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How Do Clinicians Prefer Cultural Competence Training? Findings from the DSM-5 Cultural Formulation Interview Field Trial

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Abstract

Objective: This study's objective is to analyze training methods clinicians reported as most and least helpful during the DSM-5 Cultural Formulation Interview field trial, reasons why, and associations between demographic characteristics and method preferences.

Method: The authors used mixed methods to analyze interviews from 75 clinicians in five continents on their training preferences after a standardized training session and clinicians' first administration of the Cultural Formulation Interview. Content analysis identified most and least helpful educational methods by reason. Bivariate and logistic regression analysis compared clinician characteristics to method preferences.

Results: Most frequently, clinicians named case-based behavioral simulations as "most helpful" and video as "least helpful" training methods. Bivariate and logistic regression models, first unadjusted and then clustered by country, found that each additional year of a clinician's age was associated with a preference for behavioral simulations: OR=1.05 (95% CI: 1.01-1.10; p=0.025).

Conclusions: Most clinicians preferred active behavioral simulations in cultural competence training, and this effect was most pronounced among older clinicians. Effective training may be best accomplished through a combination of reviewing written guidelines, video demonstration, and behavioral simulations. Future work can examine the impact of clinician training satisfaction on patient symptoms and quality of life.

Keywords

Cultural psychiatry, Cultural Formulation Interview, DSM-5, academic training

Government and professional organizations contend that clinician cultural competence training can reduce racial and ethnic health disparities [1-3]. Cultural competence approaches, however, differ by provider discipline, training methods, and outcomes measured, with no indication of which methods clinicians find helpful [4-7]. Methods to train clinicians in mental health interventions can clarify cultural competence training. Research on intervention training is important in mental health since psychotherapy interventions lack regulated standards unlike medications [8]. Researchers have hypothesized that to ensure clinician adherence to and competence in verbal interventions, training must include a review of written guidelines, case-based behavioral simulations, and supervision of at least one case [9]. Passive methods such as reading guidelines or watching videos change clinician behavior less than active methods that engage participants such as behavioral simulation, clinician modeling with expert feedback, and question-and-answer sessions [10-13]. Studies of training methods typically present views of expert trainers, and to our knowledge no study has yet presented data on clinicians' preferences for cultural competence training.

One cultural competence model with emerging evidence is the psychiatric cultural formulation. Published in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), the Outline for Cultural Formulation (OCF) describes topics identified by cultural mental health experts as relevant to diagnostic and treatment planning [14]. The OCF is guided by social science research and outlined four assessment domains: (1) cultural identity of the individual, (2) cultural explanations of illness, (3) cultural levels of psychosocial support and functioning, (4) cultural elements of the patient-physician relationship; a fifth domain can be used to summarize clinically relevant information [15]. The OCF has been the most widely-used framework for introducing cultural competence to psychiatric trainees, with publications in over

ten languages from six clinics around the world developing practice guidelines [16, 17]. For DSM-5, the OCF was revised into the Cultural Formulation Interview (CFI) by an international consortium to create a standardized interview of sixteen questions with guidelines [18]. An earlier draft of the CFI was tested in an international field trial for feasibility, acceptability, and clinical utility among patients and clinicians, and revised for DSM-5 based on their feedback [19]. A 2014 *Lancet* Commission on culture and health has advocated for CFI use throughout all medical subspecialties given its evidence base and focus on patient cultural views of illness and treatment relevant beyond psychiatry [20].

