

Using Q Methodology as a Strategy to Explore Cultural Opinions toward Health Care

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Abstract. *The need for this study relates to the health disparity problem facing racially, ethnically, and socio-economically diverse people who may not seek or receive the necessary care to maintain their health. Describing the ways that underrepresented groups view wellness using Q methodology may lead to improvements in the quality and equity of health care delivery by increasing the cultural competency of providers. The Q sample was an expansion of one used previously (Sylvester, 2000). This study utilized Q methodology to identify attitudes about healthcare access of African Americans. Statements were added to broaden the range of opinions that might be expressed by other groups, including low-income and other ethnic groups. Of the 43 Oklahomans from various ethnic groups who sorted the 47-item Q set, three factors defined by 27 of the sorts were interpreted to be related to types of health care priorities. Care through Prevention view preventative health care most important, with an emphasis on a well-balanced lifestyle. Participants defining Care through Relationships place a particular focus upon developing strong relationships with caretakers. Participants defining Care for All recognize the need for all Oklahomans to have access to quality health care regardless of socioeconomic status. Implications for further research are discussed.*

Introduction

There is an increasingly diverse patient population in the health care system, due particularly to a growing number of racial and ethnic minorities and individuals from low socio-economic standings. At the same time, however, it is reported that minorities are disproportionately more likely than the general population to be uninsured or underinsured. Additionally, racial and ethnic minorities tend to receive a lower quality of health care than do non-minority Americans (Institute of Medicine, IOM 2002). A recent report

issued by the Oklahoma Task Force to Eliminate Health Disparities (2004) highlights the disparities by cultural group. It reports that African Americans in Oklahoma tend to have higher rates of elevated blood pressure and obesity along with increased rates of death from certain cancers. They, as well as American Indians, had reduced access to affordable health care.

Minorities are less likely than are non-minority Americans to receive needed services, including clinically necessary procedures, even after correcting for access-related factors, such as insurance status (IOM, 2002). Minority Americans are generally in worse health than are non-minority Americans. They have fewer doctor visits, receive less primary care, and have fewer preventive procedures even when they have the same insurance coverage (Watson, 2001). Studies show that federal efforts such as Medicaid and Medicare have not been sufficient to erase differences in the quality of care received by minorities. African American patients in Medicare-managed health care plans often have poorer outcomes for treatment of common and important conditions such as high blood pressure, diabetes, or high cholesterol when compared to non-minority patients (Trivedi, Zaslavsky, Schneider, & Ayanian, 2006). According to Chen, Diamant, Pourat, and Kagawa-Singer (2005), African Americans and Latinos were shown to be significantly less likely to be vaccinated for influenza, and Asian Americans less likely to obtain a mammogram compared to non-minority Americans while controlling for other explanatory factors.

In a quantitative study of healthcare use by Hispanics conducted by Ortiz and Fitten (2000), the three most frequently perceived healthcare barriers reported were personal belief (38%), economic status (13%) and language proficiency (33%). Personal opinions and beliefs may be influenced by a variety of factors. For example, the health care system historically has not fairly treated minorities in the United States. A classic case is the forty-year study conducted by the federal government in Tuskegee, Alabama. In this well-known case, 390 African American men were denied syphilis treatment, told they were being treated for "bad blood," and were withheld the diagnostic information regarding syphilis (Centers for Disease Control and Prevention, 2005). In 1996, a female Asian-American college student participated in medical research that involved the administration of a painkiller (New York State Department of Health, 1996). While the participant agreed to receive additional doses to continue the study, no limit was set upon the maximum dosage. An overdose caused her death three days later. While the student's death may not be due to mistreatment based upon her minority status, knowledge of this and other similar examples may influence minority Americans trust in the health care system.

Economic status has been reported as a barrier to quality health care (Ortiz & Fitten, 2000). Socioeconomic status (SES) is included in *The Minority Health and Health Disparity Research and Education Act of 2000* as a contributing factor to healthcare disparity. Traditionally, racial and

ethnic minority populations were the primary focus when exploring causes for and solutions to healthcare disparity. However, research indicates that low-SES individuals are more likely to receive inadequate health care than are individuals from the majority population (Frist, 2005). Socioeconomic status is related to healthcare quality for numerous reasons. Low-SES individuals often have poor access to healthcare. Lack of transportation is a significant problem for these individuals, especially in rural areas. These individuals are more likely to have adverse health behaviors, such as physical and emotional stress and poor nutrition (Frist, 2005). Other ways in which SES effects health care quality include lack of health insurance and access to fewer community resources (Siegel, Moy, & Burstin, 2004; Sudano & Baker, 2006). Views of individuals in these circumstances need to be included in research studies.

