Association Analysis of Reported Attitudes and Culturally Competent Behavior Engagement among Public Health Employees

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ABSTRACT
The purpose of this research is to analyze the association of attitudes and beliefs of engaging in culturally competent behavior. The research is derived from an explorational case study of individuals employed within an urban public health department. Employees (n=90) from four metropolitan clinical sites of an urban public health department, located in the southwest region of the United States, were solicited and recruited during a monthly staff meeting. The Cultural Competence Assessment tool was utilized, which is designed to explore individual knowledge, feelings and actions of respondents when interacting with clients in health service environments. Participants were divided into subgroups, clinical and non-clinical, to account for the variation in respondents’ level of education, type of client/patient interaction and opportunities for professional development engagement. Results included respondents with increased levels of knowledge possessing attitudes which encompass dignity and respect of minority groups, potentially improving clinical interactions. African Americans and Hispanic/Latinos, within the non-clinical subgroup, displayed more culturally sensitive attitudes compared to their clinical peers within the same race/ethnicity classification. Non-clinical workers with Associate and Bachelors degrees displayed more culturally sensitive attitudes than their clinical counterparts. Clinical staff with graduate or professional degrees scored higher in the culturally sensitive attitudes analysis than non-clinical peers. In conclusion, knowledgeable individuals have the necessary foundation to develop beliefs and attitudes conducive to creating an effective clinical encounter. Educational programs must include components which increase participant awareness of diversity. In addition, training should incorporate lessons to foster self-reflection of one’s own bias and beliefs, and its effect on how workers provide health services.

Keywords: community health, preventive medicine, cultural competency, racial minorities, public health workers
INTRODUCTION

Racial and ethnic health disparity data from a national perspective indicates there is much to learn about those employed in healthcare settings. There is a level of urgency to assist clinicians (i.e., those delivering health services directly to patients) in obtaining specific skills sets to assist them in effectively working with ethnic and racial minority populations. These skills encompass culturally competent care and entails understanding the social and cultural factors which influence individual health beliefs and behaviors (Harvard Catalyst, 2010). Heightened levels of cultural competence by those employed in clinical settings enables the elimination of health disparities by facilitating effective clinical encounters and improving quality of care. This concept is well accepted and incorporated in many federal initiatives and organizations, such as the National Institutes of Health and the Agency for Healthcare Research and Quality (Betancourt, Green, Carillo, & Park 2005).

Those providing health services may influence race/ethnicity and socioeconomic health disparities in numerous areas (Van Ryn & Fu, 2003). Providers may reflect and/or reinforce societal notions regarding patients’ own values, self-reliance, knowledge, and deservingness of effective care. In addition, providers have the ability to communicate lower expectations for patients in disadvantaged social and economic positions (Van Ryn & Fu, 2003). These are examples of the clinicians’ influence on patient and client expectations for the degree to which they expect to obtain the resources and services they need, and their expectations for improvements in their health conditions. Also noted are patients’ health related cognition and behavior being highly correlated with provider communication (Van Ryn & Fu, 2003). All of these factors, whether intentional or unintentional, may account for some of the disparities observed in health outcomes (Van Ryn & Fu, 2003).

Those employed in healthcare settings are likely to unconsciously apply stereotypes when interpreting patients. Extensive evidence documents the mental categorization of individuals into a particular class or group. As a result, the characteristics assigned to the particular group are unconsciously and automatically applied to the individual (Burgess, Fu, & Van Ryn, 2004). To allow researchers to assess automatic stereotypes associated with race/ethnicity, physicians’ perceptions were studied. It was noted on average, African American patients were perceived as less educated and less likely to have demanding careers as their white counterparts, regardless of their actual occupation and/or educational level. Even when information about patients’ education or occupation were disclosed in their medical records, they were perceived stereotypically by physicians (Burgess et al., 2004).

