

## Suggestion of literature about adaptation

Compiled by Ana A. Baumann, Borsika Rabin, Shannon Wiltsey Stirman and Christopher J. Miller  
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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.

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.

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.

### 3. 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)
- an outcome

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.

#### 4. Fidelity and adaptation, and why fidelity is important:

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.

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

#### 5. 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

Guise 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.

## 6. 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.

## 7. Process frameworks to guide adaption:

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.

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>

## 8. 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.

## 9. 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.

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.

Kim, J. J., Brookman-Frazee, L., Barnett, M. L., Tran, M., Kuckertz, M., Yu, S., & Lau, A. S. (2020). How community therapists describe adapting evidence-based practices in sessions for youth: Augmenting to improve fit and reach. *Journal of Community Psychology*, 48(4), 1238-1257.

- 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>
- 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>
- 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.
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## 10. 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>