The Commission also called for more research on cultural competence training [20]. Clinicians were trained to use the CFI for the DSM-5 field trial through active and passive methods and then asked their opinions on various methods after assessing their first patient. This paper examines (1) which training methods clinicians reported as most and least helpful, (2) reasons for preferences, and (3) relationships of patient and clinician characteristics with educational method preference. While training can be studied at multiple levels [21], we focus on training methods and patient and clinician factors since these are most frequently addressed by clinicians, administrators, and educators. We analyze specific methods; clinician factors such as age, discipline, years of experience, hours of prior cross-cultural training, and ethnicity; and patient factors such as ethnicity and presence of a psychotic illness that have been hypothesized as correlating with training preferences [22]. We present clinician perspectives on training given the literature's tendency to report perspectives of researchers and administrators who are not ultimately responsible for implementing clinical interventions [23, 24]. Better understanding of clinician preferences can produce more effective and efficient training programs.

Methods

The field trial was designed by cultural psychiatry experts through the DSM-5 Cross-Cultural Issues Subgroup (DCCIS) [18]. The New York State Psychiatric Institute (NYSPI) and Columbia University Department of Psychiatry formed a single site and coordinated logistics for all sites. The study started in November 2011 and ended in September 2012. Each site aimed to enroll at least 30 patients and partnered with clinics for enrollment. The overall trial enrolled 75 clinicians in the United States, Peru, Canada, the Netherlands, Kenya, and India.

We enrolled new and extant patients. Research clinicians new to the patient administered the CFI and diagnostic interview; extant patients were referred by treating clinicians to research clinicians. We obtained informed consent from all patients and clinicians before enrollment. Sessions with the research clinician consisted of administering the CFI, designed to last 15-20 minutes, followed by a routine diagnostic assessment. All sessions were audio-taped. All participants completed questionnaires before and after the interview. The study was approved by each site's Institutional Review/Ethics Board and followed local informed consent regulations.

Eligible CFI research clinicians were required to have a terminal degree (i.e. MD, MSW, PhD, APRN) permitting them to see patients, consistent with each country's requirements. Clinicians were excluded if they could not attend the training. Clinicians did not interview their own patients to assess CFI training preferences in assessing new patients.

Eligible patients were 16 years or older, fluent in the language of research clinicians, and could have any psychiatric diagnosis. We included the language match requirement to avoid using interpreters who could introduce cultural information not obtained through the CFI. Patients were excluded if acutely suicidal or homicidal; intoxicated or in substance withdrawal;

or with any condition that could interfere with the interview such as dementia, mental retardation, or florid psychosis. A sample of convenience was recruited and read a standard recruitment script. For this analysis, only patients interviewed by clinicians using the CFI for the first time were included since subsequent cases could introduce bias as clinicians gained experience [9].

CFI Training and Assessments

After being introduced to the field trial, clinicians attended a two-hour training session at their sites consisting of these methods: (1) reviewing CFI written guidelines, (2) a 24-minute video of the CFI simulated between a patient and clinician, (3) interactive behavioral simulations pairing clinicians to practice the CFI through sample cases created by the authors or from clinical experience, (4) coaching and feedback from local principal investigators (PIs) who led the training session, and (5) a final period for questions and answers. The training featured two South Asian researchers from the UK. All PIs were affiliated with the DCCIS.

Before the interview, patients and research clinicians completed demographic surveys, with clinicians also reporting professional training and cultural competence experiences.

Research clinicians administered the CFI followed by a routine diagnostic assessment, with sessions audio-recorded with patient consent. A copy of the CFI was provided to clinicians before each session. After the interview, the research clinician recorded patient diagnosis and treatment recommendations.

Research clinicians were interviewed on training experiences after the first patient session, providing answers to two questions: *(1) What did you find most helpful about the*

training? Why? (2) What did you find least helpful about the training? Why? The overall field trial collected other data, but only training data are reported here.

All instruments were reviewed by the DCCIS. Research staff translated (when not in English), summarized, and uploaded all interviews into a database managed centrally by the Center of Excellence for Cultural Competence at NYSPI.

Data Analysis

Services researchers have recommended mixed-methods data analysis in which qualitative methods explore a new phenomenon and quantitative methods correlate the phenomenon to sample traits [25]. We applied this approach, beginning with a qualitative analysis of clinician responses to training method preferences through deductive content analysis and quantifying these findings for statistical modeling [25].