An extensive literature review was conducted to identify studies which evaluated interventions designed to improve cultural competence of healthcare professionals related to attitudes and beliefs. Twenty-five studies evaluated training effects on physician attitudes, with 21 demonstrating beneficial outcomes (Beach et al., 2005). Researchers noted the most prevalent outcome was cultural self-efficacy, which evaluates the learner’s confidence in knowledge and
skills in working with ethnic and racial minority patients (Beach et al., 2005). In addition, 
attitude was measured as it relates to community health issues and interest in educating oneself 
on patient backgrounds. It was determined there was substantial evidence to suggest cultural 
competence training has a direct impact on the attitudes of public health clinicians (Beach et al., 
2005).

The clinician-self relationship has been characterized as the degree of awareness 
possessed by those working in clinical settings, regarding their background, values, attitudes and 
its impact on their behaviors and interactions with patients (Cooper, Beach, Johnson, & Inui,
2006). Researchers evaluated a study designed to allow physicians the identification of 
previously unrecognized, negative attitudes which interfered with patient-centered interviewing 
skills (Cooper et al., 2006). The findings suggested increasing self-awareness improved trainees’ 
skills. The approach utilized in this intervention included the utilization of educational exercises 
and strategies to promote continuous self-reflection (Cooper et al., 2006). This resulted in an 
increase awareness of their experiences, beliefs, values and behaviors, as well as subconscious 
bias. The overall goal of programs designed with this approach is to improve patient-provider 
interactions across the cultural diversity spectrum (Cooper et al., 2006).

Proposed effective curriculum focuses on awareness, with four core areas. These topics 
for reflection and discussion include: physician self-care, physicians’ emotional responses in 
patient care, physicians’ beliefs and attitudes; and challenging clinical situations (Novack et al., 
1997). The findings noted organized activities, with support groups and meaningful discussion of 
clinical experiences, promote practitioner awareness. As a result, this may improve the services 
provided and increase occupational satisfaction (Novack et al., 1997).

The purpose of this research was to assess the association of attitudes and beliefs of 
engaging in culturally competent behavior, utilizing an explorational case study of individuals 
employed within an urban public health department. In order to effectively evaluate these 
constructs, a quantitative research approach was employed. The data was further analyzed to 
determine if employees’ attitudes predicted their level of culturally competent behavior 
engagement and past diversity training participation.

Researchers utilized the Theory of Planned Behavior (TPB) which not only predicts, but 
also explains behavior. The theory suggests behavior is a function of salient beliefs relevant to 
specific activities. These beliefs are considered the determinants of an individual’s intentions and 
actions (Ajzen, 1991). Salient beliefs include behavioral beliefs, normative beliefs and control 
beliefs. Behavioral beliefs influence an individual’s attitudes toward a given behavior. 
Normative beliefs are the underlying components of subjective norms; and control beliefs 
provide the foundation for perception of behavioral control (Ajzen, 1991).

Literature is limited in the study of TPB being applied to those working in healthcare 
settings to understand and modify behavior (Perkins et al., 2007). An extensive literature review 
found different constructs of TPB predicts intentions depending upon the target group, and for 
different guidelines and behaviors (Perkins et al., 2007). The hypotheses for this research study
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can be designed to further the knowledge of TPB as a predictor for various actions related to healthcare professionals. Predictions include:

1) If public health department employees have positive attitudes of health disparities factors and their role in its elimination, they are more likely to participate in continuing education.

2) If public health department employees are provided with cultural competence and health disparities training, they have a heightened sense of knowledge of attitudes conducive to implementing effective clinical encounters.

METHODS

Participants

Within the research design, participants were identified using convenience sampling. Employees (n=90) from four metropolitan healthcare sites, of an urban public health department located in the southwest region of the United States, were solicited and recruited during a monthly staff meeting. This sample is representative of 84% of the total employees (n=107) across all sites. Participants met criteria for inclusion in the study if they: 1) work in a healthcare setting; and 2) provide services to individuals of racial and ethnic minority backgrounds. Participants included nurses, physicians, and oral health practitioners, as well as general medical and clerical staff. For reporting purposes, participants were divided into clinical (e.g., physicians, nurses and dental staff) and non-clinical (e.g., clerical staff) subgroups. This was completed to account for the variation in respondents’ level of education, type of client/patient interaction and opportunities for professional development engagement.

