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A comparison of provider perspectives on cultural competency training: A mixed methods study

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ABSTRACT

Background: We aimed to identify differences in training among colorectal cancer physicians and advanced practice providers with high and low cultural competency
Methods: Using explanatory sequential mixed methods, we surveyed providers and dichotomized into high and low cultural competency (CC) groups, conducted qualitative interviews, and analyzed verbatim transcripts using deductive and inductive codes to compared findings across groups using a joint display.
Results: Fifty-four of 92 providers (59%) responded; 10 respondents from each group (20/36 invited) completed semi-structured interviews about previous CC trainings. Low CC providers' training included explanations of cultural differences that, in practice, improved awareness and utilization of communication tools, but they also desired decision-making tools and cultural exposure. High CC providers' training included action-oriented toolkits. In practice, they admitted failures, improved communication, and attributed patient behaviors to external factors. High CC providers desired performance evaluations.
Conclusions: Behaviorally-oriented CC training offered a robust foundation for culturally competent care.

Introduction

Although racial/ethnic disparities in colorectal cancer (CRC) outcomes have decreased recently, black Americans still have 40% higher mortality than whites and this pervasive disadvantage is not entirely due to socioeconomic status.[1,2] Even after adjusting for income, education, and insurance, black-white differences in mortality persist and may be related to differences in utilization of care and contextual factors, which have been linked to the patient-provider relationship and provider cultural competency.[3–6]

Cultural competency, defined as a continuum of attitudes, knowledge, and skills at both the healthcare system level and at the patient-provider level, aims to provide quality care, improve equity, and reduce disparities for people of color and other disadvantaged populations.[7] Highly culturally competent healthcare systems have a greater ability to adapt to the needs of diverse groups of patients, resulting in more equitable care and better outcomes.[8] At the patient-provider relationship level, highly culturally competent providers participate in more effective patient-physician communication which can increase trust and improve adherence to provider recommendations.[9,10] Cultural competency training has been integrated across the learning spectrum: standards for medical student cultural competency training, legislation for statewide continuing medical education requirements, and federal e-learning training modules.[11]

Current cultural competency training programs range from immersive experiences to online training with a large variation in conceptualization and implementation.[12] The absence of standard curricula, however, has led to variable outcomes[13,14] and the related need for research to identify effective teaching methods and content.[12,15] Our objective in the current study was to compare the experiences and behaviors of high and low cultural competency providers to help guide the development of effective future programs.

Methods

We conducted an explanatory sequential mixed methods study[16] of colorectal cancer providers, using a previously developed

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survey of cultural competency to dichotomize participants into high and low cultural competency groups and semi-structured interviews to elicit perspectives on how their training experiences prepared them to provide culturally competent patient care. We included physicians, advanced practice providers, and nursing providers from colorectal surgery, gastrointestinal oncology, radiation oncology, and gastroenterology departments from a multidisciplinary cancer clinic. Providers were recruited via email to participate in a study on communicating with diverse patients. This study was approved by the Stanford Institutional Review Board as an expedited protocol.

Quantitative data collection

Providers who met inclusion criteria were invited to complete the Cultural Competency Assessment using maximum variation sampling.[17,18] The tool has previously been used in healthcare settings for the purpose of measuring cultural competency in populations with a wide range of educational levels and backgrounds and has undergone extensive psychometric evaluation. The Cultural Competence Behaviors (CCB) subscale measures culturally competent actions, such as focusing cultural assessments, asking about expectations for care, adapting interventions to respect cultural practices, and seeking additional resources. The Cultural Awareness and Sensitivity (CAS) subscale measures sensitivity to culture and different cultural expressions across groups. The 25 questions were scored between 1 and 7 and were averaged by subscale. Providers were dichotomized into high or low cultural competency on the CCB with a cutoff at the 50th percentile due to wider distribution of average scores.

Qualitative data collection

We used purposeful sampling to recruit providers located at the on-campus site in the cancer center. Among eligible providers, interview participants were selected using criterion-based purposeful sampling[19] to achieve thematic saturation from at least 10 participants from each cultural competency group. We also ran a Kruskal-Wallis test to compare the group of participants who were interviewed vs those that we did not interview to ensure similarity in age and race. A trained interviewer who was blinded to the Cultural Competency Assessment scores conducted semi-structured interviews using an iteratively-developed guide focused on the content, impact, and desired features of cultural competency trainings at the school level as well as on-the-job trainings. Interviews were conducted in a private setting, audio-recorded with participant consent, and transcribed verbatim by a professional service.