Language proficiency has been noted as a barrier to optimal care (Ortiz & Fitten, 2000). Hundreds of languages are spoken in both urban and rural areas of the United States. In one estimate, almost 11 million people have little or no English (4.2 percent of the population) and 21 million additional people have only moderate English (8.1 percent of the population; U.S. Bureau of Census, 2000). Unfortunately, many healthcare providers have limited knowledge of available interpretation services or access to resources to reduce barriers to care (Youdelman & Perkins, 2005). A recent study found that adults who do not speak English fluently have greater difficulty communicating with their health care providers, which leads to inequities in access and compromised quality of care (Commonwealth Fund, 2001). The IOM (2002) reports that 51 percent of providers surveyed believe patients do not adhere to treatment because of culture or language. At the same time, 56 percent of these providers reported receiving no language or cultural competency training.

Saldana (2001) offers mental health professionals a better understanding of the factors that can affect their counseling and suggests ways to improve and enrich services for their ethnically diverse clientele. She names language as the top priority in conducting culturally-sensitive assessments, noting it seriously affects perceptions of care. To help reduce health care disparity, Majumdar, Browne, Roberts, and Carpio (2004) propose that health care providers gain in cultural competence through education. Defined as "the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors and needs presented by consumers and their communities" (U.S. Department of Health and Human Services Office of Minority Health, 2001, p. 131), cultural competency is essential to help reduce health disparities among ethnic groups (Cohen & Goode, 1999). Majumdar and his colleagues found that cultural sensitivity training not only improved understanding of multiculturalism and ability to communicate with minority clients among health care providers, but also yielded positive health outcomes for their patients.

Demonstrating the importance of culturally competent approaches to cancer education in an inner city community, researchers found that many doctors and nurses in that community were lacking in cultural competence (Marks, Reed, Colby, & Ibrahim, 2004). Consequently, the African American clients' unpleasant experiences of racism, sexism, and classism influenced their beliefs and behaviors regarding the prevention, detection, and treatment of common cancers. Following from a lack of cultural competence among health care providers, the IOM (2002) reports that minority patients are more likely than are non-minority Americans to refuse recommended services and delay seeking health care due to factors such as mistrust, misunderstanding provider instructions, and poor prior interactions with health care systems. This is in line with the research by Betancourt and Carrillo (2002), which concludes that the failure of health care providers to understand socio-cultural differences between themselves and their patients leads to patient dissatisfaction. Moreover, when providers fail to consider socio-cultural factors, they may resort to stereotyping, which can affect their behavior and clinical decision-making (Betancourt & Carrillo, 2002).

Psychological research reinforces Ortiz & Fitten's findings (2000) that personal beliefs play an important role in the prediction of individuals' behaviors. Specifically, Bandura and his colleagues (2004; Bandura & Barbaranelli, 1996; Bandura, Barbaranelli, Caprara, & Pastorelli, 2001) have conducted research that indicated that perceptions regarding abilities affects performance. It is reasonable and even necessary to extend this knowledge into the realm of health care with the assertion that a person's beliefs toward his or her ability to receive quality health care likely impacts his or her behavior regarding receiving care. Further, the health access model (Andersen, 1995) indicates that beliefs regarding health are a contributing factor to the ultimate utilization of health services.

Recent studies have examined a wide range of beliefs related to specific areas of health care, including those relevant to cancer (Choe 2006; Tabak, Shiaabana, & ShaSha, 2006), HIV/AIDS (Sidat, Rawstorne, Lister, & Fairley, 2006), mental health (Kinderman, Setzu, Lobbam, & Salmon, 2006), illness diagnosis (Schuettler & Kiviniemi, 2006), and health promotion (Yokokawa, 1999). Consistent with the importance of studying beliefs about specific issues, assessing patients' overall views related to the health care system is crucial.

Nevertheless, the relationship between overall quality of care and racial disparities in quality of care has not been well studied (Trivedi, et al., 2006). Limited research has been conducted to identify perceptions of the health care system that are based upon the experiences of minority or poor Americans, which limits the means for healthcare workers to adequately understand the views of culturally diverse individuals. Q methodology has been increasingly utilized in the health care field, and can serve to provide such an understanding (Cross, 2005).

Sylvester (2000) conducted research to bring together social marketing and Q methodology to study racial attitudes toward health care. In her study of 57 African Americans in Missouri and Georgia, Sylvester used focus groups to generate the important concepts influenced by culture. From this information, a Q set of 49 statements was derived. Her findings show perceptions toward health care contribute to the phenomenon of large numbers of African Americans waiting for their illness to become life-threatening before seeking health care. Some people in her study describe religious opinions about disease. In stark contrast, non-minority Americans seek health care earlier and have a more satisfactory interaction with the American health care system. She notes that little attention has been given to the possibility that the reasons for these differences may be grounded in cultural roots. In addition, Sylvester notes that her participants thought that many white health care professionals did not understand or appreciate the differences in verbal and non-verbal language used by African Americans. Her findings explain why African Americans have less interaction with the health care system than do non-minority Americans. However, she did not study the attitudinal differences in other ethnic groups including Hispanics, Asian Americans, or Native Americans.

