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**CULTURAL COMPETENCY IN HEALTH CARE:
FRAMEWORKS, TRAINING AND EVALUATION**

A REVIEW OF THE LITERATURE

**PREPARED FOR THE CULTURE INSIGHT PROGRAM OF THE
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CULTURAL COMPETENCY IN HEALTH CARE: FRAMEWORKS, TRAINING AND EVALUATION¹

Overview

Cultural competency has emerged as a framework for understanding health disparities. There are several definitions of the cultural competency—each emphasizing the need for healthcare systems and providers to be aware of, and responsive to patients’ cultural perspectives and backgrounds. This review outlines cultural competency in healthcare systems, conceptual approaches to cultural competency training, evaluations of cultural competency training programs, in addition to criterion and factors for evaluating training programs more generally.

Cultural competency in healthcare systems can be manifest in three distinct ways: *organizational*, focusing on the hiring and promotion of culturally diverse staff; *systemic*, focusing on eliminating institutional barriers to care and improving the healthcare systems ability to monitor and improve the quality of care; and lastly, *clinical*, focusing on enhancing health professionals’ awareness of cultural issues, beliefs, and to introduce methods to elicit, negotiate, and manage this information. Although organizational and systemic cultural competencies are important, there is an emphasis on the need to train practitioners as they interact directly with patients.

There are three conceptual approaches to cultural competence training programs. *Knowledge-based* trainings focus on providing information such as definitions about culture, the social determinants of health model, and disparities in disease incidence and prevalence. *Attitude-based* trainings focus on improving provider’s awareness of the impact of socio-cultural factors on patient’s values and behaviors, and how these may affect care. *Skill-building* trainings focus on learning communication skills with both patient and culturally specific communities. Although few studies find direct links between cultural competency trainings and healthcare improvement, evidence suggests these trainings influence knowledge, attitudes, and skills of health professionals, as well as patient satisfaction. Evaluations of trainings vary depending on conceptual approach. Knowledge-based programs can use pre/post-test designs, unknown clinical cases, presentation of clinical cases, and objective structural clinical exams (OSCE) as measurements tools. Attitude-based trainings can use surveys, interviews, self-awareness assessment, presentation of clinical of clinical cases, and OSCE to assess attitude changes. Skill-building trainings use presentation of clinical cases, OSCE, and recordings of clinical encounters as methods for evaluation.

Research on the evaluation of training programs suggests multiple steps in organizing an effective evaluation of trainings. Training program evaluations start with the basic Kirkpatrick four-level model: 1) reaction – how learners feel about instruction, use written comment sheets; 2) learning – learner performance on in-class test, a pre/post approach; 3) behavior –

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the extent to which learners implement, transfer what they learned in class, use systematic appraisals of performance on a pre/post basis; and 4) results – organizational benefits, stated in terms of organizational performance or return on investment derived from a course, use a control group. Modifications to this model include specifying the level of evaluation intended, short-term (Level 1 & 2) or long-term (Level 3 & 4), as well as the factors that influence training transfer such as trainee and trainer characteristics, and organizational climate.

Introduction

Healthcare professionals are now more aware of the challenges they face when providing healthcare services to a culturally and racially diverse population. Cultural competency has emerged as a framework for understanding health disparities among racial and ethnic groups in particular (Anderson et al., 2003; Betancourt et al., 2002; Bhui, 2007; Brach & Fraserirector, 2000; Crenshaw et al., 2011; Price, 2005), but also for women, the elderly, sexual orientation and gender identity, people with disabilities, and religious minorities (Brach & Fraserirector, 2000; Crenshaw et al. 2011; Price, 2005). Although there are several definitions of cultural competency, each emphasizes the need for healthcare systems and providers to be aware of and responsive to patients' cultural perspectives and backgrounds (Anderson et al., 2003; Betancourt et al., 2002). One example defines cultural competency as “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (Cross et al., 1989, as cited in Brach & Fraserirector, 2000). Cultural competency in healthcare is the ability of systems to provide care to patients regardless of their values, beliefs, and behaviors; and includes adapting to meet patients' social, cultural, and linguistic needs. The fundamental goal is a healthcare system and workforce that can deliver the highest quality of care to every patient, regardless of cultural background or English proficiency (Betancourt et al., 2002).

There is a need to deliver cultural competency in healthcare due to: the lack of diversity in healthcare leadership and employees; systems of care that are poorly designed for diverse patient populations; the lack of interpretation services or culturally and linguistically appropriate health education materials that lead to patient dissatisfaction, poor understanding of and adherence to treatments, and lower quality care; providers failing to understand socio-cultural differences between themselves and their patients, which in turn may lead to patient dissatisfaction, poor adherence to medication and health promotion strategies, and poorer health outcomes (Betancourt et al., 2002; Bhui, 2007; Brach & Fraserirector, 2000; Betancourt & Green, 2010). Also, it is thought that failure to take socio-cultural factors into account may resort to stereotyping which can alter healthcare providers' behavior and clinical decision-making (Betancourt et al., 2002). Lastly, a successful business model requires responsiveness to diverse patient populations as a means of attracting new patients and market shares (Betancourt et al., 2002).

Cultural Competency Frameworks

In 2000, the Office of Minority Health (OMH) at the US Department of Health and Human Services released the National Standards for Culturally and Linguistically Appropriate Services in

Healthcare (CLAS Standards) to address the inequities that exist in the provision of healthcare service and to provide a framework for common understanding and guides regarding cultural competence in healthcare (Pacheco, 2007). The CLAS Standards are organized by three themes: culturally-competent care, language-access services, and organizational supports. The OMH commissioned the development of Cultural Competency Curriculum Modules (CCCM's) as a tool to equip physicians with the cultural and linguistic competencies required to improve the quality of care for minority, immigrants, and ethnically diverse communities.