We used an iterative process to develop the codebook, using Dedoose (Version 8.2.14 Los Angeles CA) to manage the qualitative data. Initially, we deductively defined codes from the conceptual framework on patient centeredness, cultural competency, and healthcare quality.[7] Next, we inductively added codes, using participant data to include emergent ideas. An inter-rater reliability test assured stable code application between the two coders (Cohen's kappa = 0.76), and we applied the final codebook to all transcripts. After conducting team-based thematic analysis, we compared thematic findings across dichotomized participants based on their high and low cultural competency scores. We integrated the quantitative and qualitative findings as joint display tables, presenting themes shared by all providers and also by high and low cultural competency groups. We validated[16,20] findings by (1) triangulation across data sources, (2) searching all data for disconfirming evidence, and finally (3) mapping our themes onto a conceptual framework adapted from Entwistle.[21]

Results

Fifty-four of 92 providers completed the initial survey (response rate 59%). For this study, we invited twenty of 36 participants to complete the semi-structured interview (Table 1). The majority of providers were female (80%) and the mean age was 45 (SD = 12). Twelve providers self-identified as White, four as Asian, two as Hispanic, and one as Black; 25% were physicians, 30% were Advanced Practice Providers, and 45% were Nurse Coordinators. Among survey respondents who were invited to participate in the qualitative interviews, participants and non-participants were similar in age ($H = 2.64$, $p = 0.10$) and race ($H = 0.006$, $p = 0.94$). There was no significant correlation between job titles and gender or race among interview participants (all $p > 0.05$). The average Cultural Competence Behavior (CCB) subscale score was 4.5, and participants were dichotomized into providers in high (mean score 5.3, n = 10) or low (mean score 3.6, n = 10) cultural competency (CC) groups.

Our thematic analysis revealed six themes embedded within three domains: (1) content of previous CC training, (2) impact of previous CC training, and (3) desired CC training.

Domain 1: Content of previous cultural competency training

All providers reported previous participation in training on bias recognition and communication skills (Table 2). Providers in the low CC group described training that enabled acknowledgement of cultural differences and recognition of their own biases. Providers in the high CC group described learning about practical toolkits to implement actionable changes in their practice.

Theme 1.1: Training materials

We defined training materials as the medium through which providers learned about cultural competency. Providers from both groups participated in trainings focused on the *recognition of biases* and *enhancement of communication skills*. More providers in the low CC group reported participating in implicit bias training than those in the high CC group. Participants learned how unconscious biases might present itself in their communications in practice and valued learning about appropriately connecting with patients across different cultures.

Many providers in the low CC group recalled participating in definition-based, culture-specific training that focused on the *explanation of cultural differences*, with little training in interaction with a variety of patients across different cultural backgrounds.

By comparison, providers from the high CC group described trainings that were scenario-based, with *incorporation of practical toolkits* across different cultures. These toolkits focused on how cultural values should be addressed in a clinical setting, such as providing culturally appropriate care with bereaved family members or navigating blood transfusion preferences. These scenario-based education tools promoted their development of actionable strategies while navigating and interacting with patients from different cultural backgrounds.

Theme 1.2: Training goals

We defined training goals as the objective of the cultural competency training. Both provider groups described trainings that tended to focus on patient-centered care, specifically the *individualization of care*. Providers were trained to "not generalize based on preconceived ideas" (P11, Nurse Coordinator), but instead to ask for and listen to the patient's story.

Providers in the low CC group described learning about

Table 1
Demographics of interviewed providers by level of cultural competence (CC).

Characteristics	Low CC Provider	High CC Provider	All Providers	CC Behaviors Score
	n = 10	n = 10	n = 20	Mean (SD)
Gender				
Male	2	2	4	4.0 (1.12)
Female	8	8	16	4.6 (1.09)
Age mean (SD)	42 (10)	46 (16)	45 (12)	
Race				
White	6	6	12	4.5 (1.06)
Hispanic	1	1	2	4.3 (1.52)
Asian	2	2	4	4.1 (0.98)
Black	0	1	1	6.6 (—)
Other	1	0	1	4.1 (—)
Job Title				
Physicians	2	3	5	4.1 (0.70)
Advanced Practice Providers (NP, PA, RN)[c]	5	1	6	3.7 (0.79)
Nurse Coordinators	3	6	9	5.1 (1.12)
Department				
Colorectal Surgery	4	3	7	4.07 (1.24)
GI Oncology	6	7	13	4.66 (1.00)
Cultural Competency Assessment (CCA)				
Cultural Awareness & Sensitivity Score, mean (SD)[a], $p < 0.001$	6.1 (0.28)	6.3 (0.47)	6.2 (0.39)	
Cultural Competence Behaviors Score, mean (SD)[b], $p = 0.29$	3.6 (0.43)	5.3 (0.76)	4.5 (1.09)	
Total CCA Score, mean (SD), $p < 0.001$	9.6 (0.61)	11.6 (0.89)	10.6 (1.25)	