To render health care providers culturally competent, more information is needed about the opinions concerning health care that are influenced by culture. Q methodology has the potential to uncover such subjective opinions. Therefore, the purpose of this study was to investigate the extent to which Q methodology would be able to describe racial, ethnic, and socio-economic opinions about healthcare. Exploring the attitudes and opinions of culturally diverse groups may increase an awareness of these views, or cultural opinions, to allow better responses to diverse patient populations and allow health care providers to attract new patients and market shares. Providing healthcare workers with an insight into perceptions of health care may help decrease disparities in service delivery.

Method

This research study began at the invitation of the Cultural Competency subcommittee of the Oklahoma Task Force to Eliminate Health Disparities. The purpose of the taskforce was to explore and reduce health disparities within the State of Oklahoma as related to racial and ethnic minority populations. In its efforts to find innovative research strategies, the Subcommittee approached researchers at Oklahoma State University to conduct a Q study to examine the perceptions of culturally diverse individuals related to health care. Through involvement and support of subcommittee members, several data collection sites were opened to researchers, including a health conference for the aging, a Latino Community Development Agency, an Indian Health Clinic, and a predominantly African-American church. Each site was referred to us by a subcommittee member, and participants were recruited through solicitation flyers and

invitation by the facility staff.

Participants

Upon approval of the Oklahoma State University Institutional Review Board, community organizations were contacted to obtain permission to recruit participants. Participants were recruited utilizing information tables during community activities and events sponsored by the Latino Community Development Agency, at a predominantly African American Church, at an Indian Health Services clinic, and at other events such as the Oklahoma Conference on Aging. Forty-three participants provided informed consent (26 were female and 17 were male). This recruitment strategy led to a large number of American Indian participants (32 self-identified as American Indian, six as African American, three as Hispanic, and two as white American), noteworthy largely because the participants who were using the health care system were participating in clinic services, while others may have specific chronic conditions (diabetes or arthritis, for example). Participants ranged in levels of household income (rounded to the nearest dollar) as follows: 16 less than \$25,000; 10 between \$25,001 and \$50,000, 4 between \$50,001 and \$75,000, with one reporting income above \$75,001. Level of household income was not available for 12 participant receiving services at a clinic.

Research Instrument

Statements were developed to capture opinions of what those who are using the healthcare system may consider or encounter as they visit a physician. A Q sample of 47 statements was developed by adapting and expanding Sylvester's (2000) Q set to identify attitudes related to health care of African Americans in Missouri and Georgia. Sylvester's initial statements were obtained through formal group interviews with representative individuals. Thirty-two of Sylvester's initial 49 statements were retained or modified slightly as indicated in the Appendix. Fifteen additional statements were developed to include a range of opinions from other cultural groups, including Hispanics, Asian Americans, and American Indians. These statements were added to represent more accurately the views of the expanded population based upon cultural differences potentially relevant to the study.

In addition to the adaptation of the Sylvester Q set, the resulting structure of statements represented depth and breadth in five domains identified through the literature: racial or economic prejudice and discrimination, socioeconomic status, cultural perceptions, language barriers, and personal beliefs. The eleven statements representing racial or economic prejudice and discrimination address health care concerns that participants may have due to their status as a racial or ethnic minority. These statements were selected to represent differing values and health care needs of diverse participants.

The eight statements representing socioeconomic status address health care concerns that are due to financial considerations and social status. These

statements relate to utilizing resources both on a personal and systemic level. The 12 statements relating to cultural perceptions were selected to represent potential differences in health care views related to the participant's cultural background. This area includes statements concerning values related to taking medication, as well as the respective roles of the community and religion in health care. The two statements comprising the language barrier address the role of language as it concerns health care access. These statements relate to the potential need for interpreters as well as participant perceptions regarding potential misunderstandings due to language barriers. Finally, the 14 statements related to personal belief address various notions or values that participants have regarding the health care system and wellness. These statements relate to opinions regarding the effectiveness of health care as well as the participants' own roles regarding their own health.

Once the 47 statements were finalized, they were translated into Spanish for use with Hispanic individuals who did not speak or read English fluently. The complete list of statements in the Q set can be found in the Appendix.

Procedure

Participants received a set of Q statements on individual magnetic cards. Statements were sorted according to the following condition of instruction: "What are your thoughts about health care?" The sorting directions included a continuum of eleven columns with a "-5" score for the two items in the left-most column and a "+5" score for the two items in the right-most column. This coding represented values ranging from "most unlike me" to "most like me." The number of statements sorted in each column was 2, 3, 4, 5, 6, 7, 6, 5, 4, 3, and 2, respectively. This process allowed participants to represent accurately their opinions regarding the condition of instruction. Participants then completed a demographic information survey with a short post-sort interview question, after which researchers recorded each participant's results onto the results sheet.

Data Analysis

Data were coded utilizing individual sorting patterns with each statement given a score ranging from "-5" to "+5" depending upon its placement along the continuum. All responses were then factor analyzed through principal components followed by a varimax rotation utilizing PCMethod software (Schmolck, 2002). Statistical significance of a sort was set at $\alpha = 0.01$, $r > .376$ (McKeown & Thomas, 1988). Defining sorts were those that were not confounded by achieving significance on two or more factors. Only factors that were defined by four or more sorts (Brown, 1980) were retained. PQMethod calculates z-scores for each statement in the factor array, which assists in the interpretation of the results.