Betancourt (2002) outlines three levels of cultural competency in healthcare provision: organizational, systemic, and clinical. Organizational competence focuses on promoting people of color into positions of leadership in healthcare and recruiting them into health professions. System cultural competence recommends focusing on the elimination systemic or institutional barriers to care and improving the healthcare systems ability to monitor and improve the quality of care. Clinical cultural competency focuses on enhancing health professional awareness of cultural issues and health beliefs and provides methods to obtain, negotiate, and manage this information once obtained. Many health care professionals suggest that cultural competency training should be required providing an integrated component of the training and professional development of healthcare providers at all levels. The curriculum would: increase awareness of racial and ethnic disparities in health outcomes and the importance of socio-cultural factors on health beliefs and behaviors; identify the impact of race/ethnicity and culture on clinical decision-making; develop tools to assess the community member's health beliefs and behaviors; and develop skills for cross-cultural assessment, communication, and negotiation.

Other research outlines nine categories in which to place cultural competency in the healthcare system: 1) interpreter services, 2) recruitment and retention of staff of color, 3) training to increase cultural awareness, knowledge, and skills leading to changes in both staff behavior and patient-staff interactions, 4) coordination with traditional healers, 5) use of community health workers, 6) cultural competent health promotion, 7) including family and /or community members in healthcare decision making, 8) immersion into another culture helps participants overcome ethnocentrism, increase their cultural awareness, and integrate cultural belief into healthcare practices, and 9) administrative and organizational accommodations by taking into account clinic locations, hours of operation, network membership, physical environments, and written materials during decision-making processes (Anderson et al., 2003; Brach & Fraserirector, 2000).

Cultural Competency Training Models

Although it is important to tend to both organizational and systemic cultural competency deficiencies, focusing on training staff is thought to be critical given their direct interactions with patients. Clinical cultural competency training is a promising strategy for improving healthcare professionals knowledge, attitudes, and skills; and improving patient satisfaction (Anderson et al., 2003; Beach et al., 2005; Betancourt et al., 2002; Betancourt, 2010; Brach & Fraserirector, 2000; Bhui, 2007; Crenshaw et al., 2011; Kripalani, 2006; Price, 2005). Although training programs share common goals of improving physician-patient interactions and

reducing health disparities, they often differ in their content, setting, length, and frequency (Crenshaw et al., 2011; Kripalani, 2006). Different components of cultural competence can be taught through classroom lectures, workshops, electives, standardized patient exercises, clinical clerkships, immersion programs, and other interactive exercises (Kripalani, 2006). Most of this training for medical students occurs during the first or second years of medical school, commonly in a case-based or didactic format and is often absent from students' clinical rotations, when it might be most relevant. However, a small portion is dedicated to cultural competence as it relates to patient care (Beach et al., 2005; Betancourt et al., 2002; Betancourt, 2010; Brach & Fraserirector, 2000). Trainings primarily occur as an occasional lecture, case study, or workshop.

Three major conceptual approaches have emerged for teaching cultural competence: knowledge-based, attitude-based, and skill-building (Betancourt, 2003; Kripalani, 2006). *Knowledge-based trainings* (multicultural/categorical approach) focus on information, such as definitions about culture and related concepts, social determinants of health, and variations in disease incidence and prevalence. These programs may also identify common ethno-medical beliefs and practices thought to influence the patient-physician relationship and medical outcomes. While this type training is often highly sought out it has been criticized for being too population specific which may reinforce a variety of stereotypes or lack the necessary nuance of the intersection of health and culture. *Attitude-based trainings* (cultural sensitivity/awareness approach) seek to improve provider awareness of the impact of socio-cultural factors on patients' values and behaviors and how these factors may ultimately impact clinical outcomes. The curricula often use self-reflection and explore issues of racial and gender disparities. *Skill-building trainings* (cross-cultural approach) focus on learning communication skills, such as eliciting from the patient an explanation of their illness, and using an interpreter or cultural liaison. These skills are applied to negotiate the patient's participation in decisions and treatment (see Table 1).

Cultural competence has evolved from the categorical knowledge-based approach into an approach focusing on the development of a set of skills and a framework allowing clinicians to assess the individual patient – what socio-cultural factors might affect their care (Betancourt, 2003). Training under this approach provides clinicians with numerous skills they can use to provide better patient care: (1) methods, such as using the explanatory model which teaches clinicians to ask questions to elicit a patients understanding of their illness, (2) strategies for identifying and bridging different styles of communication, (3) skills for assessing decision-making preference and the role of family, (4) techniques to elicit patients perception of medicine and their use of complementary and traditional medicine, (5) tools for recognizing sexuality and gender issues, (6) mechanisms for negotiating, and (7) methods to bring awareness of the impact of race/ethnicity on clinical decision-making, and historical issues of mistrust and prejudice within racial/ethnic groups.

| Table 1. Betancourt, 2003 Conceptual Approaches to Culturally Competent Education | | | |
|--|--|--|--|
| Approach | Approach A Awareness/Sensitivity | Approach B Multicultural/Categorical | Approach C Cross-Cultural |
| Focus | Provider attitudes | Increasing provider knowledge of cross-cultural issues | Developing tools and skills for providers |
| Goal | Increased provider awareness of the impact of socio-cultural factors on individuals patients' health values, beliefs, and behaviors and ultimately on the quality of care and outcomes | Points out limits of previous focus on teaching unifying cultural characteristics (patients from culture x behave) | Process oriented instruction is used to meld medical interviewing and communication skills with socio-cultural and ethnographic tools of medical anthropology. |
| Topics | Explore and reflect on culture, racism, classism, sexism, as they relate to the provider and patient culture and how they may have an impact on clinical decision-making | Teach methods of community assessment and evidence based factors, these included disease incidence/ prevalence among groups, ethnopharmacology, and historical factors that might shape health behaviors | Foundation to care for diverse population is laid through the development of interviewing frameworks. These include eliciting patient conceptualization of illness (explanatory model), methods to assess patients' social context, and strategies for provider-patient negotiation and facilitation of participatory decision-making. |
| Time offered | Primarily taught in early in the first and second years of medical school | Taught throughout undergraduate medical education | Practical approach or the clinical years |

Prior research finds that successful interventions in changing performance and healthcare outcomes are those using practice-enabling strategies or reinforcing methods (Betancourt, 2010; Kripalani, 2006). The key areas for successful cultural competency training programs:

1. Specificity - focus on a particular condition (Betancourt, 2010); target a specific population (Betancourt, 2010); and teach a specific skill, i.e. a specific screening tool for non-adherence applied to a specific condition (Betancourt, 2010; Kripalani, 2006).
2. Teaching of practical skills, and use interactive methods such as standardized patient encounters, role-play, and self-reflective journal assignments (using the principles of adult learning), lead to practical skill learning (Kripalani, 2006).
3. Develop practice-enabling strategies such as prompts in the electronic medical record for providers to ask specific questions, algorithms for handling common cross-cultural challenges, instructional tool kits, as well as practical items that would facilitate the use of skills in the medical setting (Betancourt, 2010).
4. Provide direct faculty observation and feedback, for example, providing feedback on the student's ability to perform a skill such as eliciting the patient's understanding of the illness, review with the trainee a videotape of the trainee's standardized patient encounter or an actual patient encounter (Kripalani, 2006).
5. Create a patient component such as providing patients with a list of questions that providers are taught to ask (Betancourt, 2010).
6. Training programs should discuss cultural competence as a complex, lifelong process; therefore programs that address cultural competency throughout clinical education rather than isolated workshops yield better outcomes (Kripalani, 2006).
7. Get buy-in from the leadership in university, or institution (Kripalani, 2006).

8. Choose measures that support the evaluation of educational activities on health outcomes (Betancourt, 2010), such as: patient and physician satisfaction as a process measure to assess the satisfaction of both the patient and the physician with the clinical encounter concerning specific cultural competencies (Betancourt, 2010; Kripalani, 2006); processes of care measures and healthcare outcomes - that can be determined through a chart review – that determine the use of skill learned in clinical encounter by (Betancourt, 2010); and test ordering or utilization decisions are made using processes of care measures mentioned above (Betancourt, 2010).
9. Control for confounders for any study seeking to randomly assign clinicians to receive or not receive cross-cultural training and that then compares patient outcomes must all take into account patient panel characteristics (Betancourt, 2010).

Evaluation of Cultural Competency Trainings

Despite the increasing concern about racial and ethnic disparities and efforts to mandate cultural competency training, there is little information about the effectiveness of cultural competency training (Beach et al., 2005; Brach & Fraserirector, 2000; Crenshaw et al., 2011; Kripalani, 2006; Lie et al., 2010; Price, 2005). There is currently no consensus on how cultural competence should be taught in medical school curricula, as well as in other settings. Therefore considerable variability exists in design and implementation (Kripalani, 2006; Beach et al., 2005), and programs are therefore difficult to evaluate. It is postulated that increased cultural competence will lead to a reduction in racial/ethnic disparities in healthcare. However, few studies find direct links between cultural competency and healthcare improvement (Betancourt et al., 2002; Betancourt, 2010; Lie et al., 2010; Brach & Fraserirector, 2000; Crenshaw et al. 2011; Price, 2005).

Emerging evidence suggests that cultural competence interventions can impact the knowledge, attitudes, and skills of health professionals, as well as increases in patient satisfaction (Betancourt et al., 2002; Betancourt, 2010; Beach et al., 2005; Kripalani, 2006; Lie et al., 2010; Majundar, 2004; Mazor, 2002; McElmurry, 2009; Sequist, 2010; Thum, 2006; Way, 2002). The medical literature finds a direct relationship with the need to address language barriers between providers and patients, and train providers to care for diverse patient populations (Betancourt et al., 2002); but finds varied evidence of a causal relationship between the training and patient health outcomes (Beach et al., 2005; Betancourt et al., 2002; Kripalani, 2006; Lie et al., 2010; Sequist, 2010). Lie et al. (2010) scan the literature on evaluation of cultural competency trainings and find research indicating a positive relationship between increased cultural competency and improved patient outcomes, but few studies met rigorous standards. A review conducted by Beach et al. (2005) suggests that cultural competency training improves the knowledge, attitudes, and skills of health professionals. They find some evidence that increased cultural competency training impacts patient satisfaction, but little evidence that it improves patient adherence, and none evaluated health outcomes.

Table. 2 Beach et al. (2005) Evaluation of Cultural Competency Training Programs Methods and Outcomes

| Healthcare Professional | Evaluation Method | Provider Outcomes | | | Patient Outcomes | | |
|-------------------------|---|-------------------|-----------|--------|------------------|-----------|---------------|
| | | Knowledge | Attitudes | Skills | Satisfaction | Adherence | Health status |
| Physicians | Self-assessment forms | * | * | * | | | |
| | Written exams | * | * | | | | |
| | Participant ratings of curriculum | | * | * | | | |
| | Individual interviews or focus groups | * | * | * | | | |
| | Observer questionnaire | | | | | | |
| | Patient rating | | | * | * | | |
| | Essays | | * | * | | | |
| | Performance audits | | * | * | * | | |
| | Audio & Video | * | * | * | * | | |
| | MAQ-Multicultural Assessment Questionnaire | * | * | * | | | |
| Nurses | CAI-Cancer Attitude Inventory | * | * | * | | | |
| | PAS-Pittsburgh Attitude Survey | * | * | * | | | |
| | MER-Measure of Epistemological Reflection | * | * | * | | | |
| | CSES-Cultural Self-Efficacy Scale | * | * | * | | | |
| | TCSET-Transcultural Self-efficacy Tool | * | * | * | | | |
| | ECSA-Ethnic Competency Skills Assessment | * | * | * | | | |
| | MLSS-Michigan Longitudinal Study Scales | | | * | | | |
| | Self- assessment forms | * | * | * | | | |
| | Written exams | * | * | * | | | |
| | Participant ratings of curriculum | | * | * | | | |
| | Individual interviews/focus groups | * | * | * | | | |
| | Observer questionnaire | * | * | * | | | |
| Patient rating | | | * | * | | | |
| Other providers | CES-counselor effectiveness' scale | | | * | * | * | |
| | CRF- Counselor Rating Form | | | * | * | | |
| | B/L RI – Barrett – Lennard Relationship Inventory | | | * | * | | |
| | Self-assessment forms | * | * | * | | | |
| | Written exams | * | * | * | | | |
| | Curriculum ratings | | * | * | | | |
| | Individual interview/focus groups | * | * | * | | | |
| | Observations or questionnaires | * | * | * | | | |
| Patient rating | | | * | * | | | |

