for recruitment, retention, and efficacy of interventions for diverse populations.

Alvidrez J, Napoles AM, Bernal G, et al. Building the Evidence Base to Inform Planned Intervention adaptations by practitioners serving health disparity populations. *American Journal of Public Health*. 2019;109(S1):S94-S101.

Benish, S. G., Quintana, S., & Wampold, B. E. (2011). Culturally adapted psychotherapy and the legitimacy of myth: a direct-comparison meta-analysis. *Journal of Counseling Psychology*, 58(3), 279.

Eisman AB, Kim B, Salloum RG, Shuman CJ, Glasgow RE. Advancing rapid adaptation for urgent public health crises: Using implementation science to facilitate effective and efficient responses. *Frontiers in Public Health*. 2022;10:959567.

Hall, G. C. N., Ibaraki, A. Y., Huang, E. R., Marti, C. N., & Stice, E. (2016). A meta-analysis of cultural adaptations of psychological interventions. *Behavior Therapy*, 47(6), 993-1014.

Rathod, S., Gega, L., Degnan, A., Pikard, J., Khan, T., Husain, N., ... & Naeem, F. (2018). The current status of culturally adapted mental health interventions: a practice-focused review of meta-analyses. *Neuropsychiatric disease and treatment*, 14, 165.

Thier, M., Martinez, C. R., Alresheed, F., Storie, S., Sasaki, A., Meline, M., ... & Yim-Dockery, H. (2020). Cultural Adaptation of Promising, Evidence-Based, and Best Practices: a Scoping Literature Review. *Prevention Science*, 21(1), 53-64.

Hansen, W.B., Pankratz, M.M., Dusenbury, L., Giles, S.M., Bishop, D.C., Albritton, J., Albritton, L.P. and Strack, J. (2013), "Styles of adaptation: The impact of frequency and valence of adaptation on preventing substance use", *Health Education*, Vol. 113 No. 4, pp. 345-363.

Marwaha, J.S., Kvedar, J.C. Cultural adaptation: a framework for addressing an often-overlooked dimension of digital health accessibility. *npj Digit. Med.* 4, 143 (2021). <https://doi.org/10.1038/s41746-021-00516-2>

Perera, C., Salamanca-Sanabria, A., Caballero-Bernal, J. et al. No implementation without cultural adaptation: a process for culturally adapting low-intensity psychological interventions in humanitarian settings. *Confl Health* 14, 46 (2020).

2. The importance of context in implementation science, as one of the forces for adaptation.

Nilsen, P., & Bernhardsson, S. (2019). Context matters in implementation science: a scoping review of determinant frameworks that describe contextual determinants for implementation outcomes. *BMC health services research*, 19(1), 189.

Chambers, D. A., Glasgow, R. E., & Stange, K. C. (2013). The dynamic sustainability framework: addressing the paradox of sustainment amid ongoing change. *Implementation Science*, 8(1), 117.

Moore JE, Bumbarger BK, Cooper BR. Examining adaptations of evidence-based programs in natural contexts. *J Prim Prev*. 2013 Jun;34(3):147-61.

Nooraie RY, Shelton RC, Fiscella K, Kwan BM, McMahon JM. The pragmatic, rapid, and iterative dissemination and implementation (PRIDI) cycle: adapting to the dynamic nature of public health emergencies (and beyond). *Health Research Policy and Systems*. 2021;19:110

Miller, C. J., Wiltsey-Stirman, S., & Baumann, A. A. (2020). Iterative Decision-making for Evaluation of Adaptations (IDEA): A decision tree for balancing adaptation, fidelity, and intervention impact. *Journal of Community Psychology*, 48(4), 1163-1177.

Baumann, A. A., & Cabassa, L. J. (2020). Reframing implementation science to address inequities in healthcare delivery. *BMC Health Services Research*, 20(1), 1-9.

3. Fidelity and adaptation, and why fidelity is important:

Akiba CF, Powell BJ, Pence BW, Nguyen MXB, Golin C, Go V. The case for prioritizing implementation strategy fidelity measurement: benefits and challenges. *Translational Behavioral Medicine*. 2021;

Bopp M, Saunders RP, Lattimore D. The Tug-of-War: Fidelity Versus Adaptation Throughout the Health Promotion Program Life Cycle. *Journal of Primary Prevention*. 2013;34(3):193-207

Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2006). Evaluating fidelity: Predictive validity for a measure of competent adherence to the Oregon model of parent management training. *Behavior therapy*, 36(1), 3-13.

