Social Cognition and the Impact of Race/Ethnicity on Clinical Decision Making

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SOCIAL COGNITION AND THE IMPACT OF RACE AND ETHNICITY ON CLINICAL DECISION MAKING

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Abstract

Social Cognition and the Impact of Race and Ethnicity on Clinical Decision Making

Most literature reflects the persistent existence of unequal treatment in the care provided to ethnic and racial minorities. Comparatively little about ethnic bias in the literature goes beyond the retrospective study as the most frequently encountered method of inquiry. Access to providers and the ability to pay only provide partial explanation in the known data. A more controversial hypothesis is the one offered in this dissertation. This qualitative research explored the cognitive processes of ethnic bias as a phenomenon in clinical decision making. The method was a simulation that captured events as they occurred with a sample of nurse participants. The racial and ethnically related cognitive content of participants was evoked through the interactive process of playing a board game. Immediately following that activity, a video vignette of an ambiguous pain management situation involving an African American male was viewed by each nurse who was then asked to make a “treat” or “not treat” clinical decision. The dialogues during playing of the board game in addition to the rationale for the treatment decision provided data for analysis. Content analysis is the primary approach for using the data to answer the research question. Themes of latent and manifest content were described for those who made the decision to treat and those who decided not to treat.
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Chapter 1: Introduction

Statement of the Problem

The Institute of Medicine (2003, IOM) report entitled Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (Smedley, Stith, & Nelson, 2003) repudiated the assumption that the American health delivery system was fair and equitable. A revolution in questions related to quality of care and access to care for groups on the social margins followed the groundbreaking study in quick succession. The synthesis of research exemplified by the report moved race and ethnicity into the forefront as important variables in the discourse on health outcomes for Americans. These variables symbolized conspicuous inconsistencies in the length and quality of life that differs by ethnic group for people living in the United States. The channels of service to persons on the edges of society, compared to those available to the dominant social group, did not reflect parity. The healthcare system, unaccustomed to suggestions of ethnic bias and prejudice, responded by opening itself to a potentially onerous field of inquiry in a demonstration of transparency.

The usual associations of race and ethnicity are primarily sociological. In day-to-day communication, for example, race continues as a sociolinguistic device that groups persons who look the same or share a common origin, although these perceptions are unfounded as scientific concepts. In this manner, race is a sociolinguistic tool that maintains socially constructed differences used to convey the idea of a group. That is to say, race has no definitive measure as a biological principle, nor is it associated with an undisputed definition (Fine, Said, & Stephen, 2005). Unlike race, ethnicity links shared norms such as customs, beliefs, and values (Nagel,
With this in mind, questions related to the use of race in lieu of ethnicity as a research parameter argues a problem.

However, with the 2003 IOM report, by convention both concepts emerge semantically significant to the domains of health, health services and health professions. These words and their frequently associated phenomena of bigotry and intolerance--- while well studied in the social sciences--- do not have a prodigious empirical history in health care. With the notable exception of the Tuskegee experiments, comparatively little about blatant and aversive racism is a focus of disquiet in medicine. By long standing custom, providers self-monitored their lived experience with these concerns and the issue remained dormant in medical discourse. Consequently, egalitarianism and scientific objectivity were assumptions thought to characterize the healthcare system. This service to the public was venerated and unaccustomed to the disparagements of discrimination and prejudice. Within that context, the IOM study was unprecedented. It underlined the need for a radical approach to dispose of uncertainty regarding practitioners and their practice.

Still, not all members of the larger society were uneasy. Reports reflecting the majority’s experience with health care did not reflect the minority experience (Lillie-Blanton, Brodie, Rowland, Altman, & McIntosh, 2000). That is to say, minorities did not universally believe in the nonexistence of ethnic bias in their visits for care (Chen, Fryer, Phillips, Wilson & Pathman, 2005). In the language of social psychology, the health management experience of the minority or outgroup (Dasgupta, 2004) consistently reflected their circumscribed place in the larger social order. Specific historical examples from the Jim Crow Era that illustrate the point are the separation of the races in hospitals, blood segregated to ensure whites would not be transfused with blood from blacks, and the denial of admitting privileges to minority physicians (Smith,
The aforementioned attest that healthcare institutions are not immune to the social practices of the wider society. Anecdotal evidence such as this did not abate and continued to challenge the contention of equity. The contrast in opinions between ingroup assumptions and the reported outgroup experience was without conclusive evidence and therefore ripe for debate. The unavoidable implication is that social norms maintain the outgroup experience without regard to social institutions (Byrd & Clayton, 2001).

The outgroup frame of reference makes it possible to conceptualize unequal treatment in health care. In many respects, to undergo the activities involved in health maintenance is to become part of a system with the same capacity to create an outgroup experience, as any other social process that relies heavily on human agency.

There is a caveat. It could be argued that the manifestation of prejudice and bias need not be insidious. A penchant for ethnocentrism or the belief in the superiority of one’s own group serves as a medium for preferential treatment. As an act of favoring what is most familiar, it creates limited awareness rather than negative intentions. For example, cultural myths in combination with inexpert knowledge can be marks of substandard care. Clinical decision making within this context compromises outcomes because it is unversed. The acknowledgment of such circumstances serves as a source of shame for the uninformed practitioner (Cortis, 2003) and may be rationalized.

Significance of the Problem

The IOM report generated the current discourse on health disparities, and the study defined the concept as documented differences in the morbidity and mortality of ethnic groups in the United States. Explanations for these differences are lacking. Affordable care, access to care,
and compliance with recommended treatment are examples of factors that influence health outcomes, but fail to provide a definitive explanation for variations that deviate from the norm.

It is not yet evident how strong of an influence ethnicity holds on clinical decision making and what remains unclear is the manner in which disparate patient characteristics function. The associated cognitive procedures are complex. Some studies indicate the decision process is stepwise, and others describe a more continuous cognitive operation (Buckingham & Adams, 2000). It is a formidable problem to imagine the process as measurable; however cognitive constructs are one key to the puzzle. The capacity for race and ethnicity to influence treatment and resource allocations, for example, is one decision function open to interpretation. This is problematic because the ability to evaluate a clinical decision requires understanding the many interrelated elements that contribute to judgment. In the end, there exists the need to evaluate clinical choices and to understand the extent to which patient attributes have the power to influence those determinations (Aberegg & Terry, 2004).

In a 2004 position paper, the American College of Physicians encouraged provider awareness of personal bias and stereotypes as a course of action to understand the degree to which the aforementioned factors influence decisions. As a case in point, DelVecchio, James, Good, & Becker (2002) described the so-called “medical gaze” that results from professional training. This expression connotes the manner in which the clinician organizes information that pertains to a specific patient. Such paradigms move the patient through the machinery of care in a timely, efficient manner and are accepted as useful. Encounters with the social complexities of a diverse patient population as unfamiliar models to the medical gaze can confuse and disrupt the process.
Explicit rules do not dictate the building blocks of such social paradigms. In general, attributes that stigmatize are often implicit and by nature hinder empathy and support victimization (Teachman, Gapinski, Brownell, Rawlins, & Jeyaram, 2003). When the provider and patient are ethnically similar or dissimilar, several studies suggest that bias can be present in judgments and decisions (Rahimi, Rosenthal, & Chan, 2003). Furthermore, such bias can persist in spite of available information that may contradict stereotypic norms (Rosenthal, 2004; Rosenthal & Berven, 1999). Research has indicated that the initial clinical impression shapes the type of information noted. Strohmer & Shivy (1994) contended it is because of this first characterization that data is sorted to confirm that first mental image rather than disconfirm it.

Underpinning this preliminary assessment is the still to be explored area of embedded language that may give rise to racial attitudes (Valentino, Traugott, & Hutchings, 2002). This rudimentary form of word association is called semantic priming (Benaji & Blair, 1996) and the speculation is that the ignition of cue language activates stereotypes. This, in turn, leads to application of those stereotypes in a given situation (Santos et al., in press). For example, a cognitive construct that includes the following cues usually frames a particular social class or ethnic group: gang member, skin head, inner city, suburb, pick-up basketball, drive-by, street hockey, rap, classical, gold chains, and pearls. Communication experts often cite the media as the source for popularizing these frames or cues, and researchers conjecture that frames enable outgroup and ingroup comparisons, as well as generate race associated images (Domke, 2001; Gray, 1987).

The capacity of installed frames or archetypes to set in motion patterned-thinking based on established mental models arouses interest in clinical decision making involving patients from ethnic backgrounds. Clinician impartiality becomes the issue of importance. Clinical decision-making is the personally mediated connection between practitioner and patient. It is the point of
care at which need and the means to meet those needs must be commensurate. The work of Rosenthal & Kosciulek (1996) suggested this preferred scenario is sometimes absent. Cognitive access to archetypes, their formation criteria, and the stimulus cues that promote their activation in a given situation, is without a definitive answer in contemporary research.

If prejudice, clinical uncertainty, and stereotypes are factors in patient-provider interactions, this does not perforce suggest harmful intent. The quality of information retained by the majority ingroup about the minority outgroup could indicate the degree to which poor information leads to less than desired outcomes (Balsa & McGuire, 2003). Race has been associated with physician assessment of intelligence, likelihood of high-risk behavior and noncompliance in African Americans (Van Ryn & Burke, 2000). Decisions make use of what we know and how we use what we know to reason out a course of action.

Clinical decision making in nursing is conceptualized as problem solving (Taylor, 2000) with experiential knowledge as its most dominant feature. The series of actions that result in a judgment remains vague, and the specific steps may not be discrete enough to identify the type of data processed when ethnicity is a variable. This remains poorly stated.

Purpose of the Study

Clinical decisions must have exacting quality and bear scrutiny. High decision quality is an important goal in nursing and the ultimate example of good patient care (Harbison, 2001). Using information to reason to a practicable and workable conclusion is a little understood phenomenon. The process of making a decision is a particular example of information utilization, and good cognitive schemas are part of the conceptual whole. These mental models are complex in design and result from processing extensive information——what is seen, read,
and experienced are bundled for easy cognitive access and application; however, the manner in which the assembled content is used is confounding.

The application of knowledge to a focused activity like decision making can follow several theoretical paths. The theory of hypothetico-deductive reasoning describes a process that involves generating a hypothesis, gathering empirical evidence, and outlining a viable explanation. Heuristics involve wide ranging exploratory processes like trial and error or diagrammatic reasoning. In another example, Buckingham & Adams (2000) classified the particular case to the general, according to the concepts of prototype and exemplar. With a prototype, for instance, the nurse compares the patient who is present with the cognitively stored representative example; the exemplar cases, on the other hand, constitute a contrast between the patient who is present and the aggregate of similar instances. This particular paradigm represents a classic opportunity to stereotype.

The quality of a clinical decision is at all times open to discussion. In an acute situation, concurrent factors such as chronic illness and age contribute to the overall clinical picture, and the influence of these variables on treatment decisions is a matter of judgment and expertise. The pivot point becomes what makes a factor salient. Weiner (2004) explained that patients need providers who are contextual thinkers and who possess a level of awareness that precludes committing a contextual error. More specifically, Balsa & McGuire (2003) pointed out that clinical uncertainty and depth of information, in conjunction with severity of presenting symptoms, can be problematic assessments for the clinician. An example of this is an attempt at allocation of suitable resources within the context of ethnic difference between provider and patient. Although ethnic bias may have a deleterious role in relation to suboptimal decisions in
the previously mentioned circumstance, the authors noted that sinister intent is not a required precondition for such bias.

In support of this perspective, Balsa and McGuire referenced the ingroup and outgroup concepts of social psychology. It could be argued that ingroup bias favors preferential treatment for its own membership and consequently disadvantages the outgroup or those who do not belong. Examples of such group differentiations that determine belongingness are language, spiritual beliefs, class, social networks and physiognomy (Gabbert, 2006). These social constructions of cultural identity are useful properties that support group distinctiveness, since genomics has shown there is more within group than between group genetic variation (Witherspoon et al., 2007). That is to say, there are no clear genetic lines of demarcation that would support the consequences of the social weight historically given to such observable traits as skin color, hair texture or eye conformation (Bonham, Warshauer-Baker, & Collins, 2005). The standard historical context, however, is to frame these features as negative attributions. On the other hand, to disparage an individual or group is not socially desirable. To counter this censured behavior rationalizations are used to mask prejudice or bias particularly when ambiguous information is part of the decision making process (Norton, Vandello, Sommers, & Darley, 2006). Wang & Sue (2005) suggest caution in operationalizing race as a biological construct in any research design given the term conflates other concepts (e.g. culture, social class).

Race and ethnicity have gained attention as important to understanding health care quality; more specifically, the influence of these factors on defining excellence in patient care is increasingly apparent. The significance of ethnic identity to assessment, care and discharge planning are evident, and these domains of practice hold implication for the nurse-patient
relationship as a function of clinical decision-making. Knowledge of the group as it relates to those who are culturally different often supersedes the customary value for the individual.

As researchers continue to question the relevance and rigor of race as a variable in scientific inquiry, it becomes increasingly important to understand the implications and possibilities for this construct as a positivist ideal and consider its replacement with the concept of ethnicity. For contemporary investigators, race is loaded with sociopolitical overtones that hinder its ability to objectively represent groups in research; however, contrary to this, ethnicity is specifically defined by these sociopolitical factors. To nullify the difference between these concepts is to compromise the full integrity of any research design, and it is imperative that contextual associations that attend race and ethnicity as research variables be explicitly addressed as a component of any study conforming to the principles of science. Consistent and open articulation of terminology and its use in other research literature may assist with clarifying the true nature of these variables, and what they accurately measure and represent. For the purposes of the following study, ethnicity was selected as the chosen construct.

Cognitive access to archetypes, their formation criteria, and the stimulus cues that promote their activation in a given situation lack definitive description in contemporary research. Not only is it critical that health care providers have the capacity to make clinical decisions uncompromised by implicit or explicit bias against ethnic groups, but the elimination of health disparities depends upon this assurance. The purpose of this research was to explore the connection between key word activators and ethnic bias. Since decisions incommensurate with standards of practice or that differ according to ethnic group require explanation, the goal was to hold the choices up to view and analyze their rationale.
The first intent is to identify the linguistic cues to mental models implicitly associated with a particular ethnic identity. Secondly, the aim is to use this latent construct of group attributions to explore its influence on the decision to treat or not treat an ethnic minority patient.

Operational Definitions

Operational definitions are the product of a broad range of research methodologies used to examine and investigate what the concept means and what it entails. Curiosity about clinical decision-making stems from the need to understand what prompts a particular course of action taken by a healthcare professional. For this research, the following definitions inform the context of the investigation.

Health disparities are the difference in the treatment and outcomes, incidence and prevalence of disease experienced by ethnic minorities in comparison to the white majority (IOM, 2003).

The National Academy of Sciences (2004) used a social science definition to explain racial discrimination which is adopted for this study as the definition for ethnicity. The definition includes two ideas. Racial (ethnic) discrimination is:

(a) Differential treatment on the basis of race (ethnicity) that disadvantages a racial (ethnic) group; (b) treatment on the basis of inadequately justified factors other than race (ethnicity) that disadvantages a racial (ethnic) group (differential effect) (National Research Council, 2004, p. 4).

In his classic work on prejudice, Allport (1954), the social psychologist, defined the concept as:
Ethnic prejudice is an antipathy based upon a faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group as a whole, or toward an individual because he is a member of that group (Allport, 1954, p. 9).

Burns (2000) wrote that mental models are adaptive (sensitive to context) internal belief constructs used to describe, explain (represent an external reality) and predict situations (in order to accomplish cognitive tasks).

Implicit bias is adopted from a definition of implicit social cognition described by Dasgupta (2004) as thoughts, feelings, and behavior toward social objects that are influenced by “traces of past experiences” without people’s awareness, intention and/or control (Dasgupta, 2004, p. 144).

Stereotype is a belief that refers to characteristics thought to be possessed by most or all members of a particular group, and may involve both positive and negative beliefs (Dasgupta, 2004, p. 145).

Clinical decision-making is the ability to demonstrate appropriate elements of the nursing process to diagnose and treat the presenting physical, mental and emotional problems of a patient.

Assumptions Based on Existing Knowledge

The nursing literature includes several articles that seek to provide a theoretical context for clinical decision making. In an evaluation of Cognitive Continuum Theory, Cader, Campbell and Watson (2005) proposed that decision making was not necessarily a dichotomy of either an analytical process or an intuitive one, but rather a combined process related to the task in question. The more structured the task, the more analytical the process. On the other hand, the more ambiguous, ill-structured and time sensitive the task, the more intuitive the cognition.
Time pressured decision making with good outcomes may happen due to pattern recognition constructed from a wealth of previous experiences (Bond & Cooper, 2006). Such patterned thinking can create subtle mind sets. For example, in journalism frames are conventional methods for presenting a story (i.e., the power of marginalized groups is typically presented as acts of street protest rather than in voting booths) and cues are emotive language phrases (e.g. “radical” versus “nontraditional”) (Cho, de Zuniga, Shah & McLeod, 2006). Information retrieval related to a specific subject involves access to conscious and unconscious content. Emotional content is substantive in positive and negative expression, and feelings of threat, anger, blame or frustration can accompany any cognitive paradigm.

One goal of nursing is to make quality decisions on behalf of good patient care (Harbison, 2001). Decisions follow cognitive schemas that enable resolution of a puzzle. Knowledge acquisition can follow the path described by the theory of hypothetico-deductive reasoning or through heuristics, which has a cognitive process focus. For example, the particular case can be compared to the general. (Buckingham & Adams, 2000) classified this idea according to the concepts of prototype and exemplar. As stated, with a prototype the nurse compares the patient who is present with the cognitively stored representative example; the exemplar case, in the other hand, constitutes a contrast between the patient present with the aggregate experience of similar instances. Clearly this represents a classic opportunity to stereotype.

Narayan and Corcoran (1997) suggested Line of Reasoning as the most appropriate theoretical framework for understanding decision-making. It is one process that describes a method in which knowledge is put to use, where certain cues trigger a series of information clusters. As the process evolves, it reflects the interaction of the thinker and the task that
subsequently enables judgment. It is stated that “knowledge is embedded within cognitive processes and presented in the form of an argument or set of arguments that lead to a conclusion, whether that conclusion is accurate or not” (p.1). The clinical picture of any patient coexists with the sociocultural aspects of the individual life. When knowledge from the public domain about the group subsumes what is known from personal experience about the individual, it is suggested that such embedded knowledge be consciously bracketed for questions of validity.

Noone (2002) submitted that the context for decision making is both personal and environmental. The individual life circumstance of the provider and the patient serve to facilitate or impede the best outcomes for health care. Additionally, lack of knowledge and detachment hold potential for unintended consequences. Burgess, Fu and van Ryn (2004) posited the following:

Research has shown that many intergroup biases are driven toward a bias that favors the ingroup rather than bias directed against the outgroup. A white provider does not have to treat a black patient poorly for racial disparities to emerge…. simply treating the white patient more favorably will produce the same effect (p. 1156).

Decision-making can marginalize the health needs of ethnically different groups because limited information on the values, beliefs and cultural norms of specific patient populations leave gaps in knowledge. The studies of sociology and anthropology have been the conventional sources of such information, and they remain connected to the discipline of nursing as part of such theories as Roy’s Adaptation Model or Leininger’s Sunrise Model. Both theories place the patient within the larger social context. That frame of reference includes the social dynamics of
the representative groups from which the patient and nurse claim their group identity. The unconscious intrusions of those dynamics into the professional milieu are worthwhile points of inquiry.

Health care decisions are made in fast paced and pressured environments so formulaic thinking has the inherent disadvantage of exclusionary thought processes. Role responsibilities to unfamiliar and stigmatized patient populations create a milieu ripe for sharp contrasts in outcomes; differences in results are arguably a natural consequence of such circumstances. However, a suspect situation can be taken apart for critical analysis if an appropriate method is available.

Research Question

Nursing literature includes research that seeks to provide a theoretical context for clinical decision-making as an essential link to patient outcomes. Typically, the decision process sets the stage for efforts to problem solve a patient’s chief complaint. Questions such as “What is the most appropriate treatment?” or “What can we provide in services?” are familiar forms of this genre. Commensurate with such questions are their sought after answers and it is reasonable to assume that such thinking involves conscious as well as unconscious informational content. In other words, facts, preferences, rules, values, insights, and psychological cues combine to shape a course of action, but how this happens and the cognitive mechanisms that support the process remain a mystery.

Mental models of ethnic groups result from social constructions and are equivalent, in social psychology, to the designation category cues. Studies suggest that social information can present in one of two ways. Sedikides & Ostrom (1988) write that what is known can be retained as a cluster of qualities associated with a named person; and secondly, information can be loaded
as descriptors. For instance, “person” as a category organizes the remembered information bundled under the name “John”. On the other hand, descriptor categories reflect classification factors such as occupation, hobby, or character traits. The linguistics that supplies the discourse on bias and prejudice highlight the intricacies of how the mind works. Stereotypes cue discrimination, and research suggests that stereotype consistent language is context dependent and more abstract than stereotype inconsistent language (Wigboldus, Spears & Semin, 2005). These expressed distortions in terminology set up the expected result; for example, “Mary is a nurse because she wants to help people” is abstract and stereotype consistent, while “Mary talks tough” is more concrete and stereotype inconsistent. In addition, when stereotypes activate, research indicates that any information inconsistent with the stereotype is blocked (Dijksterhuis & van Knippenberg, 1996). This holds implications for an initial clinical encounter when the first clinical impression shapes how discrepant or congruent information is noted. The beginning characterization forms the basis for sorting data that confirms rather than disconfirms the first mental image (Strohmer & Shivy, 1994).

The cognitive construct judged relevant to the situation at hand is the innermost part of the decision process. Undoubtedly, the way in which these are put together can reflect what is true in certain cases but not in others. Faulty psychological models or paradigms have the capacity to mar the formation of opinions and judgments, and this is especially significant when considering clinical decisions relevant to the care of ethnic groups. More specifically, the identification of thought patterns consistent with ethnic bias holds great implication for the elimination of health disparities.

There is the assumption that clinical decision making is rational, objective and socially neutral as it relates to positive or negative values assigned to class structure or ethnic groupings.
Research suggests that socially desirable characteristics such as a good job, good salary, and trustworthy persona may give rise to preferential treatment (Tamayo-Sarver, Dawson, Hinze, Cydulka, Wigton, Albert, Ibrahim & Baker, 2003). Bias can also be present in judgments and decisions when provider and patient are ethnically similar or dissimilar, and such bias can persist even in the face of available information that contradicts stereotypic norms (Rahimi, Rosenthal & Chan, 2003; Rosenthal & Berven, 1999).

Implicit Attitude Tests infer unconscious value judgments associated with racial groups. Affiliated beliefs manifest under the pressure of timed responses, e.g., “white with good,” “black with bad,” that the test measures in milliseconds. The assumption is that pace precludes the influence of conscious thought and underlying ideologies are made explicit.

Pittinsky, Shih and Ambady (2000) suggested another dimension of complexity. There are several categories in which to place an individual—gender, age, and ethnicity are examples. The perceiver can elicit the object of recall from several categories, and the grouping most meaningful to the perceiver is the question of interest.

Assumptions
1. Cognitive constructs about ethnic groups are socially constructed. They are comprised of historically identifiable elements that remain consistent from perceiver to perceiver.
2. Cognitive constructs about ethnic groups are discernible in health care decisions.
3. Cognitive constructs about ethnic groups may influence treatment choice resulting in a clinically acceptable alternate choice but that alternate is one less in degree of value when applied to socially hierarchical groups.

Fig. 1.0 Treatment Dichotomy

Preferred treatment

Prevailing treatment choice in a clinical situation

Equivocal treatment decision results when cognitive construct about ethnic groups is part of clinical scenario

Clinical situation results in an alternate NOT prevailing treatment choice.
Research Question

Do cognitive constructs of ethnic groups connect to clinical decision-making in a manner that disadvantages ethnic groups?

Summary

Race and ethnicity have import in clinical decision making. Ethnic minority patients report qualitatively different health care experiences than the social majority. These accounts appear in the literature associated with historically stereotyped population groups and generate questions about unequal treatment in health care.
Chapter 2: Review of Literature

This study addressed questions related to the interrelationship between ethnic bias and clinical decision making. Understanding the connection between these two factors and their contribution to health disparities in a multiethnic society is vital, and the ability to identify an explanation for patterns of difference in the health status of population groups demands action. This is the case as long as uncertainties about inequities, their origins, construction and manner of functioning remain imprecise and not well established.

Health Disparities

The existence of inequitable treatment provided to patients dissimilar in sociodemographic detail is one of the great ethical and analytic challenges in modern health care. Present day research is a helpful means for sharing current thinking on variations in health status and the outcomes of health management as they relate specifically to ethnic populations. Contributing factors highlighted in the literature are socioeconomic realities, flawed systems, or inadequate training in cultural competence. Relevant to the contributing factor of cultural competence, English proficiency, socioeconomic status, gender, sexual orientation, cognitive or physical ability, and religious or spiritual belief systems are inherently neutral social classifications that take on added dimension when linked with stigmatized or marginalized social groups. English proficiency and Hispanics, socioeconomic status and blacks or religion and Muslims are life characteristics that may be variables or proxies for yet another unidentified process when examining the intricacies of disparities in health care.

One of the most challenging possibilities is that health outcomes for ethnic groups are impaired by bias in clinical decision-making. The integration of stereotypes, for example, into
the information schema that health professionals maintain about minority patients induces
questions that health care researchers can give evaluative attention. The implications for the
provider and patient are basic and fundamental, and the avoidance of perfunctory or inadequate
care as a logical conclusion to the presence of bias is a moral and legal imperative.

Sources of Health Disparities for Ethnic Minorities

The 2005 National Healthcare Disparities Report published by the Department of Health
and Human Services reiterated the existence of disparities in quality of care based on race,
etnicity, and socioeconomic status. One descriptor of health care quality in the report was
equity--- the idea of care that conforms to standards and reflects impartiality exemplifies that
particular descriptor. The reference points against which quality could be measured included
clinical performance, patient assessment, and outcome measures. Of note in the publication were
the following: (a) racial/ethnic groups received fewer of the recommended services for a chronic
illness, e.g., diabetes; (b) racial/ethnic groups were disproportionately represented in the lower
socioeconomic strata; and (c) socioeconomic status did not totally explain race/ethnic differences
in mental health treatment.

Other indicators of health disparities included rates of higher infant mortality and
hospitalizations for asthma. Additionally, minority populations had heart disease, colorectal
cancer, differences in treatment options for HIV as well as in screening rates for cancer and the
differential incorporation of analgesics in treatment plans (Lillie-Blanton, Rushing & Ruiz,
2003).

A considered retrospective of the nursing profession and its contribution to the study of
health disparities research provided by Flaskerud, Lesser, Dixon, Anderson, Verzemnieks,
Conde, Kim, Knoniak-Griffin, Strehlow & Tullman (2002) revealed an interesting narrative on
the topic. This decade-by-decade assessment of specific eras revealed the capacity of social concerns to stimulate study of a specific issue or problem. Focusing only on research published in the journal *Nursing Research* and using their criteria for inclusion in the literature review, the authors found relatively little on health disparities. The operational definition used for the concept was “differential patterns of morbidity and mortality in vulnerable versus advantaged social groups.” The category “vulnerable” identified people of color; people living in poverty, and those marginalized by sexual preference, immigration status, religion, or creed. Resource availability, measures of risk such as lifestyle behaviors, and use of preventive services constituted the research variables (p. 75). The periods covered in the review and fields of study with the research status to draw funding during those years may explain the limited number of nursing studies found by the authors. That is to say, the maturity of nursing research itself was still developing and could have been a hindrance.

As noted, health disparities are experienced as unequal treatment and suboptimal health outcomes in patients identified as members of stigmatized and socially marginalized groups. There is well-documented evidence of this phenomenon in health care. As noted, questions persist even after research results investigating the impact of affordability, consistent access to care, co-morbidities as an indicator of disease severity and genetic differences have entered the literature.

In spite of limited contributions in the past, the increased presence of nursing in this field of research continues to be important. In particular, there is the need to investigate possible causes of disparities as opposed to its correlates. Complementary variables or reciprocal relationships between variables are signs and symptoms exemplifying underlying possibilities. The field needs categorical statements and new evidence or facts firmly linked to cause and
Issues for Debate

Ethnocentrism was once the prototypical model of care delivery when the demographics of the United States reflected the European roots of the nation. Different immigrant groups now dominate communities that are the focus of a contemporary public health agenda, and present a challenge to old worldviews. In Massachusetts, for example, the gain in state population for the last census was determined by immigration. New immigrants arrived to the state from South and Central America, India, China, Russia, Vietnam, and the Caribbean. The infusion of new arrivals tested the abilities and resources of the dominant culture to accommodate issues such as English proficiency, level of educational attainment, and potential need for public assistance regarding these populations and their communities of residence (Sum, Uvin, Khatiwada & Ansel, 2005).

The means to manage the health needs of new immigrants exerted considerable pressure on the operations of health systems. The process of making the prevailing structures more responsive to disparate cultural groups generated questions of rights, privileges, and equity. Diametrically opposed to the latter, institutions and individuals are thought to serve as conduits for the expression of prejudice and ethnic bias. Personally mediated racism is a particular example, because this concept expresses itself as negative assumptions about the abilities, motives, and intentions of others according to their race and accompanies differential actions toward those individuals (GrantMakers in Health, 2003).

Several variables confound this complicated proposition. Following the premise further, in a 2003 study, Tamayo-Sarver and colleagues posited socially desirable characteristics and the quality of the patient-provider interaction were contextual influences on treatment decisions that
offered alternative explanation for certain outcomes rather than absolute ethnic bias as a cause. They found no significant basis for the suggestion of racism in health care decisions. The study suggested a patient without a primary care provider (or one with low socioeconomic status) could represent situations and decision scenarios a clinician might also take into account. In contradiction to this point, even when controlling for factors such as socioeconomic status, indications of difference in health outcomes remain correlated with ethnic identity in numerous other studies.

Additional research shows that ethnic minority patients with diabetes are at increased risk of amputations as compared to whites, even when access to care is not an issue (Young, Maynard, Reiber, & Boyko, 2003). Also, black patients are less likely than white patients to receive devices such as implantable cardioverter-defibrillators, which are shown to improve survival rate following cardiac arrest (Groeneveld, Heidenreich & Garber, 2003); and the probability of having their name on a waiting list or referred for a renal transplant is less likely for blacks as compared to whites (Ayanian, Cleary, Weissman & Epstein, 1999).

Disputation exists surrounding possible explanation for acknowledged differences due to a paucity of the kind of research that attempts to provide direct evidence of the manner in which bias, prejudice, stereotypes, and uncertainty play a role in clinical decision making and differential treatment. Balsa and McGuire (2003) suggested that one explanation for health disparities is the lack of familiarity with ethnic populations by some physicians. Lack of experience may cause a misread or misinterpretation of presenting problems. The resulting reliance on other categorizing factors such as race/ethnicity may move the context for decision making into the realm of preconception, and thus a possible connection to stereotypes. The IOM report on disparities referenced the role of discrimination; for instance, the impact of ethnic bias
at the patient-provider point of contact is little understood as an influence on interpersonal communication and clinical decision making.

**Patient-Provider Interaction**

One important difficulty in extricating the minority patient experience from the general patient experience is lack of documented information that accurately portrays the dynamics of that reality. Focus groups and individual narratives provide qualitative material that is seldom followed by an empirical study. In their research, Krieger, Smith, Naishadham, Hartman and Barbeau (2005) pointed out the small number of psychometrically valid instruments available to do large scale tests of experience with discrimination. The Experience of Discrimination (EOD) instrument, a self report tool exploring instances of unfair treatment in venues like work, housing, and the court system, also asks about medical care. Surveyed blacks recalled negative experiences about 17% of the time and Latinos about 14%; this is in contrast to whites that recalled such experiences at about 6%. Interestingly, blacks that were interviewed filed a formal complaint in any instance of discrimination only 7% of the time, Latinos about 9% and whites approximately 6% of the time. These numbers suggest that even if racism is experienced, it is unlikely to be reported.

There are studies that stimulate the desire to learn more. For example, case scenarios that examine treatment decisions to retain or extract a decayed tooth for a simulated case in which race is the only manipulation shows differences based on ethnicity even when socioeconomic status, health status, and adequate pain control are eliminated as confounders (Cabral, Caldas & Cabral, 2005). The researchers theorized clinical uncertainty, prejudice and stereotyping as possible influences on the difference in decision choice. Given the decision to retain the tooth for both ethnic groups occurred only in the world of the military, it is posited by the investigators
that the treatment setting might be an influence on decision making. For instance, socioeconomic status (e.g., poor black as compared to poor white) may prevent a clinician from considering conservative treatment that could require several follow-up visits when issues of compliance are a group stereotype or when cost is the topic in question.

Patient participation in decision making may not be the sought after panacea. Intercultural communication requires awareness of verbal and nonverbal communication as well as a skill based understanding of patient preference in presentation of information. Consider the example of shared decision making---this option may not offer the change by which more desirable treatment outcomes could be achieved for the ethnic minority patient. That is to suggest that shared decision making provides a method by which the right choice in treatment decisions will be more likely if the patient is involved (Amsterlaw, Zikmund-Fisher, Fagerlin & Ubel, 2006). How this concept is put into action determines its resemblance to what is intended by the term. It is the responsibility of the clinician to describe risks and benefits associated with treatment options, and risk-benefit is often presented in the forms of a ratio. Understanding the way in which patients process that information is of great significance because of the clinician role.

A relevant example is the Amsterlaw, et. al (2006), study in which the information was varied in one primary scenario describing the risk of complications related to surgery for colon cancer. The first in the sequence of two variations was the choice described as a complicated surgery (Surgery 1) with an 80% cure rate, a 4% risk of complication, and a 16% risk of mortality. The alternative is presented as an uncomplicated surgery (Surgery 2) with an 80% cure rate, 0% complications, but a mortality risk of 20%. In each variation of the primary scenario, a 4% risk of side effects to the surgery (e.g., wound infection, diarrhea) was offered in different
iterations. In some instances the chance for side effects in the complicated surgery was presented as an aggregate of 4%, and at other times as 1% for each of the four different types of complications as previously mentioned. An additional scenario posing a 1% risk of negative side effects with the uncomplicated surgery is also included in the study design to explore choices that may not have clear distinctions. The threat of mortality (16% for surgery with risk for complications, 20% for no risk of complications) was adjusted accordingly. The researchers concluded that for the patient, the presence of complications takes on added significance out of proportion to the stated risks when a decision is required. In other words, when comparing the two cases, a 4% risk of complication that exists in one case outweighs the 4% difference in mortality that differentiates the two treatment options. More pointedly, it appears patients would risk mortality rather than live with the types of complications posed in the study.

The researchers pointed out an inconsistency in the outcome from a preference rating exercise performed by the study subjects. In this portion of the research “death” favored over “living with a complication” was explored, and the latter was selected. This was at odds with surgery without complication (Surgery 2) as the dominant choice of the principle study. That is to say, the belief system that supports a choice may not result in the expected decision. The investigators suggested that what people know about something and what they feel about it may be different. This emotional salience as it is termed by the researchers is put forward as a concept for future study.

The research design had methodological limitations such as nonrandom sampling, and different cohorts used in a segmented study; however, it still raises practical considerations for discussion. The amount of information to provide, the style and the content of instruction are crucial subjects when risk-benefit options are presented to minority patients by nonminority
clinicians. Verbal and nonverbal delivery within the subtext of the racial ethnic dynamic can be very fluid. The right choice may be influenced by many explicit and implicit factors.

In a Canadian study, Majumdar, Browne, Roberts and Carpio (2004) explored the gap in knowledge presented by the lack of experimentally designed research on the effect of cultural sensitivity training on the quality of care provided to a multicultural patient population. Their research met the criteria of experimental design through the random selection of a provider and patient sample population, and the use of an experimental and control group to assess the effectiveness of cultural sensitivity training as an independent variable. The research questions were: (a) is cultural sensitivity training effective in improving provider attitude; and (b) are patient expenditures on health and social services and patient health outcomes improved as a result of cultural sensitivity training?

Researchers observed nursing and home care providers in an urban area with an estimated 25% foreign-born population over a period of 1.5 years. Patients in the experimental and control groups identified ethnically as Canadian, British, or European; they were otherwise similar in religious background and level of education with English as their primary language. In comparison, French-speaking patients were the minority in the study sample. The sample size of providers and patients dropped throughout the period of research due to relocation, refusal for further participation, illness, and death. Acknowledging these constraints, several interesting conclusions were noted nevertheless: providers who received 36 hours of training in cultural sensitivity demonstrated an improvement in cultural awareness, an increase in open-mindedness and insight, and improved ability to communicate with minority patients. Most intriguing, there was a decrease in health and social expenditures among patients involved in the study.
The movement to describe and educate health care providers about cultural competence and its inclusion in individual practice brings into closer range the issues raised by health disparities. Culturally competent care, cultural sensitivity, and culturally and linguistically appropriate care are examples of terminology that indicate a change in medical and nursing perspectives on health management and education. This nomenclature is comparative, and it orients clinical practice and principles of care to the unique end users of health services according to the cultural identity of patients, their families and the communities in which they live. The consumer becomes the focus of the health care experience within this paradigm, while the resulting idea of equal treatment underscores the importance of consistency in action, intention and effect as essential qualities of good clinical practice. To a notable extent such care is assumed impervious to inexplicable variation.

Rawls (2000) explored the difference between black and white conversational codes of conduct. In a social environment, initial ingroup conversational encounters are managed differently; for whites, introductory dialogue is focused on information gathering, and social credentials (occupation, place of residence, education) are established at the beginning; for blacks, introductory talk separates into what is judged public or private in addition to nonhierarchical communication as the basis for relationship. Information itself is important to whites, “White Americans prefer to build their conversations only after the production of categories” (p. 249). When the aforementioned processes do not occur, making sense of the interactions becomes problematic, and from a black perspective, category questions require motive, i.e., the social history of the group creates guardedness. Caution is culturally prudent as it relates to type and amount of information shared.
An example of wariness relevant to health care is the quality and effectiveness of the contemporary clinical interview. The current interest in cultural competence aids in understanding why African Americans are circumspect in their answers to certain questions. Holding back information, withdrawing from care, poor interpersonal communication and a social history (e.g. Tuskegee Syphilis Study) that casts episodic clinical incompetence as human experimentation are examples of open distrust and unwillingness to confide (Jacobs, Rolle, Ferrans, Whitaker & Warnecke, 2006). Similarly described in the literature and based in the history of the Maori people of New Zealand, is the concept of cultural safety described as the practice of positively supporting the cultural identity of any given person. This construct created by Maori nurses for an indigenous people also familiar with cultural oppression, enables the identification of experiences analogous to that of the African American (e.g. underutilization by clinicians of patient resources such as interpreters even when available, negative power dynamics in health care relationships, demeaning clinical encounters (Anderson, et.al., 2003) as well as other cultural groups with comparable histories. This tendency of group histories impacting cross cultural relationships is relevant because clinical outcomes are dependent on analytic data as well as the best discretionary information collected from the patient.

Problematic situations permeate the average patient experience. Patient satisfaction surveys identify waiting time, staff competence, institutional reputation, and quality of interpersonal communications as examples of factors important to the personal experience of each consumer. However, issues of disparate care, while related to such considerations, are also impacted by circumstances unique to attitudes and behaviors characteristic of cultural dissimilarities. This backdrop pertains to the social value placed on factors such as race, class,
customs, beliefs and gender which, in the practice of the individual clinician, may bias who receives help and the degree of assistance provided (Anderson, et. al., 2003).

Sources of health disparities at the level of the patient-provider encounter are provider bias, clinical uncertainty and stereotypes (Cardarelli & Chiapa, 2007). The difficulty in acknowledging race-ethnic bias in decisions related to the quality of patient outcomes is disturbing to clinicians not only because of ethics and self esteem, but also because subjective reflection presents a challenge to recall antipathy as a part of decision motivation. This is understandable to the contemporary person who considers him or herself enlightened. Granted, this is a reasonable assumption --- and while it may be true--- it is only part of the overall understanding we have of bias. As noted in studies previously quoted, bias exists beyond the realm of emotional content, and it is also part of conditioned thinking. The persistent categorical divisions that human beings use to organize their understanding of how to navigate through life are beyond any question of actual use as a technique for mental processing.

Mental Schema

The underlying structure of any individual decision schema remains undetermined, and the patient-informant presents signs and symptoms as subjective data. The decision maker as a singular persona with a level of expertise also subjectively processes that data in accordance with their problem solving schema. The introduction of new factors broadens the complexity; for example, the social construct of race or ethnicity serves a sort by type intention in the nomenclature of cognitive schema, but the need for this function remains an open question. Sort by type as a stipulation for mental processing does not explain its purpose; however, the existence of the race-ethnicity construct provides a specific focus from which to analyze and study the byproduct of any sort by type cognitive activity. Good clinical decision making will
ultimately improve patient outcomes if individuating factors like ethnicity have no contravening effect.

The intellectual process that stores and utilizes abstract ideas as general knowledge is assumed coherent and logical. This suggestion of order in learning and reasoning intimates thought patterns that are not haphazard; therefore, the structure of the elements that particularize a learned stereotype point to the possibility of a consistent relationship between component parts organized and held together by an identifiable framework. It is the function of social cognition to organize the meaning of any attending experiences, and because of this, the combination of stereotype and personal meaning warrant careful examination of the psychology behind such individual actions as decision making. Although it is appropriate to give thoughtful attention to any conclusion stemming from a line of reasoning, the idea that information processing cannot be tied to fallacious inferences does not necessarily point to a faulty premise. Based on the issue of health disparities described, the possibility that stereotypes function as scripted thinking embedded in cognitive schema is not a hypothesis that can be put aside.

Social Cognition

Social Mechanisms

Group and interpersonal dynamics influence social relations in human society. A body of formal and informal rules, social models and systems guide the structuring of what becomes known as the common experience. Societal segments result from such arrangements. They develop further consequent to social canons and conventions that become acquired knowledge and enacted behaviors.
The influence of social structures that could have an adverse effect on the health of ethnic populations is not known. For example, studies show that for African and Mexican immigrants who settle in the United States, there is a detrimental influence on the state of health enjoyed before arrival into this country. Stated differently, the health of the newcomer is often better than the white population in America (Read, Emerson & Tarlov, 2005). This suggests the need to identify the social mechanisms that serve to explain this general decline in health accompanying long term residence in the United States for ethnic minorities.

Social Constructionism as a Link

Several social science concepts are discussed in this literature review, which span different approaches to explicating the nature and effects of ethnic stereotypes. Social cognition, social identity theory, cognitive psychology and framing communication theory all have similar theoretical assumptions related to the manner in which information about social groups is organized. One result of these methods is the realization that word choice enables the ability to exteriorize thoughts and feeling about the other as a sociological object. Another related broad theory is symbolic interactionism, and stemming from this is one overarching theory that includes tenets of the other posits and is known as social constructionism.

Gergen (1985) writes that social constructionist inquiry is principally concerned with explicating the processes by which people come to describe, explain, or otherwise account for the world (including themselves) in which they live. It attempts to articulate common forms of understanding as they now exist, as they have existed in prior historical periods, and as they might exist should creative attention be so directed (p. 266).

Mallon (2007) is more specific in characterizing the principal intellectual occupation of social constructionists as the exploration of phenomena dependent on conditions and occurrences
that are the consequence of social relations, and the techniques that allow human beings to function in relation to one another. From this perspective, stereotypes are artifacts stemming from the field of human activity and in this sense individual experience produces a personal nomenclature connected to a larger publicly shared consensus. This collective agreement gives social meaning to human behavior.

The rational mind requires a conscious awareness that it is operating logically. Consequently, reasoning tends to reference experience and the logic of cause and effect by necessity appears faultless in reaching a satisfactory conclusion. Concomitantly, individual thinking is organized in a manner to suggest sound judgment and good sense. As noted, labels and categories are one example of an organizing principle of such cognition.

Labels are cognitive compass points that help individuals avoid the disorientation associated with ambiguous or unfamiliar situations. They bundle multiple elements in a design that implies significance and can be used as a premise from which other reasoning can proceed. The content enlisted into service for such a bundle need not be based on or restricted to facts. Social constructionism suggests that prevalent thinking that is widespread and commonplace is raw material for devising concepts related to the juxtaposition of ingroup to outgroup. More specifically, when one group is not conversant with the conventions and habitual behaviors of another, this lack of familiarity is experienced as an unacceptable gap in knowledge, and it is perceived as a problem. According to the aforementioned theory, it can be inferred that the information to fill this vacuum is given form by the context of history, everyday experience, social interactions, projected meaning, and inversely related or complementary behaviors.

The social construction of reality (Berger & Luckman, 1966), generally considered the seminal work on social constructionism, proposed that society has both an objective and
subjective reality. The ability of individuals to share in the social process of understanding each other and knowing that their separate experiences correspond in character or kind promotes the larger concept of socialization. The internalization of the objective reality of another is a reflection of a shared human society. Language is the conduit for this process. The authors noted that:

It should, however, be stressed that the symmetry between objective and subjective reality cannot be complete. The two realities correspond to each other, but they are not coextensive. There is always more objective reality “available” than is actually internalized in any individual consciousness, simply because the contents of socialization are determined by the social distribution of knowledge (p. 133).

Additionally, what the authors refer to as counter-identities and counter-realities are other facets of human society that exist in contrast to the exertions of social pressure and constraints. Using outmoded terms such as “cripple” or “idiot” to make the point that some profiled groups have self-identities that do not match with designations instituted by dominant social thinking, the authors stated that “incipient counter-definitions of reality and identity are present as soon as any such individuals congregate in socially durable groups” (p. 166).

Socially constructed definitions

Moskowitz (2005) defined social cognition as the study of the mental processes involved in perceiving, attending to remembering, thinking about, and making sense of the people in our social world (p. 3). This domain of science contributed to an understanding of the larger sphere of social psychology.

The author explained learning happens through experience, and in the process of perceiving, the observer learns to categorize both animate and inanimate objects according to
their features—a hammer is a tool, a trout is a fish, a lion is a cat. The categorization is faster the more familiar the association and the process slow with judgments like a whale is a mammal or a tomato is a fruit. Object placement is consequent to its category and family resemblance.

Convention assigns this aggregate of attributes to its target. Moskowitz (2005) wrote:

> We see ourselves as merely transcribers of the qualities displayed by others, despite the fact that our construal of them is heavily influenced by subjective forces (existing wholly in our own minds as perceivers) that are divorced from the qualities of the persons being perceived. (p. 22)

Harding (2004) examined the series of steps used to determine the disability status of adult claimants for Social Security benefits, and the implications of bias in the decision making process. The author notes the Social Security Disability Program operates under federal guidelines, so the definition for disability is consistent from state to state. Additionally, the two programs under which awards are determined have clear differentiating criteria: under one program, claimants are eligible if there is a limited work history; eligibility for the other program is set aside for those who worked and paid taxes. Psychologists and physicians are employed as medical review consultants and serve as advisors to disability analysts. The key element to the consultant role is the lack of direct contact with the claimant, and advice to the disability analyst is solely based on information contained in the individual file. The type of evidence included in the review ranged from mental status examinations and cognitive measures, such as IQ tests, to observation notes from field personnel. Also included in the file were self reports from the claimant.

An error in decision making can result in the denial of a deserving claim for benefits, or an inappropriate award that further drains the budgeted resources. As it relates to the
fundamental premise of the following research, Harding (2004) pointed out that there are no established heuristics that guarantee accuracy in decisions made; more pointedly, the central factor is the judgment of the clinician. Consequently, questioning the potential for bias in the process is important, and the fundamental issue remains the same: What is the particular method for reaching a conclusion?

The subtlety at the base of the expertise question rests on determination of factor relevance and the weight of evidence given items important enough to inform the decision process. The goal of expertise is the capture of a connection between eligibility criteria and the manner in which the life of the claimant conforms to the qualifications in daily life. For example, the implications of a psychiatric diagnosis, functional limitations and episodes of decompensation facilitate or block consideration. Harding (2004) cited the use of heuristics (what was learned from previous experience) such as confirmation bias (taking action based on finding what was expected), availability (giving more weight to most recent information acquired) and representativeness (perceiving associations between events assumed to be similar). The research pointed out that bias can be introduced in several ways: when determining the credibility of the claimant, through diagnostic overshadowing in which the presence of one condition can mask the identification of additional impairments, and when framing information such that different interpretations are possible for presentation of the same data depending on chosen perspective. Under the heading of bias and patient characteristics, Harding noted that age of patient or decision maker influenced the manner in which clinicians processed claimant information. The researcher concluded that the clinical decision maker is inclined to simplify complex information to make it more manageable and consequently opens the possibility of inaccuracy and faulty conclusions.
Woo-Kyoung & Medin (1992) explored the inner workings of category construction and the way in which objects and their dimensions are judged similar or dissimilar by the perceiver. Cognitive schemas that explain human psychology are not all valid models. The perceiver makes the judgment about what is the most salient attribute in a given situation; however, the most notable factor to one participant in a circumstance may not be as arresting to another involved in that same experience. What is most prominent carries a different weight for each observer according to the cognitive schema used for a frame of reference. Although autonomous of the perceiver, that same individual gives meaning to these features.

We use norms to filter perception. This selective attention prevents cognitive overload and conscious and unconscious norms or models allow a decrease in uncertainty of meaning or ambiguity. The assumed base of clinical judgment is the facts of the case or more specifically, the clinical information. Held as self-evident, context (persons and personal belief system) has no weight as interference with said data. It is important to understand for the purposes of this study, at what moment race-ethnicity is simply context and when it becomes the most salient feature. That is to say, when is race-ethnicity background or foreground?

In 2000, van Ryn and Burke posed a study question exploring the paradox of categorization in the cognitive processing of health professionals as it relates to minority groups. They noted the paucity of research exploring the effect of patient race and socioeconomic status on physician suppositions. In their study, random samples of African American and white patients of both genders were assessed for appropriate cardiac treatment, with socio-economic status included as an additional parameter. After controlling for the effect of physician characteristics, e.g., age, sex, race, specialty, and patient characteristics inclusive of income and education; the study hypothesis was supported. More specifically, compared to whites who
enjoyed a better financial status, African Americans were more likely to be perceived by physicians as less intelligent, lacking self-control, irrational, unlikely to desire an active lifestyle or have heavy career demands, at risk for substance abuse, have inadequate social supports, and likely to be noncompliant with cardiac rehabilitation if recommended.

The research conclusions of van Ryn and Burke (2000) framed a significant issue for debate. More specifically, the field of epidemiology, for example, provided ample information about population groups. The difference between a population based probability identified from extensive research and the appropriate labeling of information as stereotypical or biased may be difficult to discern in the mind of the individual practitioner. As indicated previously, the degree to which a given amount of information is applied to an individual instance is the base from which to assess the difference between knowledge with academic merit and information that is only habitual patterns of thought based on social conventions.

Weeks & Lupfer (2004) demonstrated that class prejudice increased in situations of stereotype congruence. For example, in the phrase “middle class black” the class designation is the more salient variable in a test involving categorization and social judgment. On the other hand, in the phrase “lower class black,” race is the most prominent feature noted by a test subject with “lower class black” considered stereotype consistent (p. 974).

In general, judgment situations utilize two perspectives to make issues comprehensible. Cho, de Zuniga, Shah & McLeod (2006) researched cue convergence and found significant strength between word associations that influenced value judgments of Arabs as a socially designated group. In the study, they allowed readers to pursue additional details of a larger story divided into nine segments. The cue language in a fictional account of FBI surveillance included the dyads of citizen-nonextremist, immigrant-nonextremist, citizen-extremist, and immigrant-
extremist. When readers demonstrated unfavorable opinions of Arabs, judgments more aligned with support for immigrant restrictions and opposition to minority empowerment.

Domke, McCoy and Torres (1999) provided a possible explanation for this. When an ethical interpretation is advanced, the basis for understanding an issue is within such contexts as rights, morals, and principles. On the other hand, if a material interpretation is the chosen approach, frames of reference may include economics, practicality, or personal self-interest. The perceiver seldom consciously labels an issue during real time information processing. The mindset used to conceptualize a situation is treated similarly. The interplay of chronic illness and faulty health behaviors that signal poor self-care can present areas of frustration and challenge for the nurse and physician, particularly if the lack of adherence is explained by cultural dismissal of a recommended plan of care. A conscious or unconscious value judgment of this patient behavior can be a misstep in ethnocentric processing by the clinician according to the authors.

Automatic and Controlled Processes

The quagmire of stereotype activation and application equates with questions about the psychology of automatic and controlled thought processes. Automatic processes take place outside conscious control. On the other hand, controlled processes happen voluntarily and as a function of awareness (Stewart & Payne, 2008). It is further posited about these mental procedures that cognitive load presents as a limiting factor for controlled processes but not for automatic. The intellectual management of the constant input that is the stimulus of daily living is conceptualized as two kinds of selective attention (Stone & Moskowitz, 2011).

Posner (1989) described these as focused attention deficits (FADs) and divided attention deficits (DADs). The former is the result of frequent repetitions that become learned behavior
and so inculcated as to be automatic; the latter deficit resulted from the controlled and strategic use of learned information influenced by the rate at which such processing takes place and portioned over time. The difficulty of analyzing the complexities of information storage and utilization represented by these actions also involved understanding if the two cognitive operations occurred concurrently, serially, or in opposition. The question remains unresolved; however, for the purposes of this study, uncovering the true nature of stereotypes within the dichotomy of automatic and controlled processes is intricate at the micro level. Decision making produces an observable result, and while the details of the mental workings of automatic and controlled processes may not be definitive at this time, to reassemble the course of actions taken in clinical reasoning within the framework of this cognitive language is necessary to reveal the dynamics of stereotypes as information uptake in health care decisions.

Identity Theory

Identification is the idea that persons perceive themselves as having a social as well as a personal identity. Social identity connects the individual with those considered “the same”. The identity (social or individual) that dominates is situational, however, and theory suggests social comparison as a third idea within this dyad of identity concepts. This specific instance incorporates the perspective that each individual also seeks an evaluation of self in comparison to those who are similar.

Social identity theory dates from 1979 as an idea developed by social psychologist Tajfel, who studied intergroup relations. Theoretical concepts included the interaction between personal identity and social identity (Stets & Burke, 2000). Tajfel suggested that group assignment creates a situation in which individuals construct a positive sense of self, based on group inclusion. An ingroup and outgroup awareness is associated with embracing a group identity constructed from
characteristics considered common among those who comprise the group. It is unclear if these attributes are generally viewed as diagnostic of group membership or merely symbolic.

A group trait idiosyncratic to a shared identity is a complex idea. It is a difficult supposition to ascertain among large numbers of disparate individuals. Nevertheless, popular culture allows for such familiar generalizations about social groups. These abstract properties are well known but conspicuously undesirable as descriptors because their use serve to marginalize. African Americans, for example, have a unique American history in relation to social inequities, but despite a context of racism and discrimination, black people forged a cogent cultural and group identity (Ford, 1997). Within the characteristics of this distinctiveness, a fuller understanding of the relationship between cultural coherence, health status and clinical decision-making may emerge. By what means ethnic or cultural identity functions, as a factor in health care decisions remains unexplained.

The theoretical tenets of social identity theory and related scholarly perspectives on the principles of group membership do not nullify the concept of a self-determining personal identity (Oyserman, Kemmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003). While individual perceptions and feelings can be affected by the ideas and opinions of others, it can also be assumed that each person within the group remains an autonomous thinker. This premise suggests the elements of a stereotype may be pliable to personal frames of reference in addition to models disseminated by the dominant social group.

The fluidity between the dominance of social identity or personal identity is a question of situational demands. There is the implication that trait consistent factors exist and together constitute identity categories. It is conceivable within the context of this reasoning that the individual incorporation of a category means enfolding stylized traits that are consistent and
recognizable to the individual member of a group, the associated principal group and to the
general social order (Grant & Holmes, 1981).

An often-cited example of an ingroup perspective is ethnocentrism (Hammond &
Axelrod, 2006). Attached to these categories are value judgments (Catton & Hong, 1962). The
ingroup designation creates boundaries and conscious articulation of differences motivated by
comparisons. The anticipated outcome from such processes is a positive sense of self-worth
stemming from group inclusion. The notion that social identity is created by its designate and
adopted freely by them mistakes social identity for group identity. Prejudice and stereotypes by
the social identity designators make this proposition questionable. To the contrary, these negative
influences are often the impetus to disestablish a social identity and when the creation of a
group-based identity is the outgrowth of a circumscribed social existence, the results demonstrate
a high degree of refinement (Raden, 2003; Herring, Jankowski, & Brown, 1999). This cultivation
gives disproportionate meaning to certain characteristics outside the social structure of the
relevant group. An emblematic illustration is the misconstrual of African American frankness as
brusque or socially incorrect behavior, outside its cultural paradigm.

Other contributing factors to valuing outgroups is the perception of group status and
appreciation for any unique contributions of the group, and these influences allow for decreased
bias. An illustration of this is the often cited spirituality of African Americans and the family
focused priorities of Hispanics. Through language, the concomitant issues become the ability of
any single individual to self prime or to stimulate priming in another. In such a situation,
language is a carrier of value judgments and a proxy for identity. This premise concedes the
importance and impact of continuous learning. If it is possible to change the expression of an
idea then the idea, itself is altered. A classic definition according to (Karlins, Coffman, & Walters, 1969) is:

Stereotypes are generalized impressions of groups, acquired by individuals from a number of sources including sometimes direct experience with members of the stereotyped groups. For the most part, however, stereotypes appear to be learned by word of mouth or from books and films. (p. 1)

In the Karlins, et.al. (1969) comparative study social desirability accounted for discomfort with explicit stereotyping. Nevertheless, traits that comprised group stereotypes remained unchanged over a span of more than thirty years. A reciprocal relationship between stereotyping and antagonism towards a stimulus group, however, was not verified. That is to say, it is possible to stereotype without animosity.

Social identity theory proposes that each person views the self as an individual and as a member of a social group. There are primary ideas contained within the theory: categorization, identification, and social comparison. Categorization creates labels for objects in the belief they are useful methods for creating a foundation of understanding and studies suggest accessibility through lexical primes that indicate ingroup and outgroup designations. For example, research results from a study by Perdue, Gurtman, Dovidio, & Tyler (1990) suggested pronouns such as we, them, they, or us have the capacity to activate value judgments linked to other words and the attributes invested in their meaning. Subtle racial cues in standard political appeals, for instance, appear to prime racial attitudes (Valentino, Hutchings, & White (2002). Banaji, Lemm, & Carpenter (2004) suggested that social categorization processes are automatically stimulated by the presence of its target. The possibility that knowledge outside conscious awareness can
influence thoughts and behaviors is unsettling within the context of clinical decision-making. The belief that health care providers are immune to such human limits is implausible.

Social identity can be viewed as an external perspective on a group’s identity that is assigned by those outside the group. The accessibility of this particular type of identity is dependent on several factors. Smith & Mackie (2000) referred to these elements as: direct reminders of membership, presence of out-group members, being a minority, conflict or rivalry, cultural differences in the importance of group membership, and personality differences in group membership importance. How often group identity is in conscious awareness has great influence on its accessibility. How these factors are employed and whether their use is fitting in regard to circumstances is often the pivot point of analysis.

Ethnic Identity

The characteristics associated with ethnic identity have the potential to inform a more comprehensive understanding of a group’s social identity. The latter involves the larger concepts of categorization (black, Muslim, southerner), identification (ingroup, outgroup) and social comparison. Ethnic identity with its cluster of descriptive features (race, religion, language, history, and so forth) more precisely outlines features that constitute a social identity. Establishing the link between social identity and ethnic identity makes possible the exploration of interpersonal and intergroup relationships that are often problematic in the clinical setting.

Kirkham (2003) did an institutional ethnography to explore the everyday intergroup health care encounters between patients and providers who were culturally different. Using such techniques as in-depth interviewing of care givers, patients, hospital administrators, and undertaking participant observation to analyze everyday encounters in an acute care setting, the research explored the ideologies of study participants within the context of a larger social
discourse on multiculturalism and tolerance. Explicated from field notes and taped conversations were themes of primary spoken language and perceived entitlements of targeted groups. This study expanded understanding of how construction of the other from macro issues such as social policies or the design of organizational processes may inadvertently serve a dominant culture. The intimation of marginalized and racialized clinical encounters and the effect on the care experience were the questions posed. The authors of the study also noted the hesitancy with which providers were able to acknowledge the influence of the larger society on the ideologies of the clinicians who delivered health care. Thus the conclusion that the role of health provider did not preclude the possibility of a racialized encounter in a clinical environment was an idea that was difficult to acknowledge.

It becomes increasingly clear that much of ethnic identity is a reflection of each group’s ability to respond to the social messages crafted by the larger society. The dominant culture establishes itself as the referent, and consequently, the nondominant culture is in constant definitional relationship to it. This juxtaposition creates a continual situation where statements of meaning related to identity are in sharp outline at all times (Ogbu, 2004). This idea offers possible explanation for members of the dominant culture who find it difficult to claim a distinct ethnic identity for themselves (McDermott & Samson, 2005).

Ethnic identity may be a correlate to social identity. The social identity theory concept of categorization (Howard, 2000) would appear equivalent to a designation of race or ethnicity. Identification as another theory concept has implications for the specifics that constitute the “us” versus “them” mindset that often accompanies tensions between ethnic groups. Data from the included studies indicate that racial identity is shaped by the larger social context. Intergroup
experiences involving, for example, prejudice, distrust, conflict, or citizenship status all contribute to securing a positive sense of self and distinctiveness from the “other”.

The role of race-ethnicity in a mental model is provocative. As a social construct its connotation is not typically positive. Placing race-ethnicity in the data set of information available to a decision maker is nettlesome since it evokes unsettling historical matters and causes doubt and uncertainty about contemporary ones. It is also difficult to concede that in any given situation race-ethnicity is insensible to another. To say the concept does not register negatively is not to say it has no register. The manner in which it correlates as data in a decision schema is presently undefined; consequently, the probability that the concept indicates a point of uncertainty or ambiguity in the decision process by its simple existence is worthy of consideration. If the race-ethnicity construct is included as a variable, it is a reasonable expectation that its use is credible. In other words, it is important to understand if race-ethnicity indicates a narrowly defined group, or if it more appropriately serves as a parenthetical determining factor within the context of other issues. Stereotypes associated with race-ethnicity are sometimes a proxy for a combination of qualities belonging to a person. On the other hand, it may be imposed characteristics outside personality. More specifically, is race-ethnicity irreducible and therefore cannot be further divided or simplified into component parts?

Ethnocentrism

Ethnocentrism—or the perspective that the culture of the ingroup is the definition of normal—serves as the boundary marker for a group that dominates (Harrison, 1995). For example, historically European and biomedical are labels for what is familiar and approved in the operating standards accepted by the American health care system. This is especially true in meeting the requirements of the marketplace (e.g., care costs, funded research) as an influence on
social cognition and care delivery. However, this viewpoint may have run its course with the latest census because the dominant group has reached a tipping point with the mass arrival of non-European populations (Trounson, 2012). Ethnocentrism was once the prototypical model of care delivery when the demographics of the United States reflected the European roots of the nation. What holds the attention is that the international sources of these new demographics flow from countries customarily treated as lacking in global value or importance (e.g., third world countries, war torn countries, developing countries). Upon residence in the United States, census designations force adoption of checklist identities culturally informed by the American experience. More specifically, African becomes black and Mexican becomes Hispanic, and the consequence of this is that different immigrant groups now dominate communities that are the focus of a contemporary public health agenda. In Massachusetts, for example, the gain in state population for the last census was dependent on immigration. New immigrants arrived to the state from South and Central America, India, China, Russia, Vietnam, and the Caribbean (Clayton-Matthews & Watanabe, 2012).

Ethnicity and health disparities are two typically correlated variables. A contemporary subtext to this focus is the issue of citizenship. Since the 1970s there has been a decrease in European immigration to the United States. An increase in the numbers of people coming into the country from Latin America and Asia replaced this reduction. This new influx of people created concern in the native-born population about the potential loss of a core American identity (For the benefit of all, 2005). A perceived state of perpetual foreignness of some populations is a source of resentment that targets immigrants as largely illegal, poor, and heavy consumers of tax dollars. Such stereotypes of ethnic groups may contribute to unequal treatment in care.
Ethnocentrism was once the prototypical model of care delivery when the demographics of the United States reflected the European roots of the nation.

The characteristics associated with ethnic identity have the potential to inform a more comprehensive understanding of a group’s social identity. The latter involves the larger concepts of categorization (black, Muslim, southerner), identification (ingroup, outgroup) and social comparison. Ethnic identity with its cluster of descriptive features (race, religion, language, history, etc.) has the capacity to more precisely outline the features that constitute a social identity. Once the link between social identity and ethnic identity has been established, it becomes possible to explore the interpersonal and intergroup relationships that are often problematic in the clinical setting.

Factors that influence flexibility of Schema

Affect

The process of making a decision is a very human activity and unlike the concept of computer based decision making. The ability to manage variables, uncertainty and make inferences goes beyond heuristics and probability. In the domain of decision theory, artificial intelligence and the use of computers, Horvitz, Breese, & Henrion (1988) write “once asserted, the truth of a proposition cannot be changed by other facts” (p. 14). It is contrary to the rules of common sense to assume the decision process is a machine-like retrieval of information supported by a computation of data that precedes a conclusion by the decision maker. The introduction of race-ethnicity into the human equation is not precisely determined in its emotional and cognitive impact.
Discomfort with ethnic bias as a factor in clinical decision making is related to uncertainty about the existence of the antipathy usually associated with race prejudice. Inveterate dislike as opposed to a random, negative reaction based on a real time event challenges the traditional image of the egalitarian and objective clinician. This latter depiction is the more customary portrayal of the health professional and is not usually part of public dispute. Nevertheless, the experience of African Americans with the healthcare system is sometimes pictured differently. A 1999 special report supported by Seattle Public Health explored the experience of 51 African American patients through an interview project. Those questioned related incidents in which they described differential treatment, and many occurrences included a “perceived negative attitude” from health care professionals further detailed as behavior that was “rude”, “cold”, “inattentive”, and “belittling”. “The perceived negative attitude exhibited by health care providers or their staff members were not reported as hostile but as uncaring or rude behavior” (p. ix). The respondents were patients from approximately 30 different health centers and recalled experiences as early as 10 months previous to the interview. Types of perceived discrimination captured by the report were: differential treatment, perceived negative attitude, treated as dumb, made to wait, ignored, pain ignored, inflicted unnecessary pain, racial slur, harassed, being watched and health personnel exhibited fear (Hobson, 2001).

While the Hobson study outlined examples of behaviors identified as discriminatory by the respondents, it was not the purpose of the study to examine another unexplored phenomenon within its chosen scenario. More specifically, the responding behavior from the study subjects to the actions and manner of the clinicians was not part of the inquiry, so the interplay between patient and provider is raw material for further research. With reciprocal feelings as context for the clinical encounter, it is reasonable to surmise a type of relationship not subject to control of
the will. In the contemporary healthcare system it is becoming less and less likely that patient and provider have more than a sporadic and incidental relationship, and they are very often not known to one another. Expanding the premise further includes acknowledgment that development of expertise is based on accumulated knowledge of the typical patient. This emblematic patient becomes a point of comparison and is affectively representative for each clinician of what is reasonable or excessive, characteristic or embellished.

The emotional reaction of the Hobson study subjects and their responding behavior poses an interesting scenario of stimulus and response between patient and provider. In particular, Rosenthal (2004) posits that when the provider is interacting with an outgroup member stereotypically viewed as “loud, hostile, lazy, criminal and low intelligence” (p. 132) either as the one patient of the day or the tenth from the specified ethnic group, the effect on care deserves inquiry. With feelings as context for the clinical encounter, there is sound basis to surmise the possibility of a strained and unacknowledged tension in a cross cultural interaction. While it may be true that not all clinical encounters involve the activation of ethnic bias, the resulting hypothesis exploring the kinds of data that increase or decrease the presence of bias, prejudice and discrimination in thought and practice becomes a worthy goal. Rosenthal (2004) goes further “Research can shed light on how racial biases are activated and how they persist, fostering the development of empirically validated strategies to neutralize the effects of these stereotypes” (p. 139).

Bodenhausen, Mussweiler, Gabriel, & Moreno, (2001) did the work of investigating the influence of affect on perception and behavior between ingroup and outgroup members. In their writing, the authors acknowledge “psychologists have known that, through experience, certain stimuli come to elicit consistent affective reactions” (p. 321). The barrage of social messages
about ethnic groups has not abated with the passage of time, and in the absence of censure, the amount of such information absorbed by any individual is open to conjecture. When there is no social contact to contravene what is communicated, the patient becomes an avatar of those socially embedded messages. Bodenhausen, et al. observed that the amount of research scrutinizing the characteristics that explain affect concomitant with stereotypes is insufficient.

Part of the decision-making process in health care is to gauge the seriousness of signs and symptoms as a subjective report from the patient and the clinical distress they cause. An objective assessment of this account from the patient is the responsibility of the nurse and doctor. The consequence to this within the set of circumstances that constitute a cross cultural interaction is the pivotal point of the following research.

The contemporary environment for clinical practice is fast paced and technologically sophisticated. A diverse patient population with multifarious needs make care delivery intricate and often pressured. The discourse on economics of care presently joins the prevailing business case for care in the form of quality, safety, and evidence-based practice. Regulations and the debate for better managed resources make the element of time an important factor that helps determine practice characteristics. The twenty minute patient visit is a standard constraint on present day practice, and as previously mentioned, short time frames facilitate the automatic processes involved with stereotype activation.

Stereotypes

The origin of stereotype based preconceptions has yet to be generally established in the literature. It is a problematic situation in the social sciences and (Bowser, 2001) contended racial profiling is an issue in health care. Using new institutionalism as a conceptual framework, the author posits that physicians rely on “background understandings” to inform their decision
making. New institutionalism is described as a type of organizational sociology which defines institutional racism as “those self perpetuating patterns and practices made in reliance on taken for granted background knowledge about race that serve to lower the status of a particular racial group” (p. 82). It is noted that race-based disparities are of particular concern when “high discretion procedures” are the focus. These procedures, carotid endarterectomy, for example, show lower rates of use for blacks (p. 90). Bowser also confronted the issue of unconscious racism.

While this analysis is fine and highly congenial to explaining a specific treatment decision by a specific physician, Bowser (2001) suggests it does not answer a number of questions. First, is the pattern of racial disparities in medical treatment the result of an aggregation of specific, particular moments of unconscious racism over the thousands of treatment decisions that occur every day? Second, is unconscious racism in medicine the product of social indoctrination only, or do the history, practices, and attitudes of medicine in some way contribute to the problem? (p. 96)

The obvious concern about the activity of ethnic stereotypes in the cognitive schema of a clinician, is the manner in which those mental models do or do not function in decision-making during the patient-provider encounter. The implanted stereotype may be difficult to isolate from the web of information sorted and selected to inform a judgment. In a 1995 essay on the psychology of stereotyping, Pickering reviewed a challenging hypothesis from the writings of Allport. “For Allport, all categorization entails overgeneralization and simplification, but only becomes a problem of prejudice when new knowledge does not lead to revision and change” (p. 695). The Pickering essay differentiated categorization and stereotyping. Categorization is described as cognitive ordering of information that brings structure to the array of data the mind
must process; but on the other hand, stereotyping is described as a more irrational classification of acquired information.

Stereotypes related to ingroups and outgroups have a constructive function because they categorize information; in fact, some researchers propose that stereotypes can be used in relatively positive ways. One suggestion holds that these portrayals are applied when it is perceived that an individual demonstrates characteristics consistent with the stereotype (Madon, Guyll, Hilbert, Vogel, & Kyriakatos, 2006). Such attributed qualities tend to utilize descriptors that characterize the physical as well as behavioral aspects of distinct groups. (Yamauchi, 2005) uses the metaphor of a container to describe the manner in which information about an object is incorporated with beliefs and assumptions to form a composite. Stereotype application happens once an activation process occurs. This process can be implicit or explicit. Moskowitz, Gollwitzer, Wasel, & Schaal (1999) suggested that personal motives exert control over the influence of stereotypic thinking. For example, if fairness is a goal of the perceiver, effort directed towards bias free judgments can result in cognitive links that prevent stereotype activation. The researchers posit that eventually these controls would function preconsciously. Somewhat counter to this position is the research on confirmation bias. Confirmation bias implies that initial impressions that substantiate ideas in a conceptual scheme tend to resist contrary information (Nickerson, 1998).

Other organizing systems are set in motion by noting a feature that suggests a category or a category that suggests a feature. The linchpin to the possibility of a model of sorting is that it begins with a defining or primary feature. What determines the most salient feature relates to how a task is specified. The sorting process can be incremental or simultaneous for the relevant qualities. The features or variables selected appear easier to sort if they are continuous (i.e.,
arranged by number of lines) in contrast to categorical (i.e., arranged by dominant color). The conception of stereotyped traits as a continuous variable holds intuitive appeal when imagined as the negative end of a positive to negative continuum (e.g., high to low intelligence). It is the amount of a quality possessed as opposed to its presence or absence that is the crux of prejudice and stereotyping.

Perceiver recognition of the stereotype while it is in play during the decision making process is the goal of this research. Stated another way, in the cluster of data upon which a decision rests, it may be possible to bookmark the location of an effect that registers the incorrect inclusion of stereotype-based information. Perhaps the signal increases when there is an affective evaluation taking place as well. Conceivably, there are influential emotions that attend stereotype traits in a given process. The inclusion of ethnicity in the cognitive schema for clinical judgment may sort stereotype traits and subjective feelings within the context of the clinical picture collectively, leading to a diagnosis and treatment decision. It is difficult to imagine a health care provider utilizing race-ethnicity as a navigation point in decision-making. The concept of a cognitive map in which race is a landmark (Xia, Arrowsmith, Jackson, & Cartwright, 2007) by which the clinician takes a psychological path leading to a negative or suboptimal treatment decision is inconsistent with ethics and reason. This scenario appears implausible; however, the most prominent studies in the literature on disparities place emphasis on therapeutics as opposed to the correctness of a particular diagnosis. The unexplained and perplexing problem is the issue that health disparities bear on the dissimilarity in chosen treatment in relation to different population groups. The statistically significant differences appear consistent. It is the explanation for this that is wanting.
Stewart, Weeks, & Lupfer (2003) studied spontaneous stereotyping. Spontaneous stereotyping is based on the notions of category cues (black, Hispanic) and stereotype cues (deviant, not smart, hostile, and illegal). In their study, a role recognition task was utilized:

The probe recognition task relies on the logic that if a reader of text infers a trait about the actions of an actor described in the text, then the activation level of the inferred trait should be heightened. Consequently, if the individual is later asked whether the inferred trait word appeared in the text, he or she would be expected to be more likely to believe erroneously that the trait word had appeared in the text (and possibly to be slower to make this recognition judgment), compared with other judgments regarding text for which no trait had been inferred. (p. 269).

In an extensive review of the research on stereotype activation and stereotype application, Spencer & Kunda (2003) suggested that the aforementioned concepts depend on three goals: (1) comprehension, (2) self-enhancement, and (3) motivation to avoid prejudice. Comprehension is the need to structure information when the pressure of time is a critical factor, and stereotypes allow a quick organization of details. Self-enhancement is related to any threat to self-esteem, and restoration of self-concept after an injury to ego can be accomplished through disparagement of others. An associated feeling of superiority is the key. As the authors noted, motivation to avoid prejudice is prompted by the desire to be viewed as an individual who does not discriminate.

In a synthesis of the literature Kunda and Spencer posited that stereotype activation and application can be either automatic (implicit) or controlled (explicit). They concluded that the literature indicates several key points: (a) stereotypes are activated for a purpose, (b) conflict between the three identified goals inhibit stereotype application and activation, (c) activation and
application are time and situation dependent, and (d) individuating information decreases stereotype activation.

There are racial cues that predispose persons to perceive situations such that disproportionate meaning is given to a circumstance and can stimulate racist thinking. For example, the stereotype of the hostile African American has an effect in hostility neutral scenarios when race is explicit. In counterpoint, when race is a conscious factor, social desirability motivates a response effect on a pertinent situation and the manner in which it is evaluated. Further complicating an understanding of such conceptual frameworks is the suggestion that a more global concept like “emotionally expressive” as a descriptor may supersede ethnic stereotype as an explanation for negative connotations associated with the stock conventions of group characteristics (Abreu, 1999).

If a stereotype is a statement of degree, a stereotype gradient may exist that is an exaggeration of any trait common to all people. For example, the lazy, dependent, angry stereotyped African American is the extreme end of the industrious, self-sufficient, emotionally controlled Caucasian. Perhaps each individual customizes the gradient to fit the respective personal experience. In a summary of research accomplished to that point in time, Rinehart (1963) concluded there was extensive agreement in the larger society on the traits associated with certain ethnic groups and that the selected traits were mutually exclusive between groups. The stereotype stimulus was not explicit to the extent that the participants recognized their pattern of thinking for what it was. Besides, studies indicated that conscious recognition of prejudicial thinking is a threat to self-concept (Frantz, Cuddy, Burnett, Ray, & Hart, 2004) and individuals tend to suppress the expression of such mindsets.
The charge of unequal treatment is a personal threat to the self image of any clinician. Frantz, et. al contended a paucity of research exists on the challenges to each other of comprehension, self-enhancement, and motivation to avoid prejudice. This is an interesting assertion to consider in the study of clinical decision making and the influence of ethnic bias. Comprehension in making treatment choices and the assumption of egalitarian motives are thought provoking concepts for research relevant to eliminating disparities in health care. Relatedly, lack of nurse insight and awareness concerning the influence of demographic cues such as sex, race and age on pain assessment and treatment necessitate further study (Hirsh, Jensen, & Robinson, 2010)

The constellation of traits arbitrarily assigned to the structure of a stereotype is typically irrational, exaggerated, and disparaging. They are outside social expectations and established through general consent, typically at the extreme opposite of what is valued. They are not congruent with a broader more acceptable social construct and therefore have no positive equivalent or translated acceptance under a larger umbrella. This would seem to make their use more visible; however, this is not the case. In some manner, the perceiver does not view stereotypes as discrepant expressions of acquired learning when incorporated into decisions containing biased information.

Stereotype traits are consistently portrayed attributions, and they attach to a specific ethnic group. For example, in the 1991 National Race and Politics Survey, telephone interviews conducted with white adults assessed the extent to which respondents connected certain qualities believed to describe African Americans. The canvas consisted of the following choices: violent, lazy, boastful, irresponsible, complaining, dependable, friendly, keeping up property, good neighbor, intelligent in school, smart with everyday things, law abiding, determined to succeed,
and hardworking. Levine, Carmines, & Sniderman (1999) learned the trait choices represented positive and negative dimensions of the structure of stereotypes held by whites in relation to blacks. As positive opinions of the latter group increased, negative opinions decreased.

The most prominent attribute in a given situation is judged the most salient piece of information by the perceiver. However, what is most notable to one participant in a circumstance may not be as arresting to another involved in that same experience. What is most notable carries a different weight for each observer according to the cognitive schema used as a frame of reference. These features autonomous of the perceiver are, nevertheless, given meaning by that same individual.

We use norms to filter perception. This selective attention prevents cognitive overload and these conscious and unconscious norms or models allow a decrease in uncertainty of meaning or ambiguity. The assumed base of clinical judgment is the facts of the case or more specifically, the clinical information. It is held as self-evident that context (persons and personal belief system) has no weight as interference with said data. For the purposes of the following study, it was important to understand at what moment race-ethnicity is simply context and when it the most salient feature—when is race-ethnicity background or foreground?

One conjecture is that sifting and sorting an outgroup experience through an ingroup or perceiver frame of reference results in a transformation of data such that the information becomes more meaningful to the perceiver, and that meaning may have a positive or a negative value. However, the cognitive rules that make that transformation of meaning correspondent to the original source are, so far, inexplicable.
Clinical Decision Making

Clinical decision making involves inadequately understood mental processes and the topic generates a multitude of discipline specific perspectives. Theoretical underpinnings and conceptual models appear in the literature on a regular basis, but consensus related to the process remains elusive. Nevertheless, pursuit of an explanation is ongoing. This effort to secure an answer takes on added meaning when investigating ethnic-racial bias as potential influential factors in this domain of care.

The scientific method organizes a number of simpler informational elements into evidence commensurate with a concept or an idea. It is a process that identifies and analyzes qualities, characteristics, and relationships linked to theoretical assumptions or educated guesses in need of confirming or disconfirming data. Logic assumes some proportion of subjective and objective data inform this initial best guess. The synthesis of the preceding turns the data into needed information that often provides new ways of viewing reality. In relation to this thesis, clinical problem solving research and studies on hypothesis development constitute the available knowledge on decision making. Subjectivity functioning as race-ethnic bias in clinical decision making is a paradigm shift in the sense of (Kuhn, 1996) and his philosophy of scientific progress. To put it differently, it is revolutionary to posit that social bias places clinical decisions under suspicion of unfairness and partiality. By the same token, the idea that health care providers are not situated in the full range of human experiences that encompass everyday life and somehow lack the cognitive imperfections of the ordinary person is fatuous.

The method of ruling in or ruling out a diagnosis is a combination of the art of gathering information from the patient interview and the science of the laboratory tests (Bianchi & Alexander, 2006). This twinning of skills only results in the probability of a correct diagnosis.
Experience with the reliability and accuracy of lab tests is part of the overall input of data utilized by the clinician. It reflects the level of personal expertise and, as objective data, they require insightful analysis. A test sensitive enough to rule out a disease or specific enough to rule in a disease does not make the decision making process definitive. The previously mentioned researchers wrote “Few tests are inherently accurate enough to “rule in” or “rule out” disease effectively in all cases” (p. 442).

An additional assertion by the investigators argued that a test result is not the exclusive reason for dismissing or eliminating a probable diagnosis. Rather, an interpretation of tests that do not support a probability is that they lower the chances of what is most likely as opposed to eliminating that chance altogether. Test interpretation is a skill that involves the context of the individual patient in addition to the patient as representative of population. This point is particularly relevant when the researchers, Bianchi & Alexander (2006), pointed out that “Specificity is not an intrinsic property of a test because it depends in part on the characteristics (even subclinical) of the control population” (p. 444). Understanding that clinical trials have a history of not including minority populations as one example of a control in testing makes this point significant. The standard research technique of holding all factors constant except ethnicity to capture evidence of unequal treatment suggests the assumed objectivity of lab results may not be a determining factor in the selection of treatment. The deciding factor in any diagnostic process is the clinical judgment of the provider.

Clinical Decision Making and Cultural Competence

Nurses and doctors are more likely to approach the challenges of care for a multiethnic and multilingual population more effectively if cultural knowledge and resources commensurate with needs are available. These newly identified demands of good care require updated
responses. Knowledge reflecting the domains of perception, memory, and judgment internal to the individual practitioner moves new questions to the forefront of health care and disparities research. If scientific inquiry is to be thorough there is an unavoidable question in the search for answers to health disparities. What if differential treatment is the result of ethnic bias by the health care provider?

In answer to the concern about a level of competence in clinical practice as well as quality and safety in care delivery to the increasing dominance of a multicultural society in the United States, a course of action to address these issues became a national health care agenda.

In 2004, The Agency for Healthcare Research and Quality (AHRQ) and the Office of Minority Health (OMH) established a research agenda to identify the components of cultural competence from an organizational perspective (Brach, 2003). Frameworks and the ability to assess effectiveness began to appear in the literature (Betancourt, Green, & Carrillo, 2002). Nursing models that captured concepts such as expertise, skill development, knowledge, and awareness gained attention (Campinha-Bacote, 2002). Such efforts addressed issues of mixed performance in health outcomes evidenced in the literature comparing population groups, and it is possible to audit research and produce studies demonstrating care below par based on ethnic background. However, there is not enough complied evidence to give legitimacy to the claim of ethnic bias in clinical decision making such that the process can objectively test positive for its presence.

The following study proposed to demonstrate that variables of ethnic stereotypes are inert in clinical practice until cognitive activation links them to observable behavior. The mode of that behavior in this study was clinical decision making. In the specific case of knowledge that is part of academic expertise versus information entrenched in social exaggerations, there is a paradox.
The essential difference between the construct of academic probability, e.g., likely to be true in contrast to unstudied social exaggerations, e.g. they always do that, stands the critical difference between observable phenomena undistorted by personal interpretations and those value-laden properties that represent the subjective thinker’s perceptions, learning, and reasoning rather than the external object of thought.

This contradiction presents two sides of a perplexing situation; the former is valuable information for evidence-based practice and the latter provides context for biased decision making that can result in unequal treatment for the minority patient. This is especially problematic given that information perceived as stereotype consistent is more easily accessed during situations in which cognitive capacity is strained (Sherman & Frost, 2000) in contrast to incongruent stereotype related information that takes more effort to remember during times of increased cognitive demands (Crisp, Perks, Stone, & Farr, 2004).

There is a list of concepts to be considered in a thorough understanding of ethnic bias and its enactment in clinical decision making. This index of active forces that accompany ethnic bias will assist with understanding the operating mechanism of the construct. Some of these processes are explicit and some implicit. When unbundled, the following concepts of: social identity, aversive racism, stereotypes, framing, and naturalistic decision making are presented as important topics that inform an understanding of ethnic bias and its presence in health care. Using these fundamentals as a backdrop, it is possible to identify variables of interest for the following research study.
Definitions and Frameworks

Clinical pertains to direct observation as distinguished from experimental or laboratory study; and decision is described as a judgment or conclusion reached or the act of making up one’s mind ("Webster’s dictionary," 1982). Paired, these words have import for clinical decision making and the influence of race and ethnicity because the literature on health disparities is essentially descriptive of one underlying concern. Members of the dominant culture live longer and healthier lives than those of the nondominant, although at this point in the research, it is not clear why.

Clinical decision making is a rubric that covers several other designations. Diagnostic reasoning, clinical reasoning, and clinical problem solving are just a sample. Decision making employs many different approaches; for example, information processing, rooted in medical decision making, uses a scientific or hypothetico-deductive approach. It involves cue recognition or cue acquisition, hypothesis generation, cue interpretation, and hypothesis evaluation. In comparison, the intuitive-humanist model focuses on the interrelationship between intuition and the knowledge that accumulates through nursing experience. The assumptions exist that these combinations of factors organize a more fully developed decision process through mechanisms like pattern recognition (Banning, 2007).

Taylor (2000) presents a review of problem solving theories such as decision theory and information processing theory. Decision theory focuses on the needed decision rather than the process used in making it. These are probability models built on weights given to cues, commensurate with two theoretical perspectives: concept attainment theory and statistical decision theory. Bayes’s theorem is a statistical model that describes how judgments change when new information is incorporated. Three factors provide the basis for a diagnosis: (1) the
probability of a diagnosis without reference to a cue, (2) the probability of a cue given a certain
diagnosis, and (3) the probability of a cue without reference to a diagnosis. The thought is the
application of Bayes’s theorem to clinical judgment improves the ability of a learner to
incorporate new information, but, unfortunately, there seems to be no corresponding
improvement in the accuracy of the diagnoses made.

The Taylor (2000) review detailed information processing theory that postulates limits to
the mental capacity for data mining. Effective problem solving relies on individual ability to
adapt to these limitations. Two major factors that influence capacity for information processing
are amount of information to which a person can attend at one time and factors that determine
clarity and accessibility of information. The single difference between the expert and nonexpert
decision maker is posited as the generation of early hypotheses and subsequent data gathering to
test the working hypotheses. Otherwise, research results suggest that clinicians tend to use
similar strategies to seek information from patients and make a diagnosis. Questions start broadly
until the patient says something judged significant by the clinician. From that point forward,
questions become more specific and more closely related to a new hypothesis. Theoretically, the
longer the interaction, the more information gathered with the increased likelihood of greater
accuracy in the diagnosis. Studies report no single model of diagnostic reasoning; however, a
small number of strategies appear consistently.

Theoretical approaches that posit the systematic series of events leading to a decision are
varied. Most are probability models postulating methods by which information is gathered and
processed. These models include: a hypothesis, data gathered related to the hypothesis, and a
patient interview process that narrows in scope as it progresses (Banning, 2007; Taylor, 2000).
The amount of manageable information and its accessibility identify limiting factors within the
cognitive process. No compelling explanation is in place for clinical problem solving, although a noted consistency in strategies suggests common principles are at work that may bring clarity to the mode of thinking supporting care delivery.

Clinical decision making and any implication of unequal treatment are critical to understanding health disparities. The idea itself suggests relative autonomy in the care of an individual patient. Traditionally this has not meant close and careful examination of clinical decisions as a specific lesson in comparative judgment involving the mental state of the perceiver as it relates to groups of people. The unquestioned autonomy of health care providers to determine a course of care places clinical decisions within principles of ethics as well as the implicit covenant between clinician and patient.

The usual goal of research in decision making is the identification of steps that consistently result in the highly valued concept of expertise. The process is rarely pointedly explored as an exercise in personal authority. Every clinician possesses such influence and it affects each patient outcome. This is a more provocative perspective on what accompanies assessment, care planning, and a treatment decision since personal authority highlights the self regulation component inherent in the process. Health disparities make understanding this facet of decision making critically important.

Types of Decision Models

Naturalistic decision making (NDM) is a model that takes the decision maker as a variable in the reasoning process (Cannon-Bowers, Salas, & Pruitt, 1996). It appeared in the field of decision theory in 1989. In general, proposed explanations for the processes and characteristics of decision making proliferated throughout varied disciplines, NDM represented a new theoretical approach. It was a departure from the more conventional domains of the
laboratory and the controlled environment that is its corollary. The demands for theories and methodologies that more accurately reflected dynamic scenarios from the real world were the driving force for change in the field. Zsambok & Klein (1997) wrote that:

The study of NDM asks how experienced people, working as individuals or groups in dynamic, uncertain, and often fast paced environments, identify and assess their situation, make decisions and take action whose consequences are meaningful to them and to the larger organization in which they operate. (p.5)

The introduction of NDM was well timed because it takes note of the context in which decisions are made and the factors that could influence the associated cognitive process. As cited in Zsambok (1997), Orasanu & Connolly (1993) listed these pulls as: ill-structured problems, uncertain environments, ill-defined or competing goals, action/feedback loops, time stress, high stakes, multiple players, and organizational goals and norms (p. 5). However, Gore, Banks, Millward, & Kyriakidou (2006) pointed out opposing viewpoints on NDM and its position as a paradigm shift in decision theory. They noted that in health care, old decision models were not adequate in explaining physician ability to make feasible and workable judgments without appearing to utilize the classic stepwise decision process. The authors did observe that nursing led in understanding the worth of NDM.

Lee, Chan, & Phillips (2006) added to reviews of the literature on diagnostic practice, but in the domain of nursing. They pointed out that the client interview is as much a psychosocial event as it is a clinical activity, because it involves a partnership of information exchange between patient and clinician. The researchers charted several theoretical models proposed as explanations for the manner in which decisions are made. As previously mentioned, they appear under the headings of diagnostic reasoning, clinical judgment, and clinical decision making and
have been statistical theories, information processing theories, and intuitive reasoning theories. Additionally, nursing and medicine appear to share the hypothetico-deductive model as a decision process which begins with the formulation of one or more hypotheses followed by information gathering to confirm or exclude. Moreover, Lee, et.al. presented challenges to the aforementioned models documented in the literature. A critique of the hypothetico-deductive paradigm highlights its shortcomings as a frame. To explain, it is reductive and selective in information so that it bypasses named factors like emotions and context. As an illustration, noted variables that influence diagnosis in nursing are knowledge, experience, psychosocial-cultural factors; discipline-specific training that shapes facts and information load. Psychosocial determinants such as stereotyping lessen perceptiveness and diminish the impact of cues that inform diagnosis. The reviewers concluded that one limitation of the methodologies used to study diagnostic reasoning in nursing is that they do not adequately replicate the real world setting of nursing practice.

In her examination of medical decision making by those who seek care rather than those who provide it, Garro (1998) used an anthropological perspective to review several studies on the topic of decision making and treatment. The author called attention to the suggestion that decision models are typically designed to predict and are therefore conceptualized as discrete moves towards an objective. It was put forward that a more realistic model would acknowledge other factors that influence the decision maker, e.g. personal values and beliefs. Given the move to shared decision making between patient and provider, it is reasonable to propose that such influences also have a part in the cognitive process of the health professional. The goals of the Garro nonmedical study subjects suggest symmetry between the layperson and the professional decision process. In particular the study listed alleviating sickness, ensuring that a cure is
achieved, and minimizing expenditures (p. 333) as familiar desired results for both provider and consumer. Sonnenberg et al., (1994) also pointed out several factors in decision analysis models. They detailed important themes like the future of the patient and quality of life, level of continuous risk, determination of criteria for treatment choice, perspectives that prioritizes the merits of a choice (e.g. patient, payor), strategies characterized as passive or aggressive and cost benefit, as significant in analyzing, and understanding the larger concept of decision making. The aforementioned indicate factors taken into account when making a decision.

As noted, it is salient to examine ethnicity as an influential variable in clinical decision making. The latter concept implies a systematic approach to care and infers standards of practice. Praxis offers a point of reference for what is usual in a specific treatment scenario and what is not. Traditionally, diagnostic reasoning is the chosen perspective on clinical decision making as opposed to other approaches discussed; however, currently there is no probability model in the guise of diagnostic reasoning that test for the effect of patient ethnicity. The manner in which this socially complex factor is treated as information constitutes the unanswered question. Health disparities require an examination of clinical decision making in relation to its psychological features as well as what mobilizes action towards a chosen therapeutic as a result. From this standpoint, decision making in health care holds fresh possibilities for understanding unequal treatment as a test of clinical and nonclinical variables.

Sources of Bias

A provider can engage in activities that lead to unequal treatment by several pathways. The cognitive resources available to process information is influenced by external factors such as fatigue, disconnect between conscious and unconscious beliefs about stigmatized groups, use of stereotypes to fill in the gap when information is ambiguous or insufficient to make a judgment,
and preference by providers for individuals who match the group identity of the clinician. All of these have the capacity to trigger behaviors that can lead to disparities (Burgess, Fu, & Van Ryn, 2004).

Conceptually a diagnosis is a hypothesis, and the correct critical analysis of a presenting problem is a combination of factors. First, there are the applicable facts and the salient cues that individualize the case. These, in turn, are generally linked to a pertinent explanation that unifies all the data. The organizing frame that selects and assembles the array of information under active consideration is unclear. However, during this reasoning process, data are sorted as applicable or inapplicable to the overall mental picture. To produce a competent solution, the diagnostician aggregates symptom presentation and clinical data. The introduction of bias at any point in the process may cause some information to be discounted or for information to be given undeserved recognition. Confirmation bias (having a proposed diagnosis and acknowledging supporting evidence but dismissing evidence that does not support it), representiveness (to mistake a case under consideration for a textbook example when it is not), availability (diagnostic process inappropriately influenced by the most recent previous example judged to be similar), hindsight (corroborate the probability of a known diagnosis), and regret (to assign the worst case scenario if it should happen that the probability of the best scenario is incorrect) are all forms of possible bias in decision making (Bornstein & Elmer, 2000).

In this paper reviewing bias in decision making, the two researchers mentioned above do not take a positional stance but do capture the difficulty involved in giving credence to prejudicial thinking in the clinical domain. When contemporary strategies such as evidence-based practice are increasingly implemented in health care, undetected compromise in reasoning is an unconvincing proposition:
In short, by providing the most relevant and objective empirical information available, and incorporating it with clinical expertise, test results and patient preferences, many of the biases associated with doctors’ relying too heavily on intuition and selectively attending to some information while ignoring other relevant information could be avoided (p. 104).

Bornstein and Elmer (2000) concluded that strategies such as decision analytic aids and evidence-based medicine would help diagnosticians give proper weight to clinically relevant data in contrast to the customary practice of consulting colleagues or written texts to assist in processing information. Symptom presentation is a personal, subjectively voiced experience and can be culturally based. It is a persuasive argument that the rarely or infrequently seen minority patient can present as a case for any of the previously mentioned categories of bias reviewed by Bornstein and Elmer.

(Lopez, 1989) chose to examine the mental health literature for evidence of bias in decision making. In this domain of practice clinician bias is termed overpathologizing bias. Here treatment and diagnosis are associated with the perception that patient variables such as race-ethnicity, age, or gender are associated with characterizations of being sicker and needing treatment to a greater extent than white, male or younger counterparts. Designated as “the model of the biased clinician”, Lopez posits bias as diagnostic errors and classifies them as either overdiagnosis or underdiagnosis. In the former, certain patient groups are diagnosed more often with particular dysfunctions and in the latter other groups are less often diagnosed with those same dysfunctions even though the clinical picture may present similarly (p. 193). For example, schizophrenia and substance abuse are diagnosed more often for blacks than whites. Minimizing
bias, as yet another example, is defined as the practice of viewing abnormality as normal for a specific group e.g. cognitive impairment in the elderly or depression in menopausal women.

Coded Language

The discourse on race is an everyday part of the social experience that frames living in American society. Exposure to the social exchange exemplifying how society functions and operates is repetitive, widespread, and presents in many formats, e.g. news, forms of entertainment, and interpersonal encounters. However, blatant racism is not countenanced in contemporary society. Notwithstanding, there are several social devices that continue to allow for its expression.

Mallinson & Brewster (2005) described what they label as “conversational shields that mitigate racetalk and regiontalk (p. 788) . A content analysis of interviews with waitpersons examined the concept of tipping. Those interviewed were employed by one of the chain restaurants located in the rural southeast, and interviewees described their expectations of an appropriate gratuity from minority patrons and white patrons described as “rednecks.” Strategies and devices to support negative opinions were such conversational artifice as “I hate to say it” (p. 792). Said anecdotes contained methods to justify implicit ethnic and class bias. The study concluded that larger social discussions, e.g. immigration or affirmative action that take place publicly affect interpersonal interactions. That is to say, close contact between persons in the smaller setting such as a restaurant act out the dynamics of social distance and the ideologies that create othering. Additionally, such social contacts provide the underlying basis for the next social exchange.

Language can be a signifier. As an illustration, concepts such as welfare, crime, and violence are thought to serve as code for race attributions. Gilens (1996) analyzed data from a
1991 national survey to understand the influence of race as an explanation for negative attitudes about welfare. Programs designed to assist individuals e.g. Food Stamps, Aid to Families with Dependent Children (AFDC) defined the concept of welfare for the study. A randomized telephone survey comprised of interviews with white respondents and a mailed questionnaire to those contacted provided the data. The results include over 2,200 interviews with a subset of approximately 1,100 of those who also responded to a mailed survey. The analysis only included white participants because in the judgment of the researchers the small number of black respondents suggested that the attitude of blacks about welfare required an analysis that recognized the racial context of the study participants. An important premise of the study was the public perception of black ethnicity being closely linked with poverty. The study proposed to distinguish between attitudes to the poor and welfare in comparison to blacks and welfare.

Gilens (1996) described understanding the salience of race as an influential factor in attitudes about welfare. The other variables studied were economic self-interest (family income/tax burden), individualism (personal/government responsibility), political partisanship (Republican or Democrat), and ideological self-identification (conservative or liberal). A causal relationship between the variables was not a claim of the study because lack of clarity about linear relationships made a causal relationship implausible. However, low correlations between the variables provided some evidence that indirect effects could be assumed minimal.

Characteristics scored from 0 to 10 to describe blacks e.g. lazy, hardworking, examined racial attitudes. A Likert scale (1=very likely to 7= not at all likely) measured perceptions of both white and black welfare mothers along the dimensions of likelihood of having more children for a bigger welfare check and likelihood of trying to find a job. The results of the study indicated that...
negative perceptions of blacks as lazy out-weighed all other variables as the source of opposition to welfare.

Studies of this type focused attention on language coded in such a manner that negative belief systems were stimulated. The supposition that health care is race neutral continues to be prevalent, and exploring the dimensions of ethnic stereotypes that function as coded language is a viable avenue for investigation. For example, if the contents of a stereotype are disassembled and distributed throughout a clinical assessment, it is important to explore the possibility that a decision maker can implicitly reassemble those components under the latent rubric of race and, connected with that subliminal exercise, engage in the same decision making process as if race had been explicitly listed as an overt identifier. Section 8 housing, non-English speaking, large extended family, and employed in hospitality services generates an image more closely associated with nonwhite groups than with white. In the same way, demographics such as the aforementioned collected on admission to care can also prompt a patient assessment process using said categories to ascertain a particular course of action. Scheduling an interpreter to assist with clinical interviews or surmising educational level or literacy are examples of such appraisals.

Understanding the mechanism of language in the discourse on race is a complex endeavor. Green & Manzi (2002) questioned if techniques used in the pursuit of perceptions about ethnic group differences actually reflect methodological artifact rather than meaningful results stemming from research. In their study exploring the structure of black stereotypes, methods such as discriminant-function, multidimensional-scaling, and hierarchical-cluster analyses examined responses from study participants. Black minister, gangsta, black
businessman, dreadlocked, and reggae were examples of study subtypes sorted under the global category “black.”

Following this study, a sample of 140 white college students took one of the black subtypes and identified associated attributes for that subtype (e.g. traits, behaviors). The goal of the research was to determine if the techniques of sorting and the freedom to list attributes had the ability to uncover the same cognitive structure associated for blacks as an ethnic group. Fourteen subtypes were clustered and their adjective attributes elicited. Some of the attributes were: ambitious, athletic, clever, dirty, drugs, intelligent, and lazy. The researchers hypothesized that it would be easier for the white study participants to group black subtypes (militant black, streetwise black) as opposed to meeting the challenge of providing different descriptive attributes (ostentatious, musical, unintelligent) which could be personally censored due to concerns about appearing biased. The active/stereotypic quadrant of the study contained the subtypes: gangsta, ghetto black, Uncle Tom, dreadlocked reggae type and rapper. The researchers assigned the descriptor “poor urban type” to this category as a more comprehensive label covering all study subtypes. The investigators surmised the existence of a consistent, negative stereotype of blacks and concluded that different investigators captured the same basic perceptions of blacks. The subtypes were not vastly different. A pointed conclusion from the investigators suggested some research techniques were more sensitive than others at explicating the dimensionality of stereotypes. Consequently, it was the judgment of the researchers that study methods should be chosen for their sensitivity to particular measures.

If ethnicity gives direction to clinical decision making, the associated coded language may provide predictors that transmit or serve as the medium of transmission into the decision process. The ability to frame an issue reduces a large field of information into manageable
portions. A somewhat obvious example of this is the field of politics. The dynamics of ideologies are standard stock in this domain. Belief systems and their content are identified, categorized, and arranged for dissemination in a manner germane to a targeted group for a predicted outcome. The field of media communications often highlights the circularity involved in the activation of ideology, the process it incites, and the anticipated response.

For example, Valentino, Traugott and Hutchings (2002) wanted to explore the influence on candidate preference of racially embedded cues in political appeals. Their study proposed campaign messages containing racial cues could influence candidate choice with the caveat that issues already linked with racial overtones e.g. violent crime, drugs, and poverty made the probability of this effect more likely. In this sense, political ads were priming agents.

The study involved the reactions of two separate groups to three versions of an advertisement. One group of 314 comprised a representative sample of metropolitan Detroit and represented the community-based group, and interviews of this group were conducted in the home setting. The other was a nonstudent group interviewed in a lab setting drawn from the University of Michigan campus. Both samples were approximately 70% white in contrast to 30% nonwhite. The community based group contained more females. The study design included interviews and responses to video ads. The control group watched three different commercials about batteries, windows and Staples office supplies. As part of the study, researchers created a 30-second political ad and substituted it for the Staples commercial. The message of the video focused on health care and the associated financial burden on the larger society. It contained implications referencing the beneficiaries of the system. During the video the candidate did not speak. For the experimental group there were three different versions of the political ad. One version had no obvious visual cues of people or places. A second version contained visual cues
of whites interacting with the candidate, counting money, and writing checks while a voice over commented about taxes, increased government spending, and described an unfair healthcare system financed by working people who were not its chief beneficiaries. During part of the narration that stated “an unfair system that only provides health care for some” a visual ran of “a white nurse assisting a black mother and child in a hospital setting” (p. 37). The narration continued with “while others go without proper treatment because their employer can’t afford it.” Here the visual cue matched the narration of a “white mother holding a child” (p. 37). Study results indicated exposure to the commercial increased support for the candidate. The implicit message apparently captured the subject matter that influenced the targeted recipients and their opinions.

One organizing principle for data is that of family resemblance such as an example or prototype used as a reference. In situations of this nature, characteristics are fitted together so that within-category and between-category classifications are clearly differentiated to the organizer. Still another method of grouping qualities occurs when predictability is the motivation for the clustering. For instance, safe practice is a heading for behaviors that can be sorted to recognize that which is dangerous or dependable.

Case presentations for student education can contain latent messages in the content provided when traditionally marginalized groups are the subjects. Sex and gender, sexual orientation, and race and ethnicity, for example, provide strictly demographic information and their use should not hold inherent meaning or explanation. According to a content analysis of case presentations by Turbes, Krebs, & Axtell (2002), identity should not be used as a substitute for behavior. In an example using sexual orientation as a demographic, the authors wrote:
A gay-identified man may or may not engage in high-risk sexual behavior, or may or may not be sexually active. Thus identity may be a marker for a risk factor, but is not an actual risk factor, and is an imperfect marker. Many of the cases in our sample discussed identity, but not behavior as a risk factor for HIV infection, thus appearing to let identity stand in for the actual risk factor for behavior. Others used ambiguous language that leaves unclear whether it is identity or behavior being discussed. (p. 213)

The researchers provided insight into the value of epidemiologic information as a positivist approach to the study of population groups as distinguished from the type of generalizations that primarily serve to stereotype. More specifically, identity as a concept of personhood is not a risk factor.

Pointing to future directions, Turbes, et. al. posed questions relevant to the purpose of the following study:

When ethnicity and sexual orientation are not presented in a case, how does this affect how students view the patient featured in the case? In the absence of other identifying information, do students interpret patients to be a part of the dominant group? If so, how will this affect their understanding of the epidemiology and risk factors for the disease presented in those cases. (Turbes, et al., 2002, p. 215).

Racial information promotes perception biases when the prime is race-based and the target stimulus is semantically associated (Payne, 2001). Well-known examples are the stimulus black semantically linked to hostile or aggressive. In the Payne study, a gun was more often associated with a black face than a work tool once respondents were exposed to a race based prime. An important factor in the test scenario was reaction time. It can be taken as a given that racial information has meaning for any individual without necessarily inferring objectionable
motes. The race-ethnicity construct may signify content because of the larger social discourse and context (definition or explanation). Payne concluded that when stereotypic cues are present and response time to make a decision is limited, errors in judgment are more likely to occur.

How Disparities and Schema Relate

The seminal work from the Institute of Medicine (IOM), Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare, has been the most influential to enter the literature on disparate treatment of ethnic groups since quality of population health became a national agenda. As noted, the IOM defined disparities as “racial or ethnic differences in the quality of health care that are not due to access related factors or clinical needs, preferences, and appropriateness of intervention” (p. 32). Examples of this included research that described race-based differences in the type and quality of care in such specialties as cardiac, mental health, pain control and transplant services (Harrison & Falco, 2005). Research findings to date are controversial and inconclusive. To illustrate, Satel & Klick (2006) in The Health Disparities Myth, disagreed with the conclusions of the IOM report. In their self-described biased doctor model, the authors contend the paradigm of the ethnically biased doctor gained unwarranted attention. “We conclude that the studies examined by the IOM panel—consisting primarily of retrospective analyses of large health system databases ---fail to make a persuasive case that physician bias is a significant cause of disparate care or health status” (p. 4). They challenged the presence of this specific type of bias in health care based on their premise that the cited research in the IOM report was flawed in either design or analysis of data. Satel and colleague take the position that political correctness leads into unsubstantiated conclusions from studies with multiple shortcomings. The authors reach another important conclusion by stating:
To our knowledge, there exist no systematic, prospective evaluations of physician decision making in relation to patient race, let alone of the clinical results of such decision making. The literature on medical stereotyping contains data they are indirect, limited to interpretation of academic exercises that may have heuristic value but are inadequate for drawing conclusions about actual clinical encounters. (p. 28).

This particular evaluation of the current state of the science is valid. Despite such debates, health care research is replete with cited studies that question equitable treatment for ethnic groups. These studies address effects as well as affects of caring, and the actions of caring as well as the emotions, feelings, and state of mind that accompany these actions are equally important to understand. Despite study limitations as caveats to research findings, differences in provision of care to ethnic minorities continue to appear in data. Current explanations detail the most apparent (e.g. affordability, accessibility) reasons yet remain unsatisfactory.

Kirby, Taliaferro, & Zuvekas (2006) investigated several variables as possible explanations for disparities. These factors were: usual source of care or having a primary care provider, satisfaction with getting care when needed, ambulatory care, socioeconomic status, English proficiency, insurance, neighborhood racial-ethnic composition, and supply of health services. They found a significant relationship between the racial characteristics of a neighborhood and access to care in their study of Hispanic subgroups. In another possible source of unequal treatment, an article summarizing the proceedings from a 2003 conference examining the subject of disparities in emergency health care, the authors affirmed the positive impact of a consistent relationship with a provider. The lack of such regular care opens the discourse to conjecture related to the level of quality in care delivery under such circumstances. The ethnic
match between provider and patient positively influences patient satisfaction (O’Connor & Haley, 2003) as an additional advantage to cultural congruence between the two participants.

Other investigators explored covariates such as regional differences in the use of surgical procedures as alternative treatment to medical management. In one study a critical appraisal examined knee arthroplasty using a Medicare database. Surgical intervention was consistently lower for black men compared to white men in the regions studied. This pattern was not in evidence for black women living in the same neighborhoods covered by the study. Appropriate scrutiny rejected co-morbidities as differentiating factors that could provide a fuller explanation. Patient preference for one treatment option over another (Skinner, Weinstein, Sporer, & Wennberg, 2003) presented yet another reasonable interpretation for divergent treatment decisions. Adding complexity to the impact of patient preference, however, are the results of other research. For example, studies indicated that the content of conversation between provider and patient differ by ethnic group (Oliver, Goodwin, Gotler, Gregory, & Stange, 2001). The implications of this within the context of patient education or the consenting process are readily seen. A retrospective study evaluating the ordering of electrocardiography, cardiac monitoring, oxygen saturation measurement, and chest radiography during an emergency department visit for complaint of chest pain contrasting gender, race and insurance status, noted further differences in the ordering of these standard tests according to race, gender, and insurance status (Pezzin, Keyl, & Green, 2007). The underlying cause for the observed differences was beyond the scope of the study.

Opposing positions on the presence of ethnic bias in care delivery require systematic investigation to establish facts. Racial concepts as a social phenomenon are an undeniable part of individual consciousness. The presence of said phenomenon as a detrimental factor in health care
is not yet ascertained or determined. No cognitive or behavioral map adequately establishes race as an “ism” in care delivery or, alternatively, defines its function in a target situation. A diagrammatic representation of ethnic bias that outlines the interrelationship of its underlying features, their function, limits, and consequences is lacking.

Health disparities are experienced as unequal treatment and suboptimal health outcomes for patients identified as members of stigmatized and socially marginalized groups. As previously noted, there is a plethora of research indicating differing health outcomes for ethnic population groups. More pointedly, questions persist beyond continuous but dissatisfying research. Investigations on the impact of affordability, consistent access to care, influence of genetic difference, and presence of co-morbidities associated with disease severity produce study results at odds with one another.

Race and ethnicity are complex constructs and analysis of these sociologically significant factors is crucial. The relevant literature is broad in scope but produces inadequate answers as to the distinct function and presence of these factors. Nevertheless, the ability to frame such abstract ideas and collect instances that represent them when viewed as occurring improves identification of their properties and characteristics.

Frames for the Discourse on Race-Ethnicity

Duckitt (1992) has suggested that explanations for prejudice have often reflected the issues and social upheavals (e.g. WWII, Civil Rights Movement) of a given time. He posited an integrative framework that incorporates accrued knowledge resulting from such significant events. The role of prejudice motivates a look at these situations in a particular way with implications for a causal process that includes psychological fundamentals, accounting for social and intergroup dynamics as well as an inherent human capacity for bias. These concepts show
evidence for negative influences such as conflict, power differentials, social transmission of prejudice manifested in attitudes and adverse socialization, as well as individual differences related to self-esteem, ideology, and personal susceptibility to suspect ideas. It is interesting to note that the issue of unequal treatment in health care focused attention on bias in a relatively unexplored domain. In the management of health as a particular area of human interaction the question for deliberation is whether or not the existence of bias can be traced to an explicit or implicit origin in its interpersonal expression.

Heuristics

Stereotypes may provide heuristics for misapplying information when ethnicity is involved. When stereotypes are activated they may serve as a filter for processing information that results in confirmation of the stereotype. Given the pervasiveness of the discourse on race in the larger society, it is relevant to question what daily events are constant primers for processing information about ethnic groups. If not consciously aware or motivated to think carefully, stereotypes can be loaded into data processing of any given situation. For example, heavy news viewers exposed to blacks as perpetrators of criminal acts are more likely to hold blacks culpable in an ambiguous scenario (Dixon, 2006). In health care, for instance, the ability to manage a burdensome health regimen well may run counter to stereotypic expectations of a patient from an ethnic group. This could lead to different treatment choices for certain patient populations and result in less than optimal choices.

Prejudice as Intolerance

In an analysis of narratives written by people who were the source of prejudice, Hall (1998) extracted five story types that added context to acts of intolerance. The identified types included: morally better than the outgroup, personally afflicted by the outgroup (e.g. threat or
injury), social pressure from members of the ingroup, turf or close proximity to the territory of the outgroup, and system abuse by the outgroup. The dominant emotions linked to these narratives included pride, hate, resignation, fear, and anger. Expressions of prejudice involved avoidance and joke telling, avoidance and “hitting back”, avoidance and lying, avoidance and careful watching, and avoidance and complaining. Hall wrote:

It is worth noting that in none of the story types is a person just prejudiced without a socially good reason. People frame potentially destructive actions in ways that are socially acceptable if not socially ideal…People create life stories that make prejudice both sensible and acceptable in their specific case, while at the same time allowing them to condemn it in a general sense. (p. 154)

For example, most people profess distaste for segregated schools and yet white flight to the suburbs after school desegregation raises questions about that general sentiment.

Earlier experience with individuals from social groups can have unconscious influence on judgments about representative members and be the source of discrimination based on implicit knowledge (Banaji, Hardin, & Rothman, 1993). Information accessed without conscious volition or intent is difficult to monitor in effect. This is particularly problematic as an issue in clinical decision making and resulting disparities in treatment. As noted, studies exist that control for the influence of variables such as access and affordability but demonstrate that disparities in health outcomes remain. The possibility that bias may exist as a consequence of a highly developed word association between ethnic groups and semantic primes that operate below the threshold of consciousness is an important research objective to ascertain.
Institutional Racism

As previously mentioned, Bowser (2001) explored the issue of institutional racism from the framework of new institutionalism. From this perspective, organizational practices are thought to compound issues of race and stereotyping. Bowser emphasized this by distinguishing between an institution and an organization. Conceptually, institution implies patterns of behavior and practices, whereas organization provides the structural components. By this reasoning, institutions can exist within organizations. Consequently, institutional racism is problematic when it is understood as unexamined patterns of behavior that are based on racialized information. There is a dearth of research examining the decision making of nurses in relation to institutionalized racism.

Bowser (2001) proposed that racialized research as a source of information is the basis of the overall problem. “Thus, in deciding what to observe, what questions to ask, and what hypotheses to form, the unquestioned knowledge that blacks are biologically and culturally different serves as an unseen and unquestioned antecedent” (p. 103). The author suggests that research began a process of self-perpetuating knowledge that eventually became institutionalized. In sum, the fundamental premise that blacks are different is the root concept that becomes a self-fulfilling prophecy. Racialized research asserts racial groups are different from one another. How then can group difference in research outcomes not be expected? Support for this inevitable result is accepted as credible if the research is based on physiologic or genetic principles.

Bowser (2001) made the thought provoking observation that evidence-based medicine stimulated a proliferation of journal articles on disease rates and mortality. The preponderance of articles on blacks and prognosis, particular diseases, and the relative effectiveness of various
treatment options presented in published writings can influence decision making. The presentation of statistical differences showcased in research studies that compare ethnic groups is now an increasing part of the body of work examining causes of health disparities. The contradictions presented by racialized literature are provocative. If the medical decision turns on the presence of skin color as an indicator of clinical significance, then the way that factor is leveraged effectively and consistently in a quality decision remains a question without an answer. Bowser points out “no empirical work has been done that specifically examines physician decision making in relation to the findings of racialized research” (p. 116).

Aversive Racism

Racism and prejudice are two facets of stereotyping. Although neither has disappeared, demonstration of their overt forms no longer present as they did in the past. Dovidio, Gaertner, Kawakami, & Hodson (2002) studied the idea of contemporary forms of prejudice exhibited by whites towards blacks as having four aspects. Modern examples of bias are subtle, often unintentional, and unconscious. There are divergent perspectives of prejudice in comparing the lives of blacks and whites and different consequences. In one study, the previously mentioned researchers cited above explored aversive racism. Aversive racism is defined as the unconscious and unacknowledged negative feelings that whites associate with blacks that stimulate rationalizations when threatened with awareness in a given situation. The study created a scenario examining the behavior of a white witness to an emergency. It involved two manipulations: one changed the race of the victim in the emergency between black and white, and the other intimated to the witness that they were the only one or that there were other witnesses involved. When the bystander believed they were the only one present, there was no difference between help to the black victim as compared to the white. However, when the
bystander believed that other witnesses were involved, the black victim was helped half as often as the white (38% vs. 75%). The expectation that someone else was going to step forward was the offered rationalization. All witnesses were white.

**Conceptual model for provider cognitive schema**

The literature provides a number of opposing arguments related to explanations for disparities in health care. The quality of communication between clinician and patient, patient preferences in treatment decisions, potential for clinician bias, flawed cognitive schemas of ethnic groups and ambiguity in establishing rapport between the culturally dissimilar in the time pressured health care setting are standard ways to formulate the nature of the problem. Equally important is the larger social discourse that serves as context for the meaning of ethnicity in American society. Explanations for unequal treatment in health care are varied. Below is a conceptual model developed for this dissertation exemplifying the aforementioned factors. Outlined after the model is a framework of main points extracted from the literature review to explicate the larger social milieu in which the minority-majority ethnic experience takes place.

**CONCEPTUAL MODEL FOR PROVIDER COGNITIVE SCHEMA**

**Figure 2.0**
Outline of Main Points

Proposed Conceptual Model

- Society creates group identities (ingroup/outgroup)
- Stereotypes are the attributes given by the larger society to the minority group (e.g. “they” are aggressive, lazy, dumb)
- Ethnic identity is created by the minority outgroup to counterbalance what the larger society creates (“We” are strong, no nonsense, live in community with one another, believe in giving back)
- Stereotypes can be implicit (unconscious) or explicit (conscious)
- Contemporary society has these attributes cognitively embedded (cognitive schema)
- Ethnic attributes reinforced daily by media framing ingroups remain socially separate (de facto) from outgroups and therefore have minimal lived experience that challenge their implicit/explicit thinking
- In health care, stereotypes of outgroups can pass as implicit thinking
- Outgroups are essentially ambiguous information for the health care provider when (s)he must deal with cultural challenges

Summary

Health disparities are experienced as unequal treatment and suboptimal health outcomes by patients identified as members of stigmatized and socially marginalized groups. There is well documented evidence of this phenomenon in health care. Questions persist even after research results investigating the impact of affordability, consistent access to care, co-morbidities as indicator of disease severity, and generic differences have entered the literature.

In spite of limited contributions in the past, the increased presence of nursing in this field of research continues to be important. In particular, there is the need to investigate possible causes of disparities as opposed to its correlates. Complementary variables or reciprocal relationships between variables are signs and symptoms exemplifying an underlying causation.
Within group studies and between group studies with well-controlled confounders will assist in clarifying issues such as ethnic bias and its undetected functioning in decision making related to patient care.
Chapter 3

Methods

This chapter details the research design, study instruments, sampling plan and type of data analysis used in this inquiry. Procedural strategies to assure credibility, rigor and trustworthiness of results are outlined. The chosen qualitative method and unique research design provided a fresh approach to the proposition that clinical decisions can, in fact, be affected by patient race and ethnicity within certain parameters.

Research Question

To what extent do cognitive constructs of ethnic groups serve to disadvantage ethnic minority patients and negatively influence the clinical decision making of nurses engaged in making a treatment decision?

Purpose

The identification of ethnic bias as a distinct and recognizable phenomenon in the spoken conversation of nurses engaged in a treatment decision was the aim of this research. The premise that the healthcare environment does not replace the results of long standing social separation presupposed the likelihood that equivocal words and phrases commonly encountered in the routines of daily living can also be manifested in the cross cultural clinical encounter. The ability to design a method that would pinpoint the unique language characteristics of such bias was the important goal of the research plan. More specifically, the cross cultural interaction is a specialized type of encounter that by its nature increases the likelihood of the use of language related to socially based beliefs and opinions. From that perspective, words are susceptible to double meaning or ambiguity and tend to function as semantic proxies for a particular state of mind. Today the widespread belief that ethnic bias is more subtle accounts for the need for
research methods that explicate tacit statements and questionable speech patterns that veil such belief systems.

This study was designed to uncover representative words, expressions and statements embedded in the speech patterns of study subjects that could be examined for evidence of ethnic bias and stereotypical thinking. Such verbal statements provide insight into the mental models upon which the participating nurses likely base their thinking. Ethnic bias that is apparent can be rooted in faulty conscious or unconscious mental models and cognitive schema. The expressions of such schema are hypothesized as existing over time in individuals and the identification of their characteristics is therefore possible. Additionally, the articulation of beliefs and opinions related to ethnic groups tend to occur with a degree of frequency that places their display in conversation in the realm of the commonplace. In this study design, words and phrases, through the process of content analysis, serve as derived evidence for the presence of ethnic bias in the clinical reasoning of the study subjects.

Institutional Review Board (IRB)

IRB approval for the study was submitted according to the protocol of the test site. The online submission was accepted and met the stated criteria for an expedited review. The research was judged to present minimal risk to participants, the data collection process and protection of the data were determined commensurate with policy.

Design

To date few studies have explored active conversation among nurses to explicate cognitive models of ethnic populations that they might hold. Discernment of ethnic stereotypes that underpin conscious and unconscious content required a deviation from traditional methods to explore the question. The design of this study differentiated an approach outside traditional
self-report studies or implicit association tests. It utilized a simulated exercise to capture implicit or explicit mental models individually held by study participants as each processed reasons for making his or her treatment decision involving an African American patient. As noted the objective was to elicit ethnic stereotypes within the context of making a clinical decision.

This descriptive study necessitated an innovative design that elicited fully formulated evidence of ethnic bias in clinical decision making. The plan required a strategy capable of revealing manifest and latent cognitive content in the thinking of the study participants. For that reason, automatic versus controlled as well as conscious versus unconscious cognitive processing were important to keep in mind as familiar variations on the themes of manifest and latent content. Their prominence in the literature on bias and unequal treatment could not be dismissed as important factors in the design of research. To that end, expressed ideas, opinions, their concomitant meanings and articulation of the underlying logic that explained treatment decisions were the needed data. The chosen plan of research and the selected instruments were organized to extract and sort heretofore unidentified concepts and constructs that corresponded to the cognitive content of the nurse participants.

**Instruments**

4 instruments were used in this study. A certified Communication Access Realtime Translation (CART) stenographer as previously mentioned provided transcription of the study sessions within 24 hours of each group meeting.

Each instrument provided a simulation experience. The board game as a group activity was analogous to collegial relationships during a typical work day. That is to say, the game provided opportunity for appropriate and routine conversation, the exchange of ideas in a safe environment and also allowed for stage setting the project. Additionally, the short video
represented an opportunity to make a treatment decision respectively by each participant related to the same case. Marsh (1981) suggested at least six components that should be in place for the creation of a simulation game. The Marsh components are: simulation objective; scenario; roles; procedures and win criteria; presentation format; and debriefing.

The board game *The Last Straw* is described as a game experience processing the social determinants of health. The game guide provides the following description (http://www.thelaststraw.ca/)

The Last Straw is a game about the social determinants of health, the social events, patterns and conditions that affect our health. In this game, players begin by creating characters who, by the roll of the dice, are born into particular sets of biological and social circumstances, including gender, socioeconomic status and race (see Appendix A for example of Profile Sheet). These characters then move through life experiencing events also determined by a toss of the die. The positive or negative effects of these events on the health of each player are measured by gaining or losing Vitality Chips. When a character runs out of Vitality Chips, he or she runs out of life.

Figure 3.0 Study design outline

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Purpose in Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Last Straw (board game)</td>
<td>Priming mechanism</td>
</tr>
<tr>
<td>Sickle Cell video vignette (5 minutes)</td>
<td>Vignette used for clinical decision by study participants</td>
</tr>
<tr>
<td>Pre and Post Test (following board game)</td>
<td>Assess effectiveness of board game as priming mechanism</td>
</tr>
<tr>
<td>2 Semi-structured interviews during research session</td>
<td>Interview 1: Questions to elicit treatment decision and give rationale.</td>
</tr>
<tr>
<td></td>
<td>Interview 2: Debrief questions related to personal impressions of the research purpose.</td>
</tr>
</tbody>
</table>
Sampling

The target population for this research was registered nurses who had been in practice in an acute care setting for more than two years and employed in an integrated health care system in the Northeast. A formal notice distributed by email and flyer served to recruit participants. Announcement of research projects via a group distribution process was a common practice at the test site. The email announcement and related flyer requested voluntary participation in a research project evaluating the cognitive process of decision making by nurses.

Sample Size

A convenience sample of 13 respondents was accepted for the study. All volunteers were nurses who met inclusion criteria and accurately completed the protocol for registration. Test groups ranged in size from 2 to 4 participants per session. 6 sessions were held.

Inclusion Factors

The target population was the nurse with a baccalaureate degree as a baseline, working in a metropolitan area at an academic medical center. Study participants were male and female from western and nonwestern cultural backgrounds with a minimum of two years in clinical practice. The area of practice (e.g. inpatient, outpatient, emergency department) was not a decisive factor; rather, the focus was the nurse who had an established record of behavior as an interventionist in patient care.

Exclusion Factors

The nurse with less than two years of practice was judged by the Primary Investigator (PI) to have a knowledge base not yet well integrated and was therefore excluded from the study. The PI as a nurse of 25 years experience with an extensive history of teaching in both the clinical
and academic sector made the decision based on the following. While no longer a new graduate, the nurse of less than two years in the profession remains on the path of accumulating experiences leading to better developed abilities with analysis and synthesis of a clinical situation. The exclusion criteria assumed that cumulative experience increased the likelihood of a decision maker with well developed critical thinking skills and a sense of self-possession that would support independent judgment.

Another exclusion factor was the nurse without the recommended entry into practice degree. The nurse without a baccalaureate degree introduces an extraneous variable whose effect would be a distraction to the principle research question. In other words, the correlation between educational preparation, decision making and unequal treatment for minority patients is not the focus of this study. In a similar vein, the nurse educated outside the United States or one who has English as a second language presented factors with unknown effects. These referents were used as exclusions based on their potential as confounding factors.

Figure 3.1  Marsh (1981) Components and Descriptions for Simulations

<table>
<thead>
<tr>
<th>Simulation Objective (what is to be achieved?)</th>
<th>Board game provides ability to process social determinants of health and includes issues of race/ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario (What is the setting?)</td>
<td>Group activity simulates casual conversation between nurses working a typical shift</td>
</tr>
<tr>
<td>Roles (who is being portrayed?)</td>
<td>Creating characters demonstrates personal knowledge of ethnic groups</td>
</tr>
<tr>
<td>Procedures and Win Criteria (what is the sequence of activities permitted or not permitted and how is winner determined?)</td>
<td>Prescribed game rules. All participates played within parameters</td>
</tr>
<tr>
<td>Presentation Format (will simulation be board game or role play?)</td>
<td>Combination of role playing and board game</td>
</tr>
<tr>
<td>Debriefing (what follow up activity after the board game?)</td>
<td>Follow up interview and video after board game</td>
</tr>
</tbody>
</table>
Below is a typical character profile that results from the rules of play and according to the toss of a dye. A potential profile that includes gender, socioeconomic status and race of a game character and vitality chips awarded are shown.

<table>
<thead>
<tr>
<th>Roll</th>
<th>Socioeconomic Status</th>
<th>Vitality Chips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Under poverty line</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Lower Class</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Lower Middle Class</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Middle Class</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Upper Middle Class</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Extremely Wealthy</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roll</th>
<th>Gender</th>
<th>Vitality Chips Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odd</td>
<td>Female</td>
<td>8</td>
</tr>
<tr>
<td>Even</td>
<td>Male</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Roll</th>
<th>Race</th>
<th>Vitality Chip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>White</td>
<td>10</td>
</tr>
<tr>
<td>3-6</td>
<td>Person of Color</td>
<td>7</td>
</tr>
</tbody>
</table>

In like manner, each nurse participant created and assumed a profile. They also chose a character name to encourage connection with the game process.

**Game Process**

According to the tables listed above, a white, middle class, female would gather a total of 26 Vitality Chips. The gain or loss of vitality chips linked a die toss to a life circumstance and a character narrative such as the following:
Roll 1: You are born with a low birth weight. Lose 1 Vitality chip

Roll 2: You are born at a healthy weight. Remain the same.

If a player with the above profile were to throw the die for a roll of 1, then the additional information added to the character sketch is the player with a low birth weight baby who would, consequently, lose a Vitality Chip resulting in a total of 25 for that player.

Game rules included prescribed discussion questions. For example, attached to the sequence of events described above the guide provided this information: “This scenario is determined by rolling the die, but how might socioeconomic status (SES) affect birth weight?” Players discussed the question from the perspective of their self-named character. The transcriber for the study recorded the dialogue for content analysis.

Roles were created according to game rules and embellished by the research participants as players. Character development depended on the imagination of the study subjects. Behavior and interactions determined the attributes of individual character portrayals and were not modified by the facilitator in any way. Complete freedom of expression was a key utilization of the board game instrument as an effective priming tool. Participants were allowed two minutes to talk with one another in character before formal game play began to encourage comfort level. A pre and post test assessed the effectiveness of the simulation process. Each respondent rank ordered gender, race/ethnicity, socioeconomic status and age as determinants of health before and after the game.

Every participant was debriefed at the end of the study session using a structured interview process. The interview tool asked for a treatment decision based on the dilemma in the
aforementioned video vignette. Debriefing also allowed respondents to provide feedback; voice concerns and request any appropriate follow up.

The Video

A patient scenario taken from a video series entitled “Cultural Issues in the Clinical Setting” produced by Kaiser Permanente was screened for the study subjects. The vignettes are described as “scripted with the help of physicians, nurses and medical anthropologists, raise numerous issues around differing health beliefs and practices, values in conflict, stereotyping, overt and covert prejudices and language barriers as they occur in healthcare settings.”

The five minute vignette chosen for the study depicts an agitated patient who presents in the emergency department complaining of acute discomfort associated with a self reported diagnosis of sickle cell anemia. In the video, the African American patient has no corroborating documents for the attending clinicians to validate his alleged diagnosis. The Last Straw and the script of the vignette were positioned as psychological primes to elicit the cognitive content each individual research participant player associated with a racial/ethnic category.

Script transcribed from Video As a Priming Mechanism (See Appendix B)

The characters are Dr. Steward who is white, Ned who is black, John (the nurse) who appears to be nonwhite and Kim (Ned’s Girlfriend) who is black. The script primed the introduction of race as a factor in the scenario and its mention warranted management of its meaning as an explicit element in the processing of the study subjects.

Research Procedure

As Principle Investigator, there was a major issue I addressed in the design of the study. I am an African American woman introducing a study on racial bias. The influence my ethnic
identity could have on a study sample that included all racial groups was a concern of considerable importance. The possibility that my physical presence could restrain, alter, or silence participant responses was a potential obstacle to the study design and research outcomes. Consequently, I chose to use research assistants and facilitators other than myself who were not African American, to meet with study participants during research sessions. Two Caucasian volunteer facilitators were trained by the Principle Investigator to conduct study groups.

After careful consideration a paid stenographer was hired to capture the exchange of ideas instead of tape recorders or video cameras. Mechanical equipment of the aforementioned type posed the sort of distraction that required time to accustom players to their presence. The decision to minimize the time commitment for study subjects remained an important underlying principle of the design given sessions were held during work hours. Further, having a typed copy for analysis within 24 hours was a significant advantage.

Setting

The research was conducted in spacious, closed door classrooms or conference rooms located on one of several inpatient units in the main clinical facility from which the participants were recruited. This was psychologically and physically convenient and conducive to session attendance. Seating available in a small lobby area outside the session sites provided a place in which to wait. The physical space for the groups had built-in audiovisual capability and was furnished with tables that accommodated five people comfortably. The stenographer provided her own equipment.

Data Collection

As noted the Principle Investigator solicited volunteers for the study through a hospital email distribution system used for general announcements. This is common practice at the test
site. Those interested contacted the investigator by one of two methods to initiate communication. One was through personal email accounts and the other made use of an employer supplied email address. The choice to use email addresses as registration pseudonyms was instituted to support the anonymity of the Principal Investigator and study participants. Accepted study subjects received a link to a website constructed for the purpose of the research project. This helped maintain anonymity for all parties as part of the registration process and allowed access to the study related demographic data sheet. (Appendix C). Once respondents provided the requested registration information appointments were arranged. Completion of the consenting process was managed during the face to face meeting at the actual test venue in a review of the study purpose and its protocol. Once respondents reported for their session they were asked to sign in using their email address and a randomly assigned participant number. No names were requested.

The Caucasian facilitators trained by the Principle Investigator greeted study participants when they presented to the test site. Groups were scheduled to meet for one hour and a time interval of at least one hour separated the start of each new study group if more than one met on a single day.

The facilitator began each session with an introduction of the research stenographer who transcribed the dialogue between players during the game. Participants seated for the assigned hour sat at tables where game pieces, die, game board and other elements were set up for play. Time set aside to process points in need of clarification and to address any reservations followed introductions. Study subjects were reminded of their right to withdraw if doubts or uncertainties became a concern.
Participants in the research were scheduled to meet in separate groups of two to four members during the day shift as arranged by appointment. Immediately following game play, the five minute video vignette was viewed. Each person in the group separately watched the same video during their assigned hour. Within that hour all but one participant left the classroom to wait in the adjacent lobby until each was called back for the individual debriefing which lasted less than five minutes. Study subjects shared their treatment decision related to the video. More specifically, according to the pain management situation depicted in the vignette, would the respondent treat or not treat the African American patient with the requested opiate. The research assistant also explored the decision rationale through a series of questions. The facilitator asked 5 questions listed on the Interview tool as well as the 4 questions which made up the Funneled Debrief instrument (Appendix D). The reason for the Funneled Debrief was to gain insight into whether study subjects had determined the unstated purpose of the research. If a participant suspected the actual research focus was the influence of race/ethnicity on their clinical reasoning the effect of that impression would need careful thought during analysis. Upon completion of this step in the process, respondents concluded their participation and were thanked for their time and contribution to understanding the cognitive aspects of clinical decision making by a nurse.

Structured Interview

Participants answered three open ended questions during playing of the board game within the context of their newly constructed personas. This step was in support of the priming process. Identifying with an ethnic group of a certain socioeconomic status was a key factor to accessing personal mental models. Race and class are often considered enmeshed and difficult to extricate as distinct variables. Each player responded to the following questions as the newly created character they inhabited.
1. How might socioeconomic status affect your health?

2. How does socioeconomic status affect where you live?

3. How do you think socioeconomic status might provoke violence in the family?

Data Analysis

The main data of the study was extraction of the frequency of decisions to treat or not to treat from the transcripts. Additionally, content analysis of participant conversations was the method chosen to identify reasons for decision made. Elo & Kyngas (2007) describe the technique as useful for qualitative data through which codes, themes or categories can be generated inductively by identifying larger constructs embedded in the details of the data. The reduction of large amounts of written matter is the purpose of this form of analysis. Additionally, Computer Assisted Qualitative Data Analysis (CAQDA) (Lewins & Silver, 2008) provided an efficient approach to condense the data and provide for in-depth exploration of the conversations between players as well as their debrief interviews. Inductive content analysis identified themes and categories associated with manifest and latent content in the cognitive processing of research participants.

Rigor and Validity

The ability to capture meaning is the distinguishing attribute of qualitative research. Understanding how ethnic bias functions in clinical decision making meets the criteria for phenomenology as a modality to comprehend the full implication of what it means to provide care to an ethnic minority as an individual, lived experience for a clinician (Starks & Trinidad, 2007). The standards for rigor in qualitative research include credibility, transferability and
confirmability (Thomas & Magilvy, 2011). These guidelines are defined by Thomas and Magilvy as value for truth, applicability to other groups, consistency of results from research methods used in a study and objectivity, respectively. Morse (2003) described parameters that help bring rigor to a qualitative inquiry: a method that answers the research question through a credible study design, an extensive literature review that synthesizes what is known in the field, an analysis of important concepts and theories, a knowledgeable and reflexive researcher who understands the philosophical foundations of the chosen application, skill in the use of study instruments and their limitations and a strategy to verify the data. To this list, (Hewitt, 2007, p. 1155) added “misinterpretation of participants' experiences might be reduced through respondent validation. Changes to grammar and punctuation, and simplification or loss of tone, pace, or volume during the transcription of interviews should be minimized.” To this latter point, and relevant to the use of a stenographer in this study, cited advantages to using court reporters to generate a transcript are greater accuracy in data (Scott et al., 2009). It is anticipated that adherence to these identified guidelines provided the scientific rigor necessary for results worthy of confidence.

Context for Analysis

Race and ethnicity are social constructions without a biological basis. It is not clear how these constructs are activated or modified by information during a healthcare encounter. It is important to understand this relationship if ethnic bias as a social phenomenon influences the cognitive process of clinical reasoning. The research question for