Procedures

Respondents were recruited during a monthly staff meeting, in which researchers conducted a presentation explaining the objectives of the study. Surveys were distributed upon disclosing to employees their participation was strictly voluntary. Participants were walked through the informed consent process, which included a designated amount of time for respondents to read the consent documentation and have their questions answered. Researchers provided lunch during the staff meeting to show appreciation for their time and participation.

Study Measures

The Cultural Competence Assessment (CCA) tool is designed to explore individual knowledge, feelings and actions of respondents when interacting with others in health service environments (Schim, 2009). It not only explores intrinsic factors of behaviors, but also extrinsic components which influence engagement. The CCA incorporates constructs of the Theory of Planned Behavior, which made it a beneficial instrument to utilize for this research study. The instrument is based on the cultural competence model, and measures cultural awareness and sensitivity; cultural competence behaviors and cultural diversity experience and training on a 49 item scale. It seeks to assess actual behaviors through a self-report, rather than self-efficacy of performing potential behaviors (Doorenbos, Schim, Benkert, & Borse, 2005).
Cultural awareness and sensitivity scores were analyzed with the Cultural Awareness and Sensitivity (CAS) subscale, utilizing a 5-point likert-like response. The CAS scale was divided in two sections, knowledge and culturally sensitive attitudes. An assessment of cultural competence behaviors were measured by the Cultural Competence Behaviors (CCB) subscale, with response categories of always, often, at time, never, and not sure (Doorenbos et al., 2005). A single-item index was used for cultural diversity experience, with respondents being asked about their amount of various encounters with minority groups within the past year. Subscale scores are provided by adding the CAS and CCB totals (Doorenbos et al., 2005). Higher scores indicate more positive attitudes, a heightened level of knowledge and increased engagement of competence behaviors. In addition, CCA collects demographic information including self-identified ethical/racial group classification, age and education (Doorenbos et al., 2005).

A convenience sample of 405 healthcare providers were recruited from hospitals, home health agencies and community health agencies, to research CCA reliability and validity among the population. Content and face validity for the instrument was established and the internal consistency was documented at .92. Cronbach’s alphas for CAS and CCB subscales were reported at .75 and .93, respectively (Doorenbos et al., 2005). The psychometric analysis of CCA suggests it is an effective tool to measure cultural competence. It is also useful to evaluate healthcare professionals’ specific cultural competence training needs, having the potential to decrease health disparities (Doorenbos et al., 2005).

The Cultural Competence Behaviors (CCB) subscale tool has been utilized previously to determine if there is an association between cultural competence of healthcare professionals and the clinics in which they are employed (Paez, Allen, Carson, & Cooper, 2008). Forty-nine providers, from twenty-three clinics, responded to the online survey across two states. The researchers suggested providers who possess attitudes which reflect increased cultural learning motivation, are more likely to work in clinics that offer diversity training and culturally appropriate patient education materials (Paez et al., 2008).

In another study, researchers examined cultural competence of thirty-one public health nurses with CCA. In addition, participants documented personal experiences and perceptions of culturally competent healthcare through qualitative data collection (Starr & Wallace, 2009). The findings concluded participation in specific types of training were highly correlated to cultural competence knowledge and attitudes. Many reported increased levels of knowledge and beliefs conducive to healthy outcomes. However, respondents disclosed the need for diversity education opportunities to enable favorable clinical application (Starr & Wallace, 2009).