Betancourt (2010) develops a framework on how the impact of cultural competence on healthcare outcomes can be evaluated. Table 3 provides an outline of how different training approaches (knowledge, attitudes or skills) have differing evaluation strategies. Table 4 links evaluation research questions to evaluation strategies. Both propose the use of tools to ensure that the differing training approaches and key research questions are addressed adequately.

| Table 3. Evaluating Cross-Cultural Education | |
|--|---|
| Training Approach | Evaluation Strategy |
| Knowledge-based | Pretest/posttest (multiple choice, True or False) |
| | Unknown clinical cases (paper cases, vignettes, or video cases) |
| | Presentation of clinical cases |
| | Objective structural clinical exam (OSCE) |
| Attitude-based | Standard surveys |
| | Structured interviews |
| | Self-awareness assessment |
| | Presentation of clinical cases |
| | Objective structural clinical exam (OSCE) |
| | Videotaped/audio taped clinical encounter |
| Skill-based | Presentation of clinical cases |
| | Objective structural clinical exam (OSCE) |
| | Videotaped/audio taped clinical encounter |

| Table 4. Linking Cross-Cultural Curricula to Health Outcomes | |
|--|--|
| Key Question | Evaluation Strategy |
| Do students learn what is taught? | Pretest/posttest (multiple choice, True or False) |
| | Unknown clinical cases (paper cases, vignettes, or video cases) |
| | Objective structural clinical exam (OSCE) |
| Do students use what is taught? | Qualitative physician and patient interviews |
| | Medical chart review |
| | Videotaped/audio taped of multiple random clinical encounters |
| Does what is taught have an impact on care? | Patient and provider satisfaction |
| | Medical chart review |
| | Processes of care (i.e. completion of health promotion/disease prevention interventions) |

Studies evaluating cultural competency trainings find positive effects on the knowledge, attitudes, and skills gained by healthcare professionals, but few of these studies measure the impact of the training on long-term goals, such as reducing health disparities. The length and frequency of training, when it is taught, and how it is taught all influence the trainee outcomes. However, there are many variables that influence provider and patient behaviors, and evaluating long-term impacts such as reducing health disparities are multi-year endeavors. Review of the training evaluation literature provides frameworks in which to nest the evaluation of cultural competency trainings, in particular the inclusion of individual, organizational, and societal considerations.

Evaluation of Training Programs

Training evaluations measure the extent to which the training programs meet intended objectives and can evaluate the content and design of the program, changes in learners, and organizational benefits (Alvarez, Salas, & Garofano, 2004). Training-program evaluation can be divided into two categories: formative and summative (Noe, 2002; Wang & Wilcox, 2006). Formative evaluations are meant to evaluate the design (instructional materials, methods, or learning objectives) and development, and help form and shape the training quality. Trainings are modified based on information achieved through the evaluation process, as it is integrated into the entire training (Wang & Wilcox, 2006). Summative evaluations focus on training outcomes, the benefits of learning for the individual and enhanced on-the-job performance for

the organization (Alvarez et al., 2004; Wang & Wilcox, 2006). Evaluations provide rationale for training budgets, human resource development and allocation and; demonstrate the value of having training interventions (Wang & Wilcox, 2006).

Training programs have evaluation mechanisms built into the process of design and development. Smith and Delahaye (1987) find four major variables in any training program: process, content, trainer, and trainee. Depending on the learning process, the complexity or simplicity of the content, skills of the trainer, and the learning maturity-level of the trainees, the training program varies. Complex concepts have many possible answers and are often best taught using trainee-centered approaches. However, this requires a high level of sophistication for the trainer (see table 5).

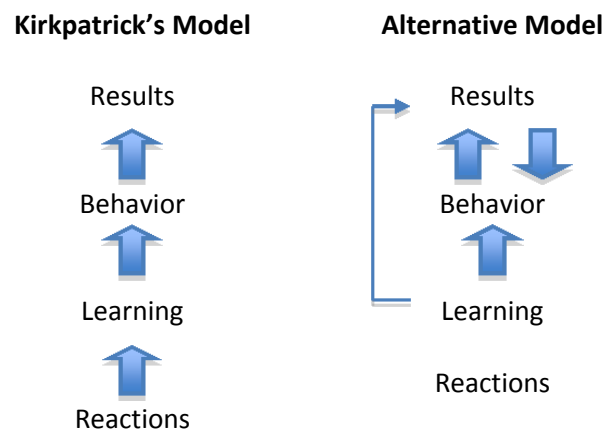
| Table 5. Continuum of Training Program Approaches | | |
|--|----------------------------|-------------------------|
| Trainer-centered | | Trainee-centered |
| 1. Theory-based | 1. Case study | 1. Self-teaching action |
| 2. Skill-based | 2. Role plays | 2. Contract learning |
| 3. Lecture style | 3. Computer based learning | 3. Action learning |
| | 4. The algorithm | |
| | 5. Programmed learning | |

Created in 1959, the Kirkpatrick (1976) evaluation model outlines four-levels to evaluate training programs. Level 1 - reaction (how learners feel about instruction), level 2 - learning (learner performance on in-class tests), level 3 - behavior (the extent to which learners implement, or transfer, what they learned in class); and level 4 - results (organizational benefits, stated in terms of organizational performance or return on investment derived from a training). Table 6 provides the guidelines for measures for each level. The model assumes the four levels are linear, build on each other, and can be evaluated at each step.