Marques, L., Valentine, S. E., Kaysen, D., Mackintosh, M. A., Dixon De Silva, L. E., Ahles, E. M., ... & Wiltsey-Stirman, S. (2019). Provider fidelity and modifications to cognitive processing therapy in a diverse community health clinic: Associations with clinical change. *Journal of consulting and clinical psychology*, 87(4), 357.

von Thiele Schwarz U, Förberg U, Sundell K, Hasson H. Colliding ideals - an interview study of how intervention researchers address adherence and adaptations in replication studies. *BMC Med Res Methodol*. 2018 May 8;18(1):36.
<https://pubmed.ncbi.nlm.nih.gov/29739337/>

von Thiele Schwarz, U., Aarons, G. A., & Hasson, H. (2019). The Value Equation: Three complementary propositions for reconciling fidelity and adaptation in evidence-based practice implementation. *BMC Health Services Research*, 19(1), 868.

Slaughter SE, Hill JN, Snelgrove-Clarke E. What is the extent and quality of documentation and reporting of fidelity to implementation strategies: a scoping review. *Implementation Science*. 2015;10:129.

Stirman, S. W., Gutner, C. A., Crits-Christoph, P., Edmunds, J., Evans, A. C., & Beidas, R. S. (2015). Relationships between clinician-level attributes and fidelity-consistent and fidelity-inconsistent modifications to an evidence-based psychotherapy. *Implementation Science*, 10(1), 1-10.

Cohen DJ, Crabtree BF, Etz RS, Balasubramanian BA, Donahue K, Leviton LC, Clark EC, Isaacson NF, Stange KC, Green LW. Fidelity versus flexibility: translating evidence-based research into practice. *Am J Prev Med*. 2008;35:S381-S389

4. Core elements versus core functions, and implications for adaptation

Hawe P, Shiell A, Riley T. Complex interventions: how "out of control" can a randomised controlled trial be?. *BMJ*. 2004;328(7455):1561-1563.

Craig et al. Developing and evaluating complex interventions: the new Medical Research Council guidance *BMJ* 2008;337:a1655

Guisse et al AHRQ series on complex intervention systematic reviews paper 1: an introduction to a series of articles that provide guidance and tools for reviews of complex interventions *JCE* 2017;90:43-50.

UK Medical Research Council: Developing and Evaluating Complex Interventions
<https://mrc.ukri.org/documents/pdf/complex-interventions-guidance/>

Skivington K, Matthews L, Simpson S A, Craig P, Baird J, Blazeby J M et al. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance *BMJ* 2021; 374 :n2061

PCORI Methodology Standards:

<https://www.pcori.org/research-results/about-our-research/research-methodology/pcori-methodology-standards>

Jolles, M. P., Lengnick-Hall, R., & Mittman, B. S. (2019). Core functions and forms of complex health interventions: a patient-centered medical home illustration. *Journal of general internal medicine*, 34(6), 1032-1038.

Harrison, M.S. Functions and Forms Framework: a Methodology for Mechanistic Deconstruction and Adaptation? *J GEN INTERN MED* (2021).

Kirk AM, Haines ER, Rokoske FS, Powell BJ, Weinberger M, Hanson LS, Birken SA. A case study of a theory-based method for identifying and reporting core functions and forms of evidence-based interventions, *Translational Behavioral Medicine*, <https://doi.org/10.1093/tbm/ibz178>

Hill J, Cuthel AM, Lin P, Grudzen CR. Primary Palliative Care for Emergency Medicine (PRIM-ER): Applying form and function to a theory-based complex intervention. *Contemp Clin Trials Commun*. 2020 Apr 24;18:100570.

5. Decision frameworks for whether and when to adapt:

Kirk, M. A., Moore, J. E., Stirman, S. W., & Birken, S. A. (2020). Towards a comprehensive model for understanding adaptations' impact: the model for adaptation design and impact (MADI). *Implementation Science*, 15(1), 1-15.

Miller, C. J., Wiltsey-Stirman, S., & Baumann, A. A. (2020). Iterative Decision-making for Evaluation of Adaptations (IDEA): A decision tree for balancing adaptation, fidelity, and intervention impact. *Journal of Community Psychology*, 48(4), 1163-1177.