Results

The data analyses resulted in retaining a three-factor solution with 12 sorts defining the first factor, eight defining the second factor, and seven the

third, as indicated in Table 1. Sorts for 16 of the participants were not used to define any of the resulting factors. The resulting factors were highly correlated ($r_{12} = .52, r_{13} = .48, r_{23} = .47$), indicating an overlap between the views even though distinct differences emerged.

Table 1: Rotated factor matrix

<i>Factor</i>			<i>Respondent</i>
<i>1</i>	<i>2</i>	<i>3</i>	
48	20	21	Af. Amer., F, 70–79, income not indicated
63	-16	27	Af. Amer., M, 50–59, income not indicated
43	25	23	Am. Indian, F, 50–59, income not indicated
63	27	18	Am. Indian, M, 60–69, income < \$25,000
56	25	15	Am. Indian, F, 70–79, income < \$25,000
68	11	08	Am. Indian, F, 70–79, income < \$25,000
79	25	11	Am. Indian, M, 18–20, inc. \$25,001–50,000
38	-24	-16	Am. Indian, F, 70–79, income < \$25,000
55	27	-11	Am. Indian, M, 50–59, income < \$25,000
49	16	26	Am. Indian, M, 60–69, income < \$25,000
57	12	28	Am. Indian, M, 18–20, income < \$25,000
63	33	16	Am. Indian, F, 40–49, inc. \$25,001–50,000
29	49	29	Af. Amer., F, 40–49, income not indicated
25	41	24	Hispanic, F, 40–49, income not indicated
06	47	25	Hispanic, F, 20–29, income not indicated
24	62	04	Am. Indian, F, 30–39, income < \$25,000
30	58	08	Am. Indian, F, 60–69, inc. \$50,001–75,000
-15	63	31	Am. Indian, M, 40–49, inc. \$50,001–75,000
24	63	-08	Am. Indian, F, 30–39, inc. \$25,001–50,000
19	54	32	Am. Indian, F, 40–49, income < \$25,000
13	35	61	Am. Indian, F, 40–49, income > \$75,000
34	17	39	Am. Indian, F, 40–49, inc. \$25,001–50,000
06	20	73	Am. Indian, F, 60–69, inc. \$25,001–50,000
36	24	39	Am. Indian, F, 70–79, income < \$25,000
04	-09	71	Am. Indian, M, 70–79, income < \$25,000
32	36	54	White Amer., M, 70–79, inc. not indicated
33	-33	60	Af. Amer., F, 40–49, income not indicated
54	22	48	Am. Indian, M, 30–39, inc. \$50,001–75,000
36	53	52	Am. Indian, F, 20–29, inc. \$25,001–50,000

Factor			Respondent
1	2	3	
48	26	52	Am. Indian, M, 60–69, income < \$25,000
40	33	58	Am. Indian, M, 70–79, income < \$25,000
30	63	44	Am. Indian, M, 70–79, income < \$25,000
55	-12	44	Am. Indian, F, 20–29, income < \$25,000
42	57	29	Am. Indian, M, 50–59, inc. \$25,001–50,000
55	31	46	Am. Indian, F, 40–49, inc. \$50,001–75,000
54	32	42	Am. Indian, F, 20–29, inc. \$25,001–50,000
29	41	44	Am. Indian, M, 30–39, inc. \$25,001–50,000
53	50	19	Am. Indian, F, 18–20, income < \$25,000
65	17	47	Am. Indian, M, 40–49, inc. \$25,001–50,000
55	29	42	Hispanic, M, 50–59, income not indicated
-01	32	-05	Hispanic, F, 60–69, income not indicated
11	38	49	Af. Amer., F, 60–69, income not indicated
32	35	35	Af. Amer., F, 50–59, income not indicated

Note: Defining sorts in bold, Rounded to two places, decimals omitted.

Although the factors are correlated, only eight of the 47 statements resulted as consensus statements; three of these are in the neutral position, as indicated in Table 2. Consensus statements demonstrate similar perspectives among all participants. According to these statements, the participants have a positive preference toward utilizing health care preventively or when experiencing medical problems and even have a positive level of trust in the ability of doctors to alleviate illness. It appears that despite what they know about illness, participants assert that they are more likely to put their health in the hands of the doctor rather than relying on home remedies. The neutral ranking of travel problems indicates that issues related to transportation are less pressing than other concerns leading to health disparities. Additionally, the relatively neutral ranking regarding state health care policies may indicate that such policies have not been adequately communicated to the general population. The interpretation of the resulting factors focused upon the apparent differences among the cultural opinions.

Participant Demographics

The three resulting factors were similar regarding participant demographics, with Factors 1 and 3 appearing the most similar, as seen in Table 3. Specifically, both types of cultural opinions are predominantly defined by females, have a wide age-range, a lower reported household income level, and a racially- and ethnically-diverse population. Factor 2 differed slightly as seven (of eight) individuals were under the age of 50, and two of these were among just four in the study with household incomes over \$50,000 annually.