| Table 6. Four-Level Approach to Training Evaluation | | | | |
|--|--|---|--|--|
| 1- Reaction | | 2- Learning | 3- Behavior | 4- Results |
| Focus | Determine what you want to find out | Measure the learning of each trainee so that quantitative results can be determined | Require a more scientific approach and consideration of many factors | Evaluate based on results. Training programs have stated desired results |
| Measure Guideposts | Use a written comment sheet with the items determined in the task above | Use a pre/post approach so that learning can be related to the program | Conduct a systematic appraisal of on-the-job performance on a pre/post basis | Use a control group |
| | Design the sheet so that reactions can be tabulated and quantified | Use a control group to compare with the experimental group that receives the training | Conduct statistical analysis to compare pre/post performance and to relate changes to the training | Allow enough time for results to be achieved |
| | Obtain honest reactions by making the sheet anonymous | Analyze the evaluation results statistically so, in terms of correlation or level of confidence | Conduct a post-training appraisal three month or more after the training | Measure both before and after training |
| | Allow trainees to write additional comments not covered by the questions | | Use a control group | Repeat the measurement at appropriate times |

Several researchers have critiqued the Kirkpatrick model (Alliger & Janak, 1989; Tannenbaum et al., 1993; Kaufman & Keller, 1994; Holton III, 1996; Kirkpatrick, J. & Kirkpatrick, W, 2009). Kirkpatrick (1994) notes that the original model was unclear about the causal links between the levels and that the model does not account for other factors such as organizational climate or the motivation to learn. Alliger and Janak (1989) find the causation in the original model may require modification and suggest an alternative model that incorporates the intercorrelation among levels (Figure 1). Reactions are not linearly related to learning but instead may act as a moderator or mediator of learning, and should not be considered a primary outcome of training (therefore not directly linked to learning). In this model, reactions does not lead to learning, but learning affects behavior, which leads to results, which in turn creates new learning.

Figure 1. Alliger and Janak Alternative to Kirkpatrick Model



Kaufman and & Keller (1994) extend Kirkpatrick's model (Table 7), arguing that although the model is useful, it is incomplete. Their "Kirkpatrick-plus" five-level model accounts for the narrow focus to include organizational and society factors. Level 1 is expanded to include reactions and enabling resources, where researchers evaluate the availability and usefulness of resources. Level 2 is an assessment of whether the training was implemented properly. Level 3 identifies the level of skill transfer of training. Level 4 remains unchanged as it focuses on organizational benefits. Level 5 includes the consideration of societal impact, the possible societal consequences and payoffs.

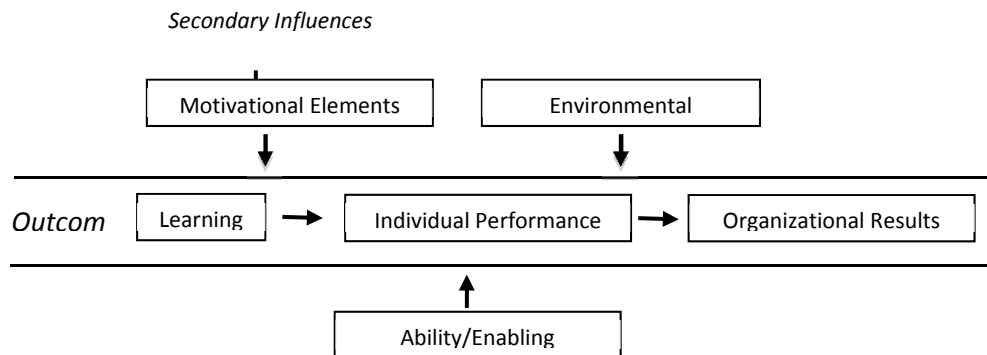
| Table 7. Five Levels for Evaluation of Interventions | | |
|--|------------------------|---|
| Level | Evaluation | Focus |
| 5 | Societal outcomes | Societal and client responsiveness, consequences, and payoffs |
| 4 | Organizational outputs | Organizational contributions and payoffs |
| 3 | Application | Individual and small group utilization within the organization |
| 2 | Acquisition | Individual and small group mastery and competence |
| 1b | Reaction | Methods, means, and processes acceptability and efficiency |
| 1A | Enabling | Availability and quality of human, financial, and physical resources inputs |

Tannenbaum et al. (1993) also expands the Kirkpatrick model by adding post-training attitudes and dividing behavior into two outcomes for evaluation (training performance and transfer

performance). The framework outlines the pre-training and during-training conditions that may influence learning, as well as factors that may facilitate the transfer of skill after training. In the addition to the training (method, content, principles, instructors), individual characteristics and organizational climate are important factors to consider. Research finds that motivation is important for the knowledge, skills, and attitudes learned at a training to be transferred to the work site (Tannenbaum et al., 1993; Gegenfurtner et al., 2009). The ability of individuals to digest the content is an important area to consider when evaluating training programs. Other factors include the organizational climate, the culture of the organization, the workload of the trainees, the opportunity to practice, supervisor or peer support, and resource availability.

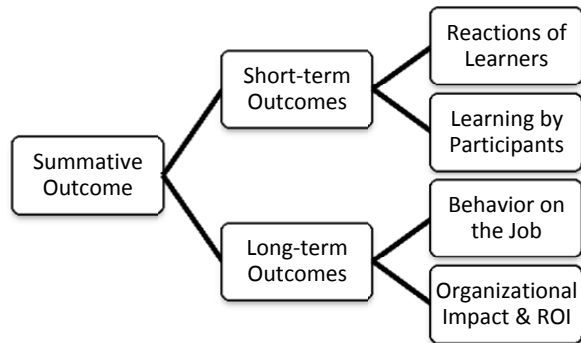
Holton III (1996) also modifies the original Kirkpatrick model to account for the lack of research that indicates linear connections between the four levels (Figure 2) and proposes three primary outcome measures: learning, individual performance, and organizational results. Reactions are removed as a primary outcome measure, and individual performance replaces the individual behavior in the former models. The model takes into account primary and secondary influences to training, which includes individual characteristics such as ability, in addition to motivation and environmental elements. Ability, motivation, and environment have been identified as factors in participant’s behavior and act as intervening variables.