Within the study design, concepts were measured using an ordinal scale. Descriptive statistics characterized healthcare professionals’ cultural competence and personal demographic measures. Prior to analysis, negative items on the attitude measure were reverse coded to enable a higher score being indicative of a more favorable attitude. One-way analysis variance (ANOVA) was used to compare knowledge, behavior and culturally sensitive attitudes (CSA) across race, and educational levels. In order to evaluate equality between knowledge, behavior...
and CSA scores across diversity training participation, a T-Test was utilized. Associations between knowledge, behavior and CSA scores; as well as race, diversity training and educational levels were determined by Fisher’s Exact Test.

RESULTS
The data analysis concluded no statistically significant association between respondents’ attitudes; and levels of culturally competent behavior engagement and past diversity training participation. However, using the Fisher’s Exact Test, within both the clinical and non-clinical groups, a positive association exists between average knowledge and CSA scores (see Table 1 and Table 2).

<table>
<thead>
<tr>
<th>Knowledge Score Quartile</th>
<th>Culturally Sensitive Attitudes Score Quartile</th>
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<tr>
<td>Frequency</td>
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Table 1. Correlation of knowledge and culturally sensitive attitudes among clinical staff
Table 2. Correlation of knowledge and culturally sensitive attitudes among non-clinical staff

<table>
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<th>Knowledge Score Quartile</th>
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<td>Total</td>
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Knowledge, within the scope of this research study, is defined as the respondents’ awareness of culture being a high influential factor on patients’ beliefs, values and health behaviors. Respondents with increased levels of knowledge, developed through the normative beliefs/subjective norms components of the TPB, possessed attitudes which foster dignity and respect of minority groups. These positive attitudes are molded by the behavioral beliefs of the respondents and have the potential to improve clinical interactions through actual behavior engagement.

There were no significant differences found in attitudes and behavior across race and ethnicity. However, African Americans and Hispanic/Latinos, within the non-clinical subgroup, possessed more culturally sensitive attitudes compared to their clinical peers within the same race/ethnicity classification. In addition, non-clinical respondents identifying themselves as Caucasian, displayed a lower CSA score than their clinical peers. Analysis of diploma, high school and GED levels of education suggested CSA scores are comparable throughout the subgroups. However, non-clinical workers with Associate and Bachelors degrees possessed a heightened level of culturally sensitive attitudes than their clinical counterparts. Clinical staff, with graduate or professional degrees, scored higher in the CSA analysis than non-clinical peers. We could assume this is related to their level of knowledge of and exposure to culturally appropriate interactions.

**DISCUSSION**

The analysis of research determined healthcare professionals’ level of knowledge was associated with possessing culturally sensitive attitudes. This suggests when individuals are knowledgeable, they have the necessary foundation to develop beliefs and attitudes conducive to creating an effective clinical encounter. Educational programs must include components which promote participant awareness of diversity. In addition, training should include lessons to foster self-reflection of one’s own bias and beliefs; and its effect on health services delivery. Employer sponsored continuing education enables a normative belief among employees that the organization values healthful communication and effective interaction among staff and patients of diverse ethnic/racial backgrounds.

A limitation noted within the study includes respondents failing to answer some questions, making the response rate low for specific items. Due to low cell counts and unequal variance, chi-squared tests were not used because of the potential of inaccuracy. In addition, the majority of staff participated in past employer sponsored diversity training which may contribute
to the heightened knowledge, culturally sensitive attitudes and behavior engagement scores. Potential future research direction will include a larger sample size with additional healthcare sites. Incorporating a control group would also allow further evaluation of the association between training, as well as psycho-emotional and behavioral tendencies.

CONCLUSION

Improving the quality of care and health outcomes of vulnerable populations are of high importance. This paper contributes to the existing literature regarding the necessity to proactively address the deficiencies of healthcare professionals through knowledge-building professional development and continuing education endeavors. We offer recommendations to assist health services and professional organizations in designing programs to ensure employees have the competencies and skills to engage in effective clinical interactions with patients.

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REFERENCES


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