Although all factors are primarily defined by female participants, proportionally more females define Factor 2.

Table 2: Array position and z-score for consensus statements

No.	Statement	Factor 1	Factor 2	Factor 3
12	If I felt by taking some precautions I could save myself some money down the line, then I would take better care of myself.	+2 0.88	+2 0.79	+4 1.24
16	Many people can't get health care because they don't have a ride to and from a doctor's office, clinic, or hospital.	-1 0.20	+1 0.26	+1 0.27
18	Preventative health efforts must be improved in poor areas of our state.	+3 0.89	+2 0.97	+4 1.45
28	It is so sad that each time when I get ill, I go to a doctor whom I don't know.	-2 -0.63	-1 0.51	-3 1.16
29	I think medicine is poison. All medicine has side effects. So whenever I get ill, I resort to my own home remedies rather than the health care system.	-4 1.67	-4 1.34	-4 1.70
36	I just don't think that doctors can truly make me recover when I am seriously ill. I see no point in going to see a doctor.	-2 -1.10	-2 -0.62	-2 -0.71
41	I know all I need to know about how to stay well.	0 -0.14	0 0.09	+1 0.18
44	The state government health policies are geared for the general population. They do not help minorities very much.	-1 -0.36	0 -0.08	-1 0.49

Note: Factor scores are listed as array position; z-score.

While the factors have several striking similarities, distinct differences remain. The three factors were interpreted using a combination of the consensus statements for all participants, the extreme statements for each factor, the distinguishing statements for each factor, as well as demographic differences. In addition, comments made by participants further enhanced the interpretation of two of the factors. The three factors were named *Care*

through Prevention, Care through Relationships, and Care for All.

Table 3: Demographic information by factor for defining sorters

	Factor 1	Factor 2	Factor 3
Gender			
Male	5	1	2
Female	7	7	5
Age			
18–30	2	1	0
31–50	1	7	3
51–70	5	0	1
Over 71	4	0	3
Race/Ethnicity			
African American	2	2	1
Hispanic	0	1	0
American Indian	10	5	5
White American	0	0	1
Income			
Less than \$25,000	7	1	2
\$25,001–\$50,000	2	2	2
More than \$50,001	0	2	1

Factor 1: Care through Prevention

The viewpoint of those individuals defining the first factor is termed *Care through Prevention*. These individuals take charge of their health and are actively engaged in promoting their physical well-being, as evidenced by the statements indicated in Table 4. This group does not seem to be focused on illness, but instead is focused on wellness and believes that preventative health measures should be available to all individuals. Further, one's lifestyle is perceived to affect health positively or negatively. While these individuals do not view sickness as a punishment, they do believe that unhealthy habits can lead to certain medical problems. The participants whose sorts define this view are not worried about the future as they indicate that the future will be determined by how they live today.

Although these participants believe that prevention is the best medicine, they realize that they will not always be able to avoid becoming ill and indicate a great deal of faith in the medical community's ability to heal them. Nine of the twelve participants whose sorts define this factor were over 51 years of age, and therefore are more likely to have experienced illness that has necessitated considerable medical care. This experience may result in

greater trust due to positive prior experiences with a wider diversity of medical professionals. As individuals age they may begin to accept that their own mortality and recognize the increased need to trust others for their care.

Table 4: Selected statements and scores for Care for Prevention

No.	Statement	Rank	z-score
8*	It doesn't matter to me what a doctor's race is as long as they pay attention to my needs.	+5	2.280
39*	The real key to good health is good, clean living.	+5	2.102
19	I believe that all Americans have a right, not a privilege by money, to health care.	+4	1.368
35	I trust doctor's ability to cure my disease.	+4	1.353
31	I prefer a doctor who helps out in the community. His reputation in the community makes me feel a lot safer.	+4	1.316
13	If I'm not feeling well, I have no trouble finding time to go to the doctor.	+3	1.264
45	I have a great deal of pride in the Oklahoma health care system.	+3	1.011
43	The future will take care of itself; I only need to worry about today.	+3	0.957
18	Preventative health efforts must be improved in poor areas of our state.	+3	0.890
3*	The health care system makes me feel like I am poor or stupid.	-3	-1.212
33	I hate to go to a doctor when getting ill because he/she does not understand me. He just does not speak our language. This makes me feel even worse!	-4	-1.305
17	I am trying to survive, and don't have time or money to worry about health right now.	-4	-1.423
29	I think medicine is poison. All medicine has side effects. So whenever I get ill, I resort to my own home remedies rather than the health care system.	-4	-1.669
21*	Illness can be a punishment from God.	-5	-1.681
2	Doctors are prejudiced against me and my family.	-5	-1.732

Note: Distinguishing statements are denoted by an asterisk ().*

The participants seem to trust the medical profession as a whole, as long as their needs are addressed. They trust their doctor—especially if he or she is active in the community, his or her ability to cure them, and the medication he or she prescribes. As proactive individuals, this group feels comfortable negotiating the health care system and has most likely had positive experiences with it, as they admit to having “a great deal of pride in the Oklahoma health care system” (statement 45).