Figure 2. Holton III Conceptual Evaluation Model



Wang and Wilcox (2006) further elaborate on the Kirkpatrick model by distinguishing between the evaluative types, and argue the need to focus on long-term goals. Summative evaluations or evaluations of the outcomes of the training can be divided into long-term and short-term outcomes. Short-term outcomes can include participant reactions and reported or measured learning outcomes (Level 1 & 2). This has been interpreted as the post-test measures of learning. However, testing should not be considered the only way to measure learning. In organizations or systems, the ultimate goal or long-term outcomes of designing and conducting trainings is to improve individual and organizational performance (Level 3 & 4), and this research has focused on behavior on the job or the transfer of training (Level 3). Though organizational impacts pose unique problems, measuring the training impact or return on investment (ROI) is a difficult but a worthwhile endeavor (Level 4).

Figure 3. Wang & Wilcox (2006) Summative evaluation model



The primary reason why trainings are conducted is to improve individual on-the-job performance, with the goal of having organizational impacts (Alvarez et al., 2004; Blume et al., 2009; Burke & Hutchins, 2007; Cheng & Hampson, 2008; Holton III, 1996; Salas & Cannon-Bowers, 2001; Wang & Wilcox, 2006). Research on transfer-of-training evaluates whether changes in behavior have taken place. Transfer-of-training is defined “as the degree to which learners apply the knowledge, skills, and attitudes gained in the training to their jobs” (Wexley & Latham, 1991, as cited in Wang & Wilcox, 2006) and is measured by the maintenance of the skills, knowledge, and attitudes during a certain period of time (Blume et al., 2009; Burke & Hutchins, 2007; Cheng & Hampson, 2008; Salas & Cannon-Bowers, 2001).

Through a review of the literature, Salas and Cannon-Bowers (2001) found a number of important factors in the transfer-of-training process. First, organizational environment is important; 2) context matters, as it sets the motivations, expectations and attitudes for transfer; 3) the transfer climate influences the extent to which newly acquired knowledge, skills, and attitudes are used on the job; 4) trainees need an opportunity to perform what was learned; 5) delays between training and actual use on the job create skill loss; 6) situational cues and consequences predict the extent to which transfer occurs; 7) social, peer, and subordinate, and supervisory support all play a central role in transfer; 8) training can be generalized from one context to another; 9) intervention strategies can be designed to improve the probability of transfer; 10) team leaders can shape the degree of transfer through informal reinforcement (or punishment) of transfer activities; and 11) training transfer should be conceptualized as a multidimensional construct, differing depending on the type of training and closeness of supervision on the job.

Burke and Hutchins (2007) conduct a literature review on training transfer and find that an individual’s ability and motivation affects performance, as well as the intervention design and delivery, and that the work climate influences training transfer. Certain variables have been fairly well established as having important influences on transfer, including cognitive ability, self-efficacy, pre-training motivation, negative affectivity, perceived utility, and organizational commitment (Table 8). Other variables, such as conscientiousness, extrinsic versus intrinsic motivators, and external versus internal locus of control have had mixed findings. Intervention design and delivery influences training transfer directly or indirectly through their impact on learning. Intervention design and delivery includes many variables established in the literature

as influencing transfer, mostly via their impact on learning, including setting learning goals, content relevance, practice and feedback, and behavior modeling. However, there is a paucity of rigorous evaluation of the learning methods. Lastly, the work environment, which includes variables that only received attention in the last two decades, influences the training transfer. Although more research is needed, the transfer climate, supervisory support, peer support, and the opportunity to perform what was learned are also linked to the transfer training.

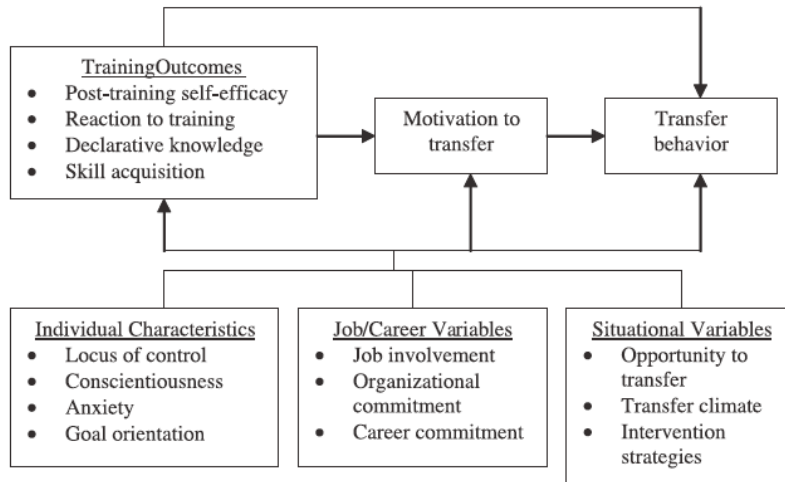
Table 8. Burke & Hutchins (2007) Summary of Transfer Link Characteristics and Relationship Strength to Transfer

| Transfer Link | Variable | Relationship with Transfer (Strong/Moderate, Mixed, Minimal Research Exists) | Research needed to clarify or to build findings |
|----------------------------------|--------------------------------------|--|---|
| Learner Characteristics | Cognitive ability | Strong | |
| | Self-efficacy | Strong | |
| | Pre-training motivation | Strong | |
| | Motivation to learn | Minimal | ✓ |
| | Motivation to transfer | Minimal | ✓ |
| | Extrinsic v intrinsic motivation | Mixed | ✓ |
| | Anxiety/negative relationship | Strong | |
| | Conscientiousness | Mixed | ✓ |
| | Openness to experience | Strong | ✓ |
| | Extroversion | Minimal | ✓ |
| | Perceived utility | Strong | |
| | Career planning | Strong | |
| | Organizational commitment | Strong | |
| | External v internal locus of control | Mixed | ✓ |
| Intervention Design and Delivery | Needs analysis | Minimal | ✓ |
| | Learning goals | Strong | |
| | Content relevance | Strong | |
| | Practice and feedback | Strong | |
| | Over-learning | | ✓ |
| | Cognitive overload | | ✓ |
| | Active learning | Minimal | ✓ |
| | Behavioral modeling | Strong | |
| | Error-based examples | Strong | ✓ |
| | Self-management strategies | Mixed | ✓ |
| | Technological support | Minimal | ✓ |
| Work Environment | Strategic link | Minimal | ✓ |
| | Transfer climate | Strong | ✓ |
| | Supervisory support | Strong/Mixed | ✓ |
| | Peer support | Strong | |
| | Opportunity to perform | Strong | |
| | Accountability | Minimal | ✓ |