Qualitative Data Analysis

Deductive content analysis tests extant theories through: (1) selecting the textual unit of analysis, (2) developing a theory-based codebook of exclusive categories, (3) coding data, and (4) reporting data by category [24]. Each debriefing interview was the unit of analysis and each meaning unit was the words or sentences expressing a single idea [24]. The first and third authors (NKA, EC), psychiatrists trained in mixed-methods research, reviewed all 75 transcriptions together for data quality over five hours. The first author created the codebook from Beidas and Kendall's framework of training methods as passive (didactic lectures, watching videos) or active (behavioral simulations, coaching, feedback through questions and

answers), with “active” defined as a learning process requiring observable demonstrations of trainee interaction [21].

Both authors first applied the codebook (available upon request) to seven interviews (10% of the total sample) over six hours. Both team members coded all sample interviews independently in NVivo 10 (QSR International) – coding each meaning unit with a unique code and meeting once weekly – to compare results, reach consensus, and revise the codebook. After the third round of independently coding test interviews produced no new coding changes, both authors coded all 75 interviews together. Queries and reports were generated in NVivo to explore patterns and draft memos on themes, triangulate data, and audit debriefing sessions for rigor [26]. A list of categories for most and least helpful methods was produced.

Inductive content analysis was then used to organize method preferences by reason. The first and third authors independently undertook one complete round of open coding, category creation, and abstraction. Coding reports from the deductive content analysis were reviewed, coded by reasons for preference (when provided), and sorted into higher-order headings through abstraction [26, 27]. Similar codes were collapsed into inclusive categories, additional codes were integrated, and clusters of related codes were organized into hierarchies. For example, under the category *behavioral simulation most helpful*, the sub-codes *positive learning from others* and *experiential learning* were freely generated, collapsed into inclusive sub-code *technique*, and contrasted with sub-code *knowledge*. Both team members together re-coded all content by method with this final list.

Quantitative Data Analysis

To analyze associations among method choice and clinician characteristics, we transformed deductive codes for quantitative analysis [25]. Clinician interviews were categorized based on method choice. Answers not endorsing any method were excluded, as was one clinician who did not report age, leaving 64 clinicians for analysis. Four helpful methods were named: behavioral simulation, video, review of written guidelines, and multiple methods (Table 1). Based on deductive content analysis, method choices were grouped into preference for any active method, either exclusively or combined with a passive method (n=46), and an exclusive preference for passive methods (n=18) to reflect clinical training programs. Most clinical trainings use purely passive methods such as written guidelines or active with passive methods, not solely active methods [23, 24].

Clinician characteristics were coded as originally entered at each site, except for race and ethnicity variables. Though central in the US as constructs of cultural difference, other countries have other markers of difference [28]; there is no standard method for reporting race and ethnicity in international trials, which typically report participants by country. To apply US constructs of race/ethnicity would impose an US-specific interpretation. For example, grouping Kenyans with African Americans or Indians with Asian Americans ignores local constructions of cultural difference. Instead, we looked at demographic factors identified by PIs as locally recognized by governments, creating a variable to indicate matching between clinicians and patients. For example, for the Kenya site, a clinician and patient from the same tribe were considered a match. Similarly, we created a matching variable for immigrant status, where both clinician and patient born inside or outside the site country were considered matches.

We examined five clinician characteristics for correlations with training preferences based on past studies [29-32]: (1) age (continuous variable), (2) years of clinical experience

(continuous variable), (3) hours of prior cross-cultural training (median split at ≥25 hours), (4) experience with patients from different cultures (daily vs. other frequency), and (5) discipline (medical vs. other degree, as 60% of the sample were psychiatrists). Using LOGISTIC and SURVEYLOGISTIC procedures in SAS software, Version 9.4 (Cary, NC), logistic regression models were clustered by country to account for similarities in variance of sites within the same country. These were adjusted for clinician gender, presence of a DSM-IV psychotic disorder, patient-clinician immigration match, and patient-clinician ethnic match, factors found to affect cross-cultural communication [30, 31, 33]. Diagnoses were coded according to DSM-IV disorder cluster based on the first three digits in line with clinical epidemiology methods [34].