Movsisyan, A., Arnold, L., Evans, R., Hallingberg, B., Moore, G., O'Cathain, A., ... & Rehfuss, E. (2019). Adapting evidence-informed complex population health interventions for new contexts: a systematic review of guidance. *Implementation Science*, 14(1), 105.

Evans RE, Moore G, Movsisyan A, Rehfuss E; ADAPT Panel; ADAPT Panel comprises of Laura Arnold. How can we adapt complex population health interventions for new contexts? Progressing debates and research priorities. *J Epidemiol Community Health*. 2021 Jan;75(1):40-45.

Movsisyan A, Arnold L, Copeland L, Evans R, Littlecott H, Moore G, O'Cathain A, Pfadenhauer L, Segrott J, Rehfuss E. Adapting evidence-informed population health interventions for new contexts: a scoping review of current practice. *Health Res Policy Syst*. 2021 Feb 5;19(1):13.

Campbell M, Moore G, Evans RE, Khodyakov D, Craig P; ADAPT Study team. ADAPT study: adaptation of evidence-informed complex population health interventions for implementation and/or re-evaluation in new contexts: protocol for a Delphi consensus exercise to develop guidance. *BMJ Open*. 2020 Jul 20;10(7):e038965.

Skivington K, Matthews L, Simpson SA, Craig P, Baird J, Blazeby JM, Boyd KA, Craig N, French DP, McIntosh E, Petticrew M, Rycroft-Malone J, White M, Moore L. A new framework for developing and evaluating complex interventions: update of Medical Research Council guidance. *BMJ*. 2021 Sep 30;374:n2061.

Moore, Graham, et al. "Adapting interventions to new contexts—the ADAPT guidance." *bmj* 374 (2021).

Dopp, A.R., Parisi, K.E., Munson, S.A. *et al.* Aligning implementation and user-centered design strategies to enhance the impact of health services: results from a concept mapping study. *Implement Sci Commun* 1, 17 (2020). <https://doi.org/10.1186/s43058-020-00020-w>

Ametaj AA, Smith AM, Valentine SE. A Stakeholder-Engaged Process for Adapting an Evidence-Based Intervention for Posttraumatic Stress Disorder for Peer Delivery. *Adm Policy Ment Health*. 2021 Sep;48(5):793-809.

Schinckus L, Van den Broucke S, van der Zanden G, Levin-Zamir D, Mueller G, Riemenschneider H, Hayter V, Yardley L, Schillinger D, Doyle G, Ganahl K, Pelikan J, Chang P. To Adapt or Not to Adapt: The Association between Implementation Fidelity and the Effectiveness of Diabetes Self-Management Education. *Int J Environ Res Public Health*. 2021 Apr 13;18(8):4095.

Treichler EBH, Rabin BA, Spaulding WD, Thomas ML, Salyers MP, Granholm EL, Cohen AN, Light GA. Skills-based intervention to enhance collaborative decision-making: systematic adaptation and open trial protocol for veterans with psychosis. *Pilot Feasibility Stud*. 2021 Mar 29;7(1):89.

6. Process frameworks to guide adaption:

Aarons GA, Green AE, Palinkas LA, et al. Dynamic Adaptation Process to implement an evidence-based child maltreatment intervention. *Implementation Science*. 2012;7:32.

Baumann, A. A., Domenech Rodríguez, M. M., Amador, N. G., Forgatch, M. S., & Parra-Cardona, J. R. (2014). Parent management training-oregon model (PMTO™) in Mexico City: Integrating cultural adaptation activities in an implementation model. *Clinical Psychology: Science and Practice*, 21(1), 32-47.

Bernal, G. E., & Domenech Rodríguez, M. M. (2012). *Cultural adaptations: Tools for evidence-based practice with diverse populations* (pp. xix-307). American Psychological Association.

Cabassa, L. J., Gomes, A. P., Meyreles, Q., Capitelli, L., Younge, R., Dragatsi, D., ... & Lewis-Fernández, R. (2014). Using the collaborative intervention planning framework to adapt a health-care manager intervention to a new population and provider group to improve the health of people with serious mental illness. *Implementation Science*, 9(1), 178.

Chambers DA, Norton WE. The Adaptome: advancing the science of intervention adaptation. *American Journal of Preventive Medicine*. 2016;51(4 Suppl 2):S124-31.

Escoffery, C., Lebow-Skelley, E., Haardoerfer, R., Boing, E., Udelson, H., Wood, R., ... & Mullen, P. D. (2018). A systematic review of adaptations of evidence-based public health interventions globally. *Implementation Science*, 13(1), 125.