Cheng and Hampson (2008) synthesize the literature on transfer of training to investigate the key variables related to transferring the knowledge, skills, or attitudes from the training to the workplace. The review uncovered inconsistent and unexpected findings between variables associated with learning transfer, much like Burke and Hutchins (2007). Conceptualizations and measurements of concepts such as motivation, attitudes, transfer climate or social support, have proven challenging. The authors call for more attention to the field of training transfer and

posit the use of the theory of planned behavior, which turns attention to the role of trainees' intentions to transfer. It explains human behavior by distinguishing between the perceived self-efficacy, the ease or difficulty of performing a specific behavior and one's confidence in the ability to do it. The other is perceived controllability, which refers to the external forces that may prevent the performance of the behavior.

Figure 3. Cheng & Hampson (2008): Pertinent Variables in studies of training transfer



Burke and Hutchins (2008) scan the literature for best practices in the training transfer. Table 9 illustrates the three major categories that facilitate transfer of training: transfer influences (learner characteristics, trainer characteristics, design and development, and work environment); time period (before, during, after, and not time-bound); and stakeholder support (trainee, trainer, supervisor, peer, and organization). They survey over 100 members of the American Society of Training and Development (ASTD) in major cities across the country for best practices; five emerged. First, supervisory support and reinforcement is critical, in recognition of the need to reinforce the use of the new knowledge and skills on the job. Second, coaching and opportunities to practice skills immediately when returning from training are important. The use of the interactive activities - collaborative activities, role-plays, small group exercises, etc.—to encourage participation was third. Fourth, post-training evaluation of skills is necessary, in particular specific measurement tools following the training that employees and supervisors can access that includes real-life application. Lastly, providing training participants with activities that resemble behaviors, challenges, and scenarios of actual job activities facilitates transfer.

Table 9. Burke and Hutchins (2008,) Training Transfer Factors

| Transfer Influence | Characteristics | Definition |
|---------------------|------------------------|--|
| Transfer Influences | Learner | Attributes regarding the trainee’s ability, motivation, personality, perceptions, expectation, or attitudes that influence transfer |
| | Trainer | Trainers knowledge of the subject matter, professional experience, & knowledge of teaching principles (such as adult learning strategies) |
| | Design and development | Instructors plan/blueprint for the learning intervention, typically based on a needs assessment information & firm goals, or the activities occurring during training delivery |
| | Work environment | Refers to influences on transfer existing or occurring outside the learning intervention itself (including the evaluating of the training transfer) |
| Time Period | Before | Activities occurring before the learning intervention that supports transfer |
| | During | Activities occurring during the learning intervention that support transfer |
| | After | Activities occurring after the learning intervention that influence transfer |
| | Not time – bound | Time period when the best practice takes place is not explicitly identified or does not strongly imply a time phase |
| Stakeholder Support | Trainee | Learner participating in the relevant learning intervention |
| | Trainer | Instructor who designs, develops, & (co-) delivers the intervention |
| | Supervisor | Refers to trainee’s immediate supervisor or manager |
| | Peer | Refers to a co-worker, colleague, or peer involved in the action taking place |
| | Organization | Organizational culture supports transfer or there is an organizational commitment to training transfer |

The research on training evaluation is vast and has grown tremendously over the last decades. The field has evolved from the use of a simple 4-level model (Kirkpatrick, 1976) to more sophisticated models that account for trainee, trainer, and organizational characteristics (Alliger & Janak, 1989; Cheng & Hampson, 2008; Tannenbaum et al., 1993; Kaufman & Keller, 1994; Holton III, 1996; Salas & Cannon-Bowers, 2001; Wang & Wilcox, 2006). However vast, the research on what makes a training work (i.e., do trainees apply what they learned to their worksite?) is mixed. Accounting for the various factors involved in the training transfer process is difficult but researchers continue to develop tools and methods to assess not only if the training transferred, but how. By isolating the transfer factors, researchers can assess if they training met its long-term outcomes by focusing on the training transfer links to trainees, trainers, and organizations.

Conclusion

Cultural Competency training is posited as an approach to reduce health disparities and increase patient satisfaction and adherence. Few studies link cultural competency training to improved health outcomes, although evidence suggests that training improves the knowledge, attitudes, and skills of providers and staff. Frameworks to evaluate such trainings focus on whether students have learned what was taught, use what was taught, and whether the teaching has had an impact on care? Most of the research focuses on the first question, and to some extent the second. Evaluation strategies and tools are dependent on the question. Several frameworks and studies indicate the use of mixed-method approaches – both quantitative (pre/post tests, objective exams, etc.) and qualitative data (interviews, focus groups, self-reflections, etc.). However, additional research is needed to evaluate the effectiveness of cultural training programs (e.g., does what was taught impact care?). In

particular, as federal, state, and local governments promote standards and tools for curriculums and programs.

The training evaluation literature provides additional frameworks and concepts that are less explored in the cultural competency training evaluation literature. There are several challenges in conducting rigorous evaluations, especially when several multi-dimensional constructs are involved. These include trainee, trainer, and organizational characteristics; in addition to challenges incurred when outcome variables like reduced health disparities are long-term. Rigorous cultural competency training programs embed evaluative techniques throughout the development and delivery process to ensure constant feedback between design and implementation. Less evident in these evaluations are post-training influences such as organizational climate, or pre-training characteristics such as ability, motivation, and transfer climate. However, given the variations in cultural competency trainings and frameworks, organizations should determine the purpose of the training and realistic short and long-term goals. The evaluative techniques and resources will vary depending on the training length, duration, and goals, but should attempt to account for trainee, trainer, and organizational characteristics.