Results

The field trial enrolled 75 patients corresponding to each clinician's first case. The average age was 44.3 years (SD=14.4) with 57.3% males and 42.7% females; 62.7% lived in their birth country. 40% were married and living with a partner and 20% were employed full time. The mean number of years of education was 11.1 (SD=4.5). 30.7% of patients were enrolled in the United States, 28% in India, 14.7% in the Netherlands, 9.3% in Canada, and 6.7% each in Kenya and Peru. After the CFI, clinicians recorded diagnoses under these disorder clusters: 49.3% with depression, 25.3% with anxiety, 20% with psychosis, 17.3% with a substance disorder, 5.3%with bipolar disorder, and 17.3% with an "other" primary diagnosis such as a personality disorder; comorbid diagnoses were counted for a total>100%.

Seventy-five clinicians participated with 54.7% females and 45.3% males. Regarding age, 17.3% were 28-30 years old, 48% were 31-40, 21.3% were 41-50, 12% were over 50, and 1 clinician did not answer. 32% were attending psychiatrists, 28% psychiatry trainees, 17.3%

psychologists, 14.7% social workers, and 8% master's level trainee therapists. In terms of clinical experience, 44% of clinicians had 5 years or less, 21.3% had 6-10 years, 17.3% had 11-15 years, 5.3% had 16-20 years, 10.7% had ≥21 years, and 1 clinician did not answer. Regarding lifetime cross-cultural training, 25.3% had <10 hours, 21.3% had 10-25 hours, 13.3% had 26-50 hours, 26.7% had >75 hours, and 5 clinicians did not answer. For frequency of contact with culturally different patients, 61.3% answered daily, 20% answered weekly, 4% answered monthly, 12% answered seldom, and 2.7% answered never. 34.7% of clinicians were from the US, 28% from India, 14.7% from the Netherlands, 9.3% from Canada, and 4% each from Peru and Kenya. 76% were practicing in their birth country compared to 24% who were not. All clinicians were included and none met exclusion criteria.

Educational methods named most and least helpful

Table 1 presents training methods reported as most and least helpful, coded as active, passive, or mixed [21]. For multiple methods, the combination is specified. We present results for the entire sample in Table 1 and representative quotations for method preferences named by 10% or more of the sample (>7 clinicians) in the text.

Most helpful. Twenty-five clinicians (33.3%) named behavioral simulations as the most helpful method. During inductive coding, 16% of clinicians reported that behavioral simulations improved their practice with CFI implementation. For example, a US psychologist with 13 years of clinical experience, five hours of prior training in cross-cultural issues, and no self-reported contact with culturally different patients said, "The role-play mock session was most helpful

because it provided valuable insights as to how to conduct the actual interview." 5.3% believed that simulations clarified theoretical knowledge. A Canadian social worker, also with 13 years of clinical experience and five hours of training in cross-cultural issues, but with daily contact with culturally different patients stated, "The training in group sessions was most helpful due to the opportunity to clarify questions and issues." Finally, 2.7% explained that the behavioral simulations helped change attitudes. A psychiatrist from India with one year of clinical experience, one hour of training in cross-cultural issues, and weekly contact with culturally different patients said, "Most helpful was the role-play since it brought up and solved a number of doubts about the CFI that were not acknowledged just by reading it alone." 10.7% of clinicians did not report reasons.

The second single method named by 14.7% of clinicians as most helpful was the video demonstration. 12% believed that the video helped to understand interviewing techniques. One US psychologist with six years of clinical experience, five hours of training in cross-cultural issues, and daily contact with culturally different patients emphasized, "The training video provided a good example of how to administer the CFI." Another clinician believed that the video responded to his distinct learning style as a "visual learner," and one clinician did not name a reason.