Perera, C., Salamanca-Sanabria, A., Caballero-Bernal, J., Feldman, L., Hansen, M., Bird, M., ... & Vallières, F. (2020). No implementation without cultural adaptation: a process for culturally adapting low-intensity psychological interventions in humanitarian settings. *Conflict and health*, 14(1), 1-12.

Wang, Z., Norris, S.L. & Bero, L. The advantages and limitations of guideline adaptation frameworks. *Implementation Sci* 13, 72 (2018). <https://doi.org/10.1186/s13012-018-0763-4>

7. Framework for tracking adaption EBI and IS:

Stirman, S. W., Baumann, A. A., & Miller, C. J. (2019). The FRAME: an expanded framework for reporting adaptations and modifications to evidence-based interventions. *Implementation Science*, 14(1), 1-10.

Miller, C., Barnett, M.L., Baumann, A.A. et al. (2021) The FRAME-IS: a framework for documenting modifications to implementation strategies in healthcare. *Implementation Sci* 16, 36.

8. Methods on how to track adaptation:

Aschbrenner, K. A., Bond, G. R., Pratt, S. I., Jue, K., Williams, G., Banerjee, S., & Bartels, S. J. (2020). Evaluating agency-led adaptations to an evidence-based lifestyle intervention for adults with serious mental illness. *Implementation Research and Practice*, 1, 2633489520943200.

Baratta J, Amano A, Parsons PK, et al. Developing best practices for PPE Portraits across 25 sites: a systematic assessment of implementation and spread of adaptations using FRAME. *BMC Health Services Research*. 2021;21(1):1182.

Chlebowski, C., Hurwich-Reiss, E., Wright, B., & Brookman-Frazee, L. (2020). Using stakeholder perspectives to guide systematic adaptation of an autism mental health intervention for Latinx families: A qualitative study. *Journal of Community Psychology*, 48(4), 1194-1214.

Coronado, G. D., Schneider, J. L., Green, B. B., Coury, J. K., Schwartz, M. R., Kulkarni-Sharma, Y., & Baldwin, L. M. (2020). Health plan adaptations to a mailed outreach program for colorectal cancer screening among Medicaid and Medicare enrollees: the BENEFIT study. *Implementation Science*, 15(1), 1-13.

Hall TL, Holtrop JS, Dickinson LM, Glasgow RE. Understanding adaptations to patient-centered medical home activities: The PCMH adaptations model. *Transl Behav Med*. 2017;7(4):861-872.

Holtrop JS, Gurfinkel D, Nederveld A, et al. Methods for capturing and analyzing adaptations: implications for implementation research. *Implementation Science*. 2022;17(1):51.