[a] Cultural Awareness & Sensitivity Subscale – measured on a 7-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). All participants averaged "agree".[17,18].
[b] Cultural Competence Behaviors Subscale – measured on a 7-point Likert-like frequency scale, ranging from never (1) to always (7). Providers with low CC averaged "sometimes" to "often" while providers with high CC averaged "somewhat often".[17,18].
[c] NP: Nurse Practitioner; PA: Physician's Assistant; RN: Registered Nurse.

acknowledgement of bias and cultural differences, including identifying their own assumptions and describing differences between cultural groups. Most of these providers felt that they learned to be more sensitive and to recognize their own biases. A common experience of providers in the high CC group was about the *implementation of action based on training* by focusing on changing their behaviors to deliver culturally-appropriate care and communicate with their patients.

Domain 2: Impact of previous CC training

Providers reported a direct impact of CC trainings on their practice, including behavioral changes and attribution of patient behavior (Table 3). After training, all providers instituted self-assessments to evaluate their biases. Providers in the low CC group utilized communication tools to clarify information with patients and attributed patient behavior primarily to culture, while providers in the high CC group tended to admit their failures, incorporate principles of patient-centered communication, and attribute patient behavior to situational factors.

Theme 2.1: Behavioral changes

We defined behavioral changes as actions providers instituted after participating in cultural competency training. All providers *recognized the need for "self-checks"* by "instituting a mental double

Table 2
Content of previous cultural competency (CC) training.

Theme 1.1: Training Materials – Medium through which providers learned about cultural competency
Shared Perspectives
Recognition of Bias **-** *"pointing out that we all have biases and it's not about being completely bias-free, but just about recognizing it" (P12, Surgeon)*
Enhancement of Communication Skills **-** *"Emphasizing the fact that different cultures communicate differently and have different value sets. And how to recognize, communicate in a way that it's non-offensive to people." (P19, Registered Nurse)*
Low CC Provider Perspectives
Explanation of Cultural Differences **-** *"a lot of definitions between culture and ethnicities and how you untangle those and personalize your care to a patient and what sort of questions to ask" (P11, Nurse Coordinator)*
High CC Provider Perspectives
Incorporation of Practical Toolkits **-** *"They went into tremendous detail about papers on different cultures and the cultures faith, the cultures view of life, the religious feelings, and how that you had to take that into account when you were taking care of a patient…religions and some religions don't like transfusions and follow different protocols." (P20, Nurse Coordinator)*
Theme 1.2: Training Goals – The objective of the cultural competency training
Shared Perspectives
Individualization of Care **-** *"ask questions to understand patients' individual preference in a sensitive fashion" (P11, Nurse Coordinator)*
Low CC Provider Perspectives
Acknowledgement of Bias and Cultural Differences **-** *"[the training lead] gave the power point of what your biases are and broke us up into little groups and had different exercises regarding how we look at a picture and what we automatically assume" (P3, Physician's Assistant)*
High CC Provider Perspectives
Implementation of Action Based on Training **-** *"talked about ways to try to counteract implicit bias to be able to deliver care that was more standardized and equitable and that took into account unconscious tendencies that you might have as a consequence of implicit bias." (P16, Physician)*

Table 3
Impact of previous cultural competency (CC) training.