Finally, 33.3% of clinicians reported multiple methods as most helpful. The largest group of 16% endorsed the combination of behavioral simulations and video. A social worker from the Netherlands with 17 years of clinical experience, one hour of training in cross-cultural issues, and daily contact with culturally different patients typified these responses: "The video was helpful because it showed how to bring the CFI into practice. Practicing with my colleagues in role-play was helpful because it gave me an idea of how to handle the questions."

Least helpful. In the largest set of responses, 50.7% of clinicians (n=38) did not name any method as least helpful. Of individual methods, 14.7% reported that the video demonstration was least helpful. 9.3% did not think that the video case represented their practice settings. A US psychologist with 11 years of clinical experience, five hours of training in cross-cultural issues, and weekly contact with culturally different patients said, "The video does not illustrate enough what needs to be done when the client does not cooperate." A psychologist from the Netherlands with 10 years of clinical experience and weekly contact with culturally different patients echoed this concern: "The training video was of a model client. Maybe it would be good to show a different client." Two other clinicians mentioned casting as a reason, with one Peruvian clinician explaining, "The background of the people in the examples is not similar to our backgrounds," in reference to their ethnicities. One research clinician wanted more than one case shown and one clinician offered no reason.

Of multiple methods, 12% of clinicians named the overall training package to be least helpful. This was the only multiple method named compared to a variety of combinations considered most helpful and may reflect general dissatisfaction with the entire training. Three clinicians felt that it was not practical enough. For example, a social worker from the Netherlands with 12 years of providing care and daily contact with patients who are culturally different stated: "What was least helpful was the lack of experience with this new method. You can give structured guidelines, but you will have to learn to actually work with it (get experienced) to achieve more quality." Two other clinicians wanted more time for training.

The relationship among clinician characteristics and educational methods

In the logistic regression analyses, clinician age was the only significant finding: OR=1.05 (95% CI: 1.01-1.10; p=0.025). With each additional year of age, the odds of a clinician preferring an active method increased by 5.4%.

Discussion

This paper examined clinician preferences for training methods from the DSM-5 CFI field trial. A majority of clinicians named active behavioral simulations as most helpful, either alone or with other methods. Passive methods such as watching a video or reviewing written guidelines were preferred only by one in seven and one in twenty clinicians, respectively. Clinicians appear to value experiential learning with the CFI, as with the DSM-IV OCF [35]. Moreover, this preference increased with clinician age.

Our findings suggest both active and passive training programs could be created for learners based on preferred method. Some studies report clinician preferences for passive training methods [36, 37], but older clinicians with established practice styles appreciate case-based simulations that promote peer interactive learning and skills uptake [38]. Older trainees such as those in continuing medical education programs (CME) may favor more active approaches compared to younger trainees. CME participants may more closely resemble our sample of convenience since CME clinicians can choose CME topics for self-assessment. Older trainees in CME programs may therefore benefit from case-based simulations in addition to passive training.

Least-helpful responses also indicate clinical applications for CFI training. Over half of clinicians named nothing as least helpful, suggesting broad acceptability of the overall training package. Of 11 clinicians naming video demonstration as least helpful, 7 stated that the case did not reflect their environment. Training materials may therefore need local tailoring to reflect

clinician caseloads such as patient diagnoses. Even though the content of the cases may demonstrate limited generalizability, clinicians across countries preferred case-based behavioral simulations that future work can examine as a generalizable method.