- Mackie, T. I., Ramella, L., Schaefer, A. J., Sridhar, M., Carter, A. S., Eisenhower, A., ... & Sheldrick, R. C. (2020). Multi-method process maps: An interdisciplinary approach to investigate ad-hoc modifications in protocol-driven interventions. *Journal of Clinical and Translational Science*, 1-33.
- Rabin, B. A., McCreight, M., Battaglia, C., Ayele, R., Burke, R. E., Hess, P. L., ... & Glasgow, R. E. (2018). Systematic, multimethod assessment of adaptations across four diverse health systems interventions. *Frontiers in public health*, 6, 102.
- Teeter, B. S., Thomas, J. L., Curran, G. M., & Balamurugan, A. (2020). Classifying intervention modifications in the community pharmacy context: A demonstration study. *Journal of the American Pharmacists Association*.
- Coury, J., Miech, E.J., Styer, P. *et al.* (2021) What's the "secret sauce"? How implementation variation affects the success of colorectal cancer screening outreach. *Implement Sci Commun* 2, 5
- Molina, R.L., Benski, AC., Bobanski, L. *et al.* Adaptation and implementation of the WHO Safe Childbirth Checklist around the world. *Implement Sci Commun* 2, 76 (2021).
- McCarthy, M.S., Ujano-De Motta, L.L., Nunnery, M.A. *et al.* Understanding adaptations in the Veteran Health Administration's Transitions Nurse Program: refining methodology and pragmatic implications for scale-up. *Implementation Sci* 16, 71 (2021).
- Walsh-Bailey C, Palazzo LG, Jones SM, et al. A pilot study comparing tools for tracking implementation strategies and treatment adaptations. *Implementation Research and Practice*. January 2021.
- Aschbrenner KA, Mueller NM, Banerjee S, Bartels SJ. Applying an equity lens to characterizing the process and reasons for an adaptation to an evidenced-based practice. *Implementation Research and Practice*. January 2021.
- Mark, M.M. Adding Adaptation/Modification Size and Scope to Frameworks for Classifying Changes to an Intervention. *Prev Sci* 22, 923–927 (2021). <https://doi.org/10.1007/s11121-021-01248-1>
- Heim, E., & Knaevelsrud, C. (2021). Standardised Research Methods and Documentation in Cultural Adaptation: The Need, the Potential and Future Steps. *Clinical Psychology in Europe*, 3, 1-15. <https://doi.org/10.32872/cpe.5513>
- Heim, E., Mewes, R., Abi Ramia, J., Glaesmer, H., Hall, B., Harper Shehadeh, M., Ünlü, B., Kananian, S., Kohrt, B. A., Lechner-Meichsner, F., Lotzin, A., Moro, M. R., Radjack, R., Salamanca-Sanabria, A., Singla, D. R., Starck, A., Sturm, G., Tol, W., Weise, C., & Knaevelsrud, C. (2021). Reporting Cultural Adaptation in Psychological Trials – The RECAPT criteria. *Clinical Psychology in Europe*, 3, 1-25. <https://doi.org/10.32872/cpe.6351>
- J.D. Smith (2022) A Dynamic Method for Tracking Implementation Strategy Use and Modification: The Longitudinal Implementation Strategy Tracking System (LISTS) <https://isc3i.isgmh.northwestern.edu/wp-content/uploads/2022/02/Smith-LISTS-presentation.pdf>
- Lyon AR, Koerner K. User-Centered Design for Psychosocial Intervention Development and Implementation. *Clinical Psychology*. 2016;23(2):180-200.
- Perlman Robinson, Jenny and Curtiss Wyss, Molly and Hannahan, Patrick, Adaptation Tracker: Learning from changes throughout a scaling process (July 2021). <http://dx.doi.org/10.2139/ssrn.3957340>
- Salloum RG, Wagner TH, Midboe AM, Daniels SI, Quanbeck A, Chambers DA. The economics of adaptations to evidence-based practices. *Implementation Science Communications*. 2022;3(1):100.
- Shelton RC, Chambers DA, Glasgow RE. An Extension of RE-AIM to Enhance Sustainability: Addressing Dynamic Context and Promoting Health Equity Over Time. *Frontiers in Public Health*. 2020;8:134.
- Shelton RC, Adsul P, Oh A. Recommendations for Addressing Structural Racism in Implementation Science: A Call to the Field. *Ethn Dis*. 2021;31(Suppl 1):357-364.
- Haley AD, Powell BJ, Walsh-Bailey C, Krancari M, Groß I, Shea CM, Bunce A, Marino M, Frerichs L, Lich KH, Gold R. Strengthening methods for tracking adaptations and modifications to implementation strategies. *BMC Med Res Methodol*. 2021 Jun 26;21(1):133.
- Finley EP, Huynh AK, Farmer MM, Bean-Mayberry B, Moin T, Oishi SM, Moreau JL, Dyer KE, Lanham HJ, Leykum L, Hamilton AB.

9. Iterative adaptations and adaptations during implementation:

Glasgow, R. E., Battaglia, C., McCreight, M., Ayele, R. A., & Rabin, B. A. (2020). Making implementation science more rapid: Use of the RE-AIM framework for mid-course adaptations across five health services research projects in the Veterans Health Administration. *Frontiers in Public Health*, *8*, 194.

Kim JJ, Brookman-Frazee L, Barnett ML, Tran M, Kuckertz M, Yu S, Lau AS. How community therapists describe adapting evidence-based practices in sessions for youth: Augmenting to improve fit and reach. *J Community Psychol*. 2020 May;48(4):1238-1257.

Lyon, A.R., Coifman, J., Cook, H. *et al*. The Cognitive Walkthrough for Implementation Strategies (CWIS): a pragmatic method for assessing implementation strategy usability. *Implement Sci Commun* **2**, 78 (2021). <https://doi.org/10.1186/s43058-021-00183-0>

10. Issues of definitions of the word adaptation: It has been considered as:

- a process or mechanism
- a strategy
- a quality of an intervention (i.e. adaptability)