Theme 2.1: Behavioral Changes – Actions providers instituted after receiving cultural competency training
Shared Perspectives
Recognition of the Need for "Self check" *- "I think just making me more aware of the fact that I had biases as well. And, like, if I feel like I'm getting annoyed or something like that, just stop and be like, 'Is there something going on here that has to do with, race, or age, or gender, or something like that?' Am I making judgments about people based on what I see? So I think it's just heightened my awareness and I question a lot of my assumptions, too." (P12, Surgeon)*
Low CC Provider Perspectives
Adaptation of Communication Methods *- "[communicate] not just verbally but maybe write more, getting more diagrams and then you can see the looks on their faces. Their reaction that, 'Okay, now I know that they are not understanding it at this particular level.'" (P14, Nurse Practitioner)*
High CC Provider Perspectives
Admission of Failures *- "I think over time my communication is kind of going back the way it was." (P5, NP)*
Creation of Open Dialogue *- "getting the conversation started to think about that sort of thing was really beneficial. Even if I was working in a community that was primarily Caucasian it's still good to open up that conversation so that you are aware of how you're interacting with people and what your own perceptions are and how that affects patient care and how you deliver care." (P9, Nurse Coordinator)*
Theme 2.2: Patient Behavior Attribution – How providers characterized patients' actions
Shared Perspectives
None
Low CC Provider Perspectives
Attribution of Patient Behavior Primarily to Culture *- "I feel like people have a different perception of what health means for them and how they interact with the medical community, so I have that in mind when I go in and see any patient. But I don't know where [patients are] coming from and I do try to figure that out." (P3, Physician's Assistant)*
High CC Provider Perspectives
Attribution of Patient Behavior to Situational Factors *- "I think it's just having more patience with the patients and not trying to judge where they're coming from, or how they look or how they present themselves in clinic because they're going through hard times … I usually try to give them benefit of the doubt. Even if [patients] comes out as angry, irate patients, I try not to link that to anything according to their demographics" (P8, Nurse Coordinator)*

check" (P16, Physician) before, during, and after a patient encounter to ensure delivery of equitable care to all patients. These "self-checks" incorporated the following practices: being present, slowing down, and thinking critically about their interactions.

Providers in the low CC group described behavioral changes that were focused on the patient-physician interaction and utilized implicit signs such as patients' body language and facial expression to *adapt communication methods*. They adapted patient education skills based on patient reactions, such as using diagrams and changing "verbiage used in explanations" (P6, Nurse Practitioner [NP]). One provider described avoidant behavior, where the provider allowed patients to "opt for different providers [who would] keep [the patient's] values [while creating] the treatment plan" rather than find ways to address the differences in values (P6, NP).

Providers in the high CC group described behavioral changes that were focused on self-improvement to identify changes they needed to make. These providers were more cognizant of progress and *admitted to failures*, such as regressing communication skills and having biases against the provider's "own people". Furthermore, providers in the high CC group fostered the *creation of open dialogue* by explicitly asking colleagues and patients to provide honest feedback on their interactions and biases. In our search for disconfirming evidence, we found that one provider in the low CC group also exhibited creating open dialogue by "asking patients" (P1, NP).

Theme 2.2: Patient behavior attribution

We defined patient behavior attribution as the ways that providers characterized patients' actions. There were no shared characteristics between the two groups of providers. Providers in the low CC group were more likely to *attribute patient behavior primarily to culture*, or their inherent being, while providers in the high CC group tended to *attribute patient behaviors to situational factors*. Rather than judging the patient's personality and background, providers in the high CC group tended to "give [the patient] the benefit of the doubt" (P8, Nurse Coordinator) and understand that stressors they are facing may contribute to the patient's disposition.

Domain 3: Desired CC training

Reflecting on prior cultural competency trainings, providers reported needing additional structural support to enhance their culturally competent practice and increasing the quality and content of trainings (Table 4). All providers requested ongoing training and incorporation of more personal anecdotes. Providers in the low CC group focused on cultural competency decision-making tools and detailed knowledge of different cultures; providers in the high CC group wanted more tools to incorporate patient feedback and establish team debriefs.

Theme 3.1: Increased structural support

We defined structural support as new additions to the current workflow. There were no commonalities between provider groups in the structural support desired. Providers in the low CC group wanted an *introduction of cultural competency decision-making tools* to assess patients' cultural preferences. Providers desired a standard, scenario-specific approach to culturally competent practice, such as patients' perspectives on stomas and cleanliness. One provider in the low CC group, however, mentioned that team debriefs would be a way to allow everyone in the department to improve, with "more transparency around some of these [issues of discrimination], what the situation was, and how the institution responds. Issues of discrimination are unacceptable, and it should be an overt thing and not covered up" (P10, NP). Overall, providers in the low CC group wanted to use tools and protocols in the clinical setting to personalize care based on patient preferences and cultural background.

Providers in the high CC group desired structural support in the form of *incorporation of patient feedback* and *establishment of team debriefs*. Providers wanted to elicit patient feedback so that they could "address [patient] concerns" (P12, Surgeon). Additionally, providers in the high CC group considered team debriefs as teaching opportunities on how to improve future patient interactions. Ultimately, providers in the high CC group integrated their CC training into the clinic workflow to continue their learning while in the clinic setting.