This study has several limitations. First, we present data on a sample of convenience. This sampling strategy is standard in DSM-5 field trials. A different sample with greater variation in cross-cultural experiences could have led to different results. Second, we attempted to standardize training. While reviewing written guidelines and video demonstration could be the same across all sites, there may be inter-site variations in the quality of behavioral simulations, expert coaching, and question-and-answer sessions. A training package implemented in multiple sites could be reasonably expected to exhibit changes. Third, we examined associations among patient, clinician, and training factors through quantitative analyses. Organizational factors such as heavy patient volume could have also affected clinician perceptions. These are not factors typically addressed within cultural competence training and future work can examine relationships between organizational factors and clinician perceptions. Fourth, we collected training data after the first CFI session, but perceptions may have changed based on time between training and the first interview. Assessments of cultural competence training typically occur once rather than longitudinally, pointing to the need for more research [6]. Our study design advances this scholarship by assessing clinician perceptions after an actual case rather than immediately following training to clarify practical relevance. Fifth, we trained clinicians in a draft of the CFI, not the final DSM-5 version. Their responses may have been influenced by parts of the original draft changed for DSM-5 as well as instructions to use the CFI strictly as written rather than recommendations in DSM-5 for clinicians to use the CFI flexibly. The CFI toolkit also consists of an informant interview when patients cannot provide consent and twelve

supplementary interviews exploring cultural topics in greater depth than the core 16-item CFI [39]; studies are needed on whether training method preferences are similar or different with these interviews. Finally, this study has relied on clinician self-report rather than objective evidence of clinician behavioral change, a focus for future work.

Nonetheless, our work contributes to research on cultural competence training in mental health. Cultural factors affect information exchange and processing throughout every clinical encounter, even in those in which patients and clinicians share similar demographic traits [17]. Our findings establish initial evidence for CFI training. Videos and case-based simulations are being developed with the American Psychiatric Association [39] and the New York State Office of Mental Health, allowing assessments of clinician preferences for combined active and passive methods. In addition, academic and community administrators can examine CFI adoption, cost, and long-term sustainability as implementation outcomes after training [40, 41]. Most importantly, research is needed linking training to clinical outcomes such as patient improvements in symptoms and quality of life.

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References

1. U.S. Office of the Surgeon General; National Institute of Child Health and Human Development; Centers for Disease Control and Prevention. Closing the Gap: A National Blueprint to Improve the Health of Persons with Mental Retardation: Report of the Surgeon General's Conference on Health Disparities and Mental Retardation. Washington, D.C.: U.S. Department of Health and Human Services; 2002.

2. Institute of Medicine. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington, D.C.: National Academies Press; 2003.

3. The Accreditation Council for Graduate Medical Education and the American Board of Psychiatry and Neurology. The Psychiatry Milestones Project. 2013. https://www.acgme.org/acgmeweb/tabid/147/ProgramandInstitutionalAccreditation/MedicalSpecialties/Psychiatry.aspx. Accessed 1 July 2014.

4. Price EG, Beach MC, Gary TL, et al. A systematic review of the methodological rigor of studies evaluating cultural competence training of health professionals. Acad Med. 2005; 80:578-86.

5. Lie DA, Lee-Rey E, Gomez A, Bereknyei S, Braddock CH 3rd. Does cultural competency training of health professionals improve patient outcomes? A systematic review and proposed algorithm for future research. J Gen Intern Med. 2011; 26:317-25.

6. Bhui K, Warfa N, Edonya P, McKenzie K, Bhugra D. Cultural competence in mental health care: A review of model evaluations. BMC Health Serv Res. 2007; 31:15.

7. Truong M, Paradies Y, Priest N. Interventions to improve cultural competency in healthcare: A systematic review of reviews. BMC Health Serv Res. 2014; 14:99.

8. Rounsaville EJ, Carroll KM, Onken LS. A stage model of behavioral therapies research: Getting started and moving on from Stage I. Clin Psychol Sci Prac. 2001; 8:133-42.

9. Sholomskas DE, Syracuse-Siewert G, Rounsaville BJ., Ball SA, Nuro KF, Carroll KM. We don't train in vain: A dissemination trial of three strategies of training clinicians in cognitive-behavioral therapy. J Consult Clin Psychol. 2005; 73:106-15.