When these individuals do become sick, they make it a priority to seek medical attention quickly. This is demonstrated by the fact that most of the participants defining this sort were attending a clinic to receive diabetic treatment. Further, these participants feel that they have adequate time to visit the doctor as soon as necessary. While observing the participants at this clinic, it was noted that the environment was highly social. Individuals were sharing photographs with one another and seemed to be catching up on recent events. This further serves to indicate the flexibility that these individuals have regarding their schedule and may account for their acceptance of waiting.

Factor 2: Care through Relationships

The second viewpoint is labeled *Care through Relationships* as participants' sorts indicate that they view effective relationships with health care providers as an essential part of adequate health care, as noted in Table 5. These individuals place a strong emphasis upon the interpersonal relationship between doctors and their patient, with a preference that providers respect the unique cultural differences that are inherent in all health care relationships.

These participants feel that the issue of health disparities can best be addressed through encouraging and educating practitioners from minority backgrounds. Unlike the *Care through Prevention* participants, these individuals are less likely to have experienced health issues requiring long-term treatment, and therefore may perceive the problem of health disparity from a more detached perspective. This detachment may result in a more analytical approach to addressing societal health care needs without emphasizing the affective component that may increase the focus toward individual needs.

These participants feel that all people have a right to health care regardless of their economic status. This is an important issue, as they tend to perceive medical practitioners as being primarily concerned with financial gain over the patient's well-being. This sentiment is supported by one participant who stated, “I wish it [health care] were more important to the doctors than the money.”

In addition to these perspectives, participants defining this view deemphasize religion as a primary focus in health care. They do not believe that illness is a punishment from God, nor is prayer their primary focus in seeking a cure. While religion may be involved in their daily lives, they trust

the medical profession where their health care is concerned even if they are emotionally distraught.

Table 5: Selected statements and scores for Care through Relationships

No.	Statement	Rank	z-score
7*	The ultimate solution to providing adequate health care for minorities and poor people is to educate enough doctors and nurses from minority groups.	+5	1.813
4*	Doctors and nurses need to respect the pride, values, and backgrounds of people they are trying to reach.	+5	1.681
19	I believe that all Americans have a right, not a privilege by money, to health care.	+4	1.616
8*	It doesn't matter to me what a doctor's race is as long as they pay attention to my needs.	+4	1.547
5	If you go to a hospital and they think you may not have insurance, they make you wait. But if you have insurance, they take you right in because they know they are going to get their money.	+4	1.336
47*	We don't go to a doctor when we are depressed.	-4	-1.244
29	I think medicine is poison. All medicine has side effects.	-4	-1.341
22*	When I get sick, I just read my Bible and pray.	-4	-1.367
25*	I like to use herbs for medicine first and only go see doctors last.	-5	-1.517
21*	Illness can be a punishment from God.	-5	-2.266

*Note: Distinguishing statements are denoted by an asterisk **

Further, these participants appear to be strongly opposed to using herbs and home remedies as a form of health care. While none of the three groups emphasize the utilization of herbs, the “-5” ranking of this statement implies that these individuals would not consider it an option as opposed to the more neutral ranking by those participants defining the other factors. This resistance could relate to the younger age of these participants as they may feel that medicine of their generation is far more advanced than that of their parents.

Factor 3: Care for All

The third viewpoint is designated *Care for All*. Health care is a priority to these individuals both for themselves, and more importantly, for others, as noted in Table 6. These participants recognize the need for all Oklahomans to have access to health care regardless of socioeconomic status. Quality health care should not be provided only to the privileged, but should be provided equally to all individuals, which requires additional efforts in poor and needy areas of the state. They feel it is society's responsibility to ensure health care equality, but ultimately they have faith in the system to eliminate disparities thus providing equal access and an excellent quality of care. These individuals assert that they make time to go to the doctor, and take care of themselves as a way to save money in the future. Like the individuals whose sorts define *Care through Prevention*, these individuals feel competent when interacting with health care providers and the health care system. This view is seemingly independent of whom they interact with in the formal care setting, though they tend to know the health care providers with whom they interact. They are not reluctant to obtain care from traditional medical workers, nor do they rely on the newspaper to select a doctor.

The *Care for All* view is comprised of individuals who perceive themselves as having adequate access to the health care system as well as the necessary time and knowledge to take care of their own health. Unlike the other two factors, these individuals feel well adept in navigating the health care system. Further, they personally feel confident about their own knowledge and abilities, which includes not feeling poor or stupid in relation to health care.

These individuals are clearly concerned about their future. This may be because they are ambivalent about the cause of illness. These participants are more likely than those defining *Care through Prevention* or *Care through Relationships* to view illness as a punishment from God. Because illness may be a punishment, the practice of prevention alone is not sufficient. Instead, these individuals seem to be primarily focused on becoming "good" people, which may further explain their emphasis on promoting others' welfare.