Table 4
Desired cultural competency (CC) training.

Theme 3.1: Increased Structural Support – New additions to the current workflow
Shared Perspectives
None
Low CC Provider Perspectives
Introduction of Cultural Competency Decision-making Tools - *"I think making it a protocol, like having a cultural assessment actually thinking about these things" (P3, Physician's Assistant)*
High CC Provider Perspectives
Incorporation of Patient Feedback - *"I think it'd be so interesting to know what the patients thought. Just to have some feedback on how comfortable [patients] feel with [their] doctor or some awareness of what is it like for a patient to have an Asian female physician or an Asian female surgeon so that I could address their concerns, because they're probably not [going to] tell me" (P12, Surgeon)*
Establishment of Team Debriefs - *"Delve into it and do debriefing or case scenarios where we take specific instances that we've encountered and kind of dissect it and just really open up the conversation about what our personal biases are and how that affects our interactions with patients." (P9, Nurse Coordinator)*
Theme 3.2: Improved Quality and Content of Trainings – Desired improvements to the training
Shared Perspectives
Continuation and Repetition of Training - *"Would be great possibly as a repeated event … you may not remember from year to year what the samples may have been, but you can see if there any changes to how you may have process similar situation." (P6, Nurse Practitioner)*
Incorporation of Personal Experience Anecdotes - *"having representatives from different cultural backgrounds [talk about] how [they] perceive healthcare … will be a big improvement so we can interact with [patients] and relate." (P14, Nurse Practitioner)*
Low CC Provider Perspectives
Detailed Knowledge of Different Cultures - *"I think if they had more people of different cultures coming to those workshops to explain as opposed to just a person standing up in the front and saying, 'This culture is like this, and this culture is like this'." (P1, Nurse Practitioner)*
High CC Provider Perspectives
None

Theme 3.2: Improved quality and content of trainings

We defined quality and content of trainings as the desired improvements to the training. All providers desired *continuation and repetition of training* and *the incorporation of personal experience anecdotes*. By increasing training frequency, at least more than once per year, providers could stay current and track their personal growth since the last training. Additionally, providers wanted trainings to include sharing personal stories, since providers felt that trainings in the past were impersonal and held to "check a box".

Providers in the low CC group described a desire to acquire *detailed knowledge of different cultures*, for example through case presentations and discussion of cultural backgrounds. They characterized prior trainings as too strictly based on definitions. One provider in the high CC group also expressed a desire for increasing knowledge of different cultures and suggested one way to increase exposure is through "a day where we eat Indian food for lunch and discuss [Indian culture] and make it a very comfortable conversation" (P18, Nurse Coordinator). Another provider in the high CC group desired more evidence-based guidelines, because he felt uncomfortable instituting a mental "double check" to keep his biases out of the interaction since he did not know what those biases looked like in his field.

Discussion

In this mixed methods study of providers in a multidisciplinary cancer clinic, we found some similarities and a number of differences between providers with objectively low and high cultural competency (CC) with regard to the content and impact of previous training. Our findings across six themes suggest that a marked difference exists between groups, with providers in the low CC group focused on changing attitudes while providers in the high CC group focused on changing behaviors.

Our findings are congruent with an extant conceptual framework, Entwistle's Conceptions of Learning,[21] (Fig. 1) which describes a continuous spectrum of approaches to learning. The spectrum ranges from a superficial understanding to transformative, action-oriented understanding of the material. In the context of this study, providers in the low CC group described the impact of training at the "repeating" stage, in which they were introduced to and utilized tools to help improve the system, but did not describe attitudinal change. Providers in the high CC group often described the impact of their training at the "transforming" stage, by adoption of a continuous improvement mindset by application of new skills to their practice. Stages in the Concept of Learning Model align with our empirical data from providers' Cultural Awareness and Sensitivity (CAS) and Cultural Competence Behaviors (CCB) scores; although both groups of providers scored high on self-reported awareness, they differentiated in self-reported behaviors. In our modified conceptual framework, providers in the low CC group diverged at the application stage of learning and tended to repeat learned behaviors, whereas high CC providers continued along the spectrum of learning and transformed their behaviors through adaptation based on feedback and continuous improvement practices. These behavioral differences are aligned with and reflect our quantitative findings of notable variation and subsequent division of providers based on the CCB scores.