10. Simons AD, Padesky CA, Montemarano J, et al. Training and dissemination of cognitive behavior therapy for depression in adults: A preliminary examination of therapist competence and client outcomes. J Consult Clin Psychol. 2010; 78:751-56.

11. Herschell AD, Kolko DJ, Baumann BL, Davis AC. The role of therapist training in the implementation of psychosocial treatments: A review and critique with recommendations. Clin Psychol Rev. 2010; 30:448-66.

12. Beidas RS, Edmunds JM, Marcus SC, Kendall PC. Training and consultation to promote implementation of an empirically supported treatment: A randomized trial. Psychiatr Serv. 2012; 63:660-5.

13. Bearman SK, Weisz JR, Chorpita BF, et al. More practice, less preach? The role of supervision processes and therapist characteristics in EBP implementation. Adm Policy Ment Health. 2013; 40:518-29.

14. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). Arlington, VA: American Psychiatric Publishing, Inc.; 1994.

15. Aggarwal NK. The psychiatric cultural formulation: Translating medical anthropology into clinical practice. J Psychiatr Pract. 2012; 18:73-85.

16. Hansen H, Dugan TM, Becker AE, et al. Educating psychiatry residents about cultural aspects of care: A qualitative study of approaches used by U.S. expert faculty. Academic Psychiatry. 2013; 37:412-6.

17. Lewis-Fernández R, Aggarwal NK, Bäärnhielm S, et al. Culture and psychiatric evaluation: Operationalizing cultural formulation for DSM-5. Psychiatry. 2014; 77:130-54.

18. Lewis-Fernández R, Aggarwal NK. Culture and psychiatric diagnosis. Adv Psychosom Med. 2013; 33:15-30.

19. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). Arlington, VA: American Psychiatric Publishing, Inc.; 2013.

20. Napier AD, Ancarno C, Butler B, et al. Culture and health. Lancet. 2014; 384:1607-39.

21. Beidas RS, Kendall PC. Training therapists in evidence-based practice: A critical review of studies from a systems-contextual perspective. Clin Psychol Sci Prac. 2010; 17:1-30.

22. Carroll KM, Martino S, Rounsaville BJ. No train, no gain? Clin Psychol Sci Prac. 2010; 17:36-40.

23. Powell BJ, Proctor EK, Glass JE. A systematic review of strategies for implementing empirically supported mental health interventions. Res Soc Work Pract. 2014; 24:192-212.

24. Edmunds JM, Beidas RS, Kendall PC. Dissemination and implementation of evidence-based practices: Training and consultation as implementation strategies. Clin Psychol Sci Prac. 2013; 20:152-65.

25. Palinkas LA, Horwitz SM, Chamberlain P, Hurlburt MS, Landsverk J. Mixed-methods designs in mental health services research: A review. Psychiatric Services. 2011; 62,:255-63.

26. Krippendorff K. Content Analysis: An Introduction to Its Methodology. Thousand Oaks, CA: Sage Publications; 2013.

27. Hsieh H.-F, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res. 2005; 15:1277-88.

28. Aggarwal NK, DeSilva R, Nicasio AV, Boiler M, Lewis-Fernández R. Does the Cultural Formulation Interview for the fifth revision of the diagnostic and statistical manual of mental disorders (DSM-5) affect medical communication? A qualitative exploratory study from the New York site. Ethn Health. 2013; 20:1-28.

29. Casillas A, Paroz S, Green AR, Wolff H, Weber O, Faucherre F, et al. Cultural competency of health-care providers in a Swiss University Hospital: Self-assessed cross-cultural skillfulness in a cross-sectional study. BMC Med Educ. 2014; 14:19.

30. Cormack S, Furnham A. Psychiatric labelling, sex role stereotypes and beliefs about the mentally ill. Int J Soc Psychiatry. 1998; 44:235-47.