References

- Anderson, L. M., Scrimshaw, S. C., Fullilove, M. T., Fielding, J. E., & Normand, J. (2003). Culturally competent healthcare systems. *American Journal of Preventive Medicine, 24*(3), 68-79.
- Beach, M. C., Price, E. G., Gary, T. L., Robinson, K. A., Gozu, A., Palacio, A., & Bass, E. B. (2005). Cultural competency: A systematic review of healthcare provider educational interventions. *Medical Care, 43*(4), 356.
- Betancourt, J. R. (2003). Cross-cultural medical education: Conceptual approaches and frameworks for evaluation. *Academic Medicine, 78*(6), 560-569.
- Betancourt, J. R., Green, A. R., & Carrillo, J. E. (October 2002). *Cultural competence in healthcare: Emerging frameworks and practical approaches*. (Field Report). Massachusetts: The Commonwealth Fund.
- Betancourt, J. R., & Green, A. R. (2010). Commentary: Linking cultural competence training to improved health outcomes: Perspectives from the field. *Academic Medicine, 85*(4), 583.
- Betancourt, J. R., Green, A. R., Carrillo, J. E., & Ananeh-Firempong, O. (2003). Defining cultural competence: A practical framework for addressing racial/ethnic disparities in health and healthcare. *Public Health Reports, 118*(4), 293.
- Brach, C., & Fraserirector, I. (2000). Can cultural competency reduce racial and ethnic health disparities? A review and conceptual model. *Medical Care Research and Review, 57*(4 suppl), 181-217.
- Bhui, K., Warfa, N., Edonya, P., McKenzie, K., & Bhugra, D. (2007). Cultural competence in mental healthcare: A review of model evaluations. *BMC Health Services Research, 7*(1), 15.
- Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review, 6*(3), 263-296.
- Burke, L. A., & Hutchins, H. M. (2008). A study of best practices in training transfer and proposed model of transfer. *Human Resource Development Quarterly, 19*(2), 107-128.
- Cheng, E. W. L., & Hampson, I. (2008). Transfer of training: A review and new insights. *International Journal of Management Reviews, 10*(4), 327-341.
- Crenshaw, M. K., Shewchuk, R. M., Qu, H., Staton, L. J., Bigby, J. A., Houston, T. K., . . . Estrada, C. A. (2011). What should we include in a cultural competence curriculum? an emerging formative evaluation process to foster curriculum development. *Academic Medicine: Journal of the Association of American Medical Colleges, 86*(3), 333.

- Gegenfurtner, A., Veermans, K., Festner, D., & Gruber, H. (2009). Integrative literature review: Motivation to transfer training: An integrative literature review. *Human Resource Development Review*, 8(3), 403-423.
- Holton III, E. F. (1996). The flawed four-level evaluation model. *Human Resource Development Quarterly*, 7(1), 5-21.
- Kaufman, R., & Keller, J. M. (1994). Levels of evaluation: Beyond Kirkpatrick. *Human Resource Development Quarterly*, 5(4), 371-380.
- Kirkpatrick, D. (1976). Evaluation of training. In *Training and Development Handbook*, ed. RL Craig, Ch. 18. New York, NY: McGraw-Hill 2nd ed.
- Kirkpatrick, D. (1996). Great ideas revisited. *Training & Development*, 50(1), 54.
- Lie, D. A., Elizabeth Lee-Rey MD, M., Gomez, A., Bereknyei, S., & Braddock III, C. H. (2011). Does cultural competency training of health professionals improve patient outcomes? A systematic review and proposed algorithm for future research. *Journal of General Internal Medicine*, 26(3), 317-325.
- Majumdar, B., Browne, G., Roberts, J., & Carpio, B. (2004). Effects of cultural sensitivity training on health care provider attitudes and patient outcomes. *Journal of Nursing Scholarship*, 36(2), 161-166.
- Mazor, S. S., Hampers, L. C., Chande, V. T., & Krug, S. E. (2002). Teaching Spanish to pediatric emergency physicians: Effects on patient satisfaction. *Archives of Pediatrics & Adolescent Medicine*, 156(7), 693.
- McDougle, L., Ukockis, G., & Adamshick, L. (2010). Evaluation of a new cultural competency training program: CARE columbus. *Journal of the National Medical Association*, 102(9), 757.
- McElmurry, B. J., McCreary, L. L., Park, C. G., Ramos, L., Martinez, E., Parikh, R., & Fogelfeld, L. (2009). Implementation, outcomes, and lessons learned from a collaborative primary healthcare program to improve diabetes care among urban Latino populations. *Health Promotion Practice*, 10(2), 293-302.
- Noe, R. A. (2002). *Employee training and development*. Boston, MA: McGraw-Hill/Irwin.
- Price, E. G., Beach, M. C., Gary, T. L., Robinson, K. A., Gozu, A., Palacio, A., Bass, E. B. (2005). A systematic review of the methodological rigor of studies evaluating cultural competence training of health professionals. *Academic Medicine*, 80(6), 578-586.

- Sequist, T. D., Fitzmaurice, G. M., Marshall, R., Shaykevich, S., Marston, A., Safran, D. G., & Ayanian, J. Z. (2010). Cultural competency training and performance reports to improve diabetes care for black Patients a cluster randomized, controlled trial. *Annals of Internal Medicine*, 152(1), 40-46.
- Smith, B. J., & Delahaye, B. L. (1987). *How to be an effective trainer: Skills for managers and new trainers*. New York, NY: Wiley.
- Tannenbaum, S. I., Methieu, J. E., Cannon-Bowers, J. A., & Salas, E. (1993). *Factors that Influence Training Effectiveness: A Conceptual Model and Longitudinal Analysis*, Rep 93-011, Orlando, FL: Naval Training Systems Center.
- Thom, D. H., Tirado, M. D., Woon, T. L., & McBride, M. R. (2006). Development and evaluation of a cultural competency training curriculum. *BMC Medical Education*, 6(1), 38.
- Way, B. B., Stone, B., Schwager, M., Wagoner, D., & Bassman, R. (2002). Effectiveness of the New York State office of mental health core curriculum: Direct care staff training. *Psychiatric Rehabilitation Journal*, 25(4), 398.