Finally, we found that all providers desired structural additions to future CC trainings and general practice that would enhance cultural competency. Providers in the low CC group wanted tools that would support all practitioners in providing standardization while providers with high CC wanted changes focused on specific individual improvement. Our findings are supported by the Adult Learning Theory, in which adults learn best when they can self-assess and direct their own learning.[22]

Our study was subject to several limitations. First, it is possible that some providers' perspectives were not represented and we mitigated this by achieving thematic saturation across the two cultural competency groups prior to completing all of the interviews for each group. Second, during the interview, it is possible that the interviewer's body language influenced participant's responses although the reviewer was blinded to CAS and CCB scores. Third, this study is from a single center and therefore is not necessarily generalizable to other centers in different regions with different patient populations. However, we note that the goal of qualitative research is to describe explanatory mechanisms and phenomena that are otherwise unavailable and therefore

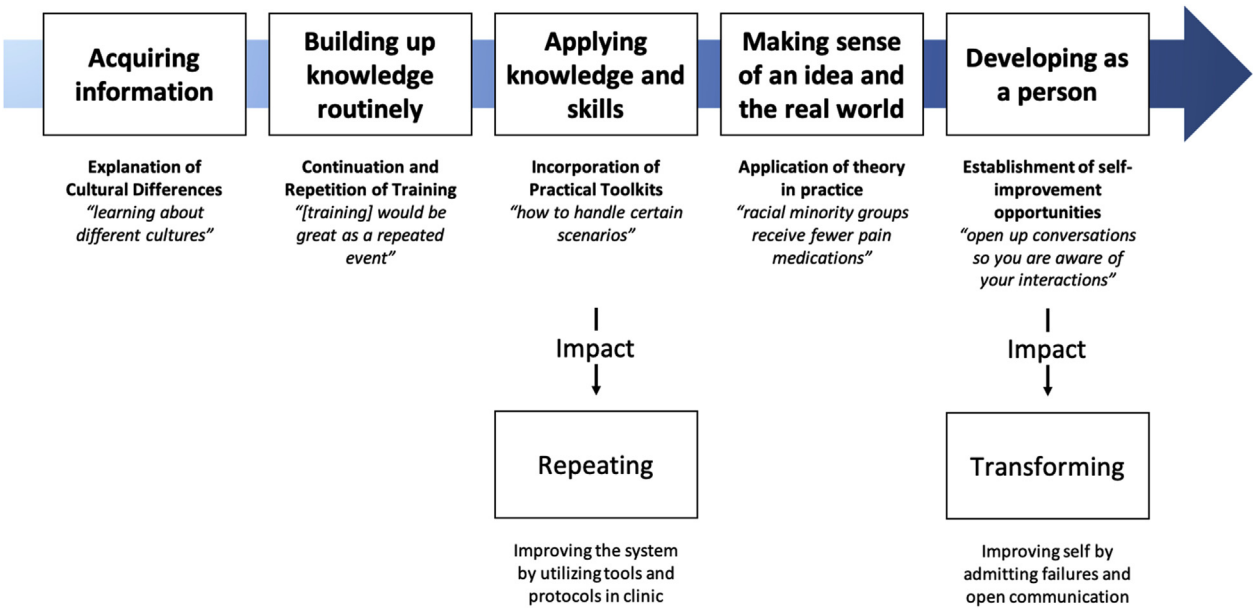

Fig. 1. Conceptions of Learning Cultural Competency in Colorectal Cancer Providers. *Adapted from Entwistle* et al., *2000.*

describing the population mean and distribution to establish generalizability is neither possible nor desired. Fourth, our study participants were predominantly female, however, the gender ratio is representative of healthcare providers in the United States.[23] It is also possible that the use of self-assessments may not be a reliable method of assessing behaviors, however, this assessment has been used in other healthcare settings for those specific purposes and the value of self-assessment in understanding readiness for change has been well supported in existing literature.[24] Finally, the study team may have been subject to bias. To reduce this risk, we examined the data in multiple iterations, triangulated our findings, searched for disconfirming evidence, and identified an established conceptual framework that matched our findings *after* we analyzed the empirical data.

Conclusion

Our findings offer an important contribution to the development of future cultural competency trainings focused on action-based change. Future cultural competency trainings must transcend from definition-based to action-based, practical experiences to encourage lifelong learning for healthcare providers with the goal of improving care for diverse patients. Our next steps include understanding the influences of informal training on cultural competency, identifying the formal trainings these providers received and correlating those experiences with what providers reported, expanding this study to include other specialties and other institutions, and creating a training program that incorporates these findings and measures provider cultural competency.

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Declaration of competing interest

There is no conflict of interest.

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