31. van Loon A, van Schaik DJ, Dekker JJ, Beekman AT. Effectiveness of an intercultural module added to the treatment guidelines for Moroccan and Turkish patients with depressive and anxiety disorders. BMC Psychiatry. 2011; 11:13.

32. Beidas RS, Edmunds JM, Marcus SC, Kendall PC. Training and consultation to promote implementation of an empirically supported treatment: A randomized trial. Psychiatr Serv. 2012; 63:660-5.

33. Adeponle AB, Thombs BD, Groleau D, Jarvis E, Kirmayer LJ. Using the cultural formulation to resolve uncertainty in diagnoses of psychosis among ethnoculturally diverse patients. Psychiatr Serv. 2012;63: 147-53.

34. Aggarwal NK, Rosenheck RA, Woods SW, Sernyak MJ. Race and long acting antipsychotic prescription at a community mental health center: A retrospective chart review. J Clin Psychiatry. 2012; 73:513-7.

35. Aggarwal NK, Rohrbaugh RM. Teaching cultural competency through an experiential seminar on anthropology and psychiatry. Acad Psychiatry. 2011; 35:331-4.

36. Rakovshik SG, McManus F. Establishing evidence-based training in cognitive behavioral therapy: A review of current empirical findings and theoretical guidance. Clin Psychol Rev. 2010; 30:496-516.

37. Verduin ML, Boland RJ, Guthrie TM. New directions in medical education related to psychiatry. Int Rev Psychiatry. 2013; 25:338-46.

38. Parboosingh IJ, Reed VA, Caldwell Palmer J, Bernstein HH. Enhancing practice improvement by facilitating practitioner interactivity: New roles for providers of continuing medical education. J Contin Educ Health Prof. 2011; 31:122-7.

39. Lewis-Fernández R, Aggarwal NK, Hinton L, Hinton DE, Kirmayer LJ. DSM-5 Handbook on the Cultural Formulation Interview. Arlington, VA: American Psychiatric Publishing, Inc.; 2016.

40. Aggarwal NK. Clinical implementation of the Cultural Formulation Interview: planning and assessment. In: Lewis-Fernández R, Aggarwal NK, Hinton L, Hinton DE, Kirmayer LJ, editors. DSM-5 Handbook on the Cultural Formulation Interview. Arlington, VA: American Psychiatric Publishing, Inc.; 2016. pp. 191-207.

41. Bassiri KG, Soriano AT. Clinical implementation of the Cultural Formulation Interview: administrator perspectives on the implementation and use of the Cultural Formulation Interview. In: Lewis-Fernández R, Aggarwal NK, Hinton L, Hinton DE, Kirmayer LJ, editors. DSM-5 Handbook on the Cultural Formulation Interview. Arlington, VA: American Psychiatric Publishing, Inc.; 2016. pp. 208-223.

Table 1: Educational Methods Named Most/Least Helpful (N=75)

	Most helpful		Least helpful	
	n	%	n	%
Active methods				
Behavioral simulations	25	33.3	2	2.7
Expert coaching and feedback	0	0	0	0
Question/answer session	0	0	0	0
Passive methods				
Video	11	14.7	11	14.7
Reviewing written guidelines	4	5.3	0	0
Multiple methods named				
Video demonstration and behavioral simulation (mixed)	12	16	0	0
Overall training package (mixed)	5	6.7	9	12
Reviewing written guidelines and video (all passive)	3	4	0	0
Reviewing written guidelines and question/answer session (mixed)	2	2.7	0	0
Behavioral simulation and coaching (all active)	1	1.3	0	0
Behavioral simulation and question/answer session (all active)	1	1.3	0	0
Video demonstration and coaching (mixed)	1	1.3	0	0
Answer irrelevant (questions about field trial procedures)	8	10.7	15	20
Nothing named	0	0	38	50.7
Missing data	2	2.7	0	0

Note: "Mixed" denotes a combination of active and passive methods