Discussion

As a unique method to study human subjectivity, Q methodology is well-suited to studying cultural opinions toward health care. Using this technique, we found that there were different perceptions toward health care among culturally diverse individuals. This knowledge can contribute to the improvement of the health care quality and equity by assisting both health care providers and clients to become more aware of the distinct perceptions of the diverse ethnic and economic groups. The opinions identified in this study could potentially increase the underrepresented population's use of health care services. The method holds promise for informing the content of developing cultural competency skills.

Table 6: Selected statements and scores for Care for All

No.	Statement	Rank	z-score
19*	I believe that all Americans have a right, not a privilege by money, to health care.	+5	2.607
10*	It is more important for Oklahoma health care system to give free medical care to the poor and needy than to give free care to middle and upper class citizens.	+5	1.644
13	If I'm not feeling well, I have no trouble finding time to go to the doctor.	+4	1.516
18	Preventative health efforts must be improved in poor areas of our state.	+4	1.455
12	If I felt by taking some precautions I could save myself some money down the line, then I would take better care of myself.	+4	1.240
21*	Illness can be a punishment from God.	+1	-0.329
15*	My family is stuck in an economic system that dictates both our ability to receive health services and the quality of our health.	-3	-1.059
26	I go to a doctor who advertises in the community newspaper.	-4	-1.339
43*	The future will take care of itself; I only need to worry about today.	-4	-1.455
29	I think medicine is poison. All medicine has side effects. So whenever I get ill, I resort to my own home remedies rather than the health care system.	-4	-1.705
3*	The health care system makes me feel like I am poor or stupid.	-5	-1.750
1*	My family is reluctant to obtain early treatment for illness because care is provided by white and wealthy medical personnel.	-5	-1.816

*Note: Distinguishing statements are denoted by an asterisk **

Three types of cultural opinions were described as all having a focus on the value of preventive medicine. The *Care through Prevention* participants differed from the other participants in that they were primarily focused on prevention above other health care concerns. Disparity issues regarding socio-economic status and race/ethnicity seem to be of less concern to these individuals. Additionally, this cultural opinion is held by those who were

more focused on proactively addressing health and wellness rather than concerning themselves about future illness. They prioritized taking the necessary steps to maintain a healthy lifestyle in the present. Because they were currently presenting at clinics and taking care of themselves, this group does appear to worry about the impact of negative health related behaviors upon their future.

The *Care through Relationships* participants differ from the other groups. Participants whose sorts define this factor are more focused on issues concerning the ethnic and cultural needs of patients than the other two groups. These individuals insist that health care providers need to be well aware of and be culturally competent with the various ethnic groups they encounter. They feel that this concern can be addressed in part through the training of more doctors and nurses from minority populations. Only when the patient's race or ethnicity is addressed can they see the possibility of establishing an effective relationship with doctors and nurses to enjoy adequate and equitable health care. After all, if a doctor wants to meet the needs of his clients, he has to consider the differences in need when it comes to different races. In other words, a doctor's race may not matter, but his or her awareness of the different needs from clients of different cultures does count in the quality of health care.

The *Care for All* participants differ from other participants because the welfare of others, as it relates to health care access and utilization, is the primary focus of this group. Those individuals whose sorts define this factor feel that their own medical needs are being met, but are concerned about the health care needs of others, especially individuals living in poverty. These participants feel that all individuals deserve adequate health care, and assert that preventative health care efforts need to be increased, as do all health care efforts concerning the disadvantaged. As their own health care needs seem to be met, the well-being of others is of foremost importance to these individuals beyond any other health care concerns.

This study could not, of course, identify differences between minority groups, due to sample restrictions and methodological objectives. However, there are presumably differences between minority groups as different groups of individuals have varying needs and cultural backgrounds. Additionally, there may be differences within different minority groups due to individual experiences. We propose numerous implications and suggestions for future research. More diversity in the sample population should be attempted to gain a more thorough view of cultural perceptions toward health care, including a better representation of African Americans, Asian Americans, Hispanics, low income, and male participants. As the participants in our study were predominantly American Indian women, and particularly those who were already attending a health clinic, it is difficult to determine whether these factors adequately represent all cultural opinions toward health care. Additionally, as many of these individuals have diabetes,

health concerns in terms of preventive medicine may be at the forefront of their thoughts. A wider participant base would allow broader responses in building cultural competence.

Future research must address what specific needs are not currently being met concerning health care. For example, while statement 47 appears at first to address the role of mental health regarding obtaining health services, at second glance it more likely reflects the person's general mood when making the decision to visit the doctor. Future research might focus on relationship between mental health and other forms of health care. Additionally, as each racial, ethnic, and socio-economic group has their own unique needs, we learned that it is beneficial, and perhaps essential, to research each population *independently* in order to provide a more thorough examination of representative cultural opinions. We believe that a separate Q set for each group would reveal deeper cultural differences than the attempts in this project to study all diverse groups with one set of responses.

This present study examined perceptions of health care from potential health care clients. Future research might study the cultural perceptions from the perspectives of health care providers and administrators toward ethnically diverse populations. Possible research questions could focus upon practitioner approaches to diversity in race, ethnicity, and socio-economic status as well as administrator ability and willingness to make necessary changes to the health care system. Such research will further efforts to reduce and ultimately eliminate disparities in health care.

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Appendix

Statements and rank factor scores

No.	Statements	Factors		
		1	2	3
Racial and Ethnic Prejudice and Discrimination				
1	My family is reluctant to obtain early treatment for illness because care is provided by white and wealthy medical personnel.*	-3	-1	-5
2	Doctors are prejudiced against me and my family.*	-5	-3	-3
3	The health care system makes me feel like I am poor or stupid.*	-3	1	-5
4	Doctors and nurses need to respect the pride, values, and backgrounds of people they are trying to reach.*	2	5	3
5	If you go to a hospital and they think you may not have insurance, they make you wait. But if you have insurance, they take you right in because they know they are going to get their money.*	0	4	2
6	Race is not a problem in health care.*	2	0	1
7	The ultimate solution to providing adequate health care for minorities and poor people is to educate enough doctors and nurses from minority groups.*	0	5	0
8	It doesn't matter to me what a doctor's race is as long as they pay attention to my needs.*	5	4	0
9	As long as a disease is hitting white people or people with money, the state cares. But if it's hitting minorities or poor people, they are not going to worry about it too much.*	-3	1	1

No.	Statements	Factors		
		1	2	3
10	It is more important for Oklahoma health care system to give free medical care to the poor and needy than to give free care to middle and upper class citizens.*	-1	2	5
11	Support groups need to be with people like me.*	0	-1	-1
Socioeconomic Statuses				
12	If I felt by taking some precautions I could save myself some money down the line, then I would take better care of myself.*	2	2	4
13	If I'm not feeling well, I have no trouble finding time to go to the doctor.*	3	1	4
14	My family has never been taught how to use the health care system.*	1	0	-3
15	My family is stuck in an economic system that dictates both our ability to receive health services and the quality of our health.*	0	2	-3
16	Many people can't get health care because they don't have a ride to and from a doctor's office, clinic, or hospital.*	-1	1	1
17	I am trying to survive, and don't have time or money to worry about health right now.	-4	1	-2
18	Preventative health efforts must be improved in poor areas of our state.*	3	2	4
19	I believe that all Americans have a right, not a privilege by money, to health care.*	4	4	5
Cultural Perceptions				
20	Illnesses are not discussed in my family.*	0	-2	0
21	Illness can be a punishment from God.*	-5	-5	1
22	When I get sick, I just read my Bible and pray.	1	-4	-2
23	Churches should take an active and aggressive role in promoting better physical health.*	1	-1	-1

No.	Statements	Factors		
		1	2	3
24	I prefer to stay away from doctors because you're not really sick until the doctor says you are.*	-2	-3	-1
25	I like to use herbs for medicine first and only go see doctors last.	-1	-5	-2
26	I go to a doctor who advertises in the community newspaper.	-1	-2	-4
27	I go to a doctor whom my family and friends already know.	1	3	2
28	It is so sad that each time when I get ill, I go to a doctor whom I don't know.	-2	-1	-3
29	I think medicine is poison. All medicine has side effects. So whenever I get ill, I resort to my own home remedies rather than the health care system.	-4	-4	-4
30	I prefer a doctor who knows our skin, hair, and illnesses that are unique to our people.	0	2	0
31	I prefer a doctor who helps out in the community. His reputation in the community makes me feel a lot safer.	4	3	-2
Language Barriers				
32	I prefer to go to a doctor who has an interpreter to help me with language when I am ill.	-2	-1	0
33	I hate to go to a doctor when getting ill because he/she does not understand me. He just does not speak our language. This makes me feel even worse!	-4	-2	1
Personal Beliefs				
34	The ability of a doctor to help me depends in part upon my belief that the doctor will help me.*	1	3	3
35	I trust the doctor's ability to cure my disease.	4	1	2
36	I just don't think that doctors can truly make me recover when I am seriously ill. I see no point in going to see a doctor.	-2	-2	-2

No.	Statements	Factors		
		1	2	3
37	There is not much I can do to keep from getting sick.*	2	-2	-1
38	Getting the health care I need is usually too much trouble.*	-2	0	0
39	The real key to good health is good, clean living.*	5	3	2
40	If I need medical care, I will most likely go to a hospital emergency room rather than to a private doctor.*	1	-3	0
41	I know all I need to know about how to stay well.*	0	0	1
42	I will go to a doctor only if I think something is terribly wrong with my health.*	2	0	3
43	The future will take care of itself; I only need to worry about today.*	3	0	-4
44	The state government health policies are geared for the general population. They do not help minorities very much.*	-1	0	-1
45	I have a great deal of pride in the Oklahoma health care system.*	3	-1	2
46	Someone in my family knows all we need to know to stay well, but he/she never went to medical school.	-3	-3	3
47	We don't go to a doctor when we are depressed.	-1	-4	1

*Statement was taken or adapted from Sylvester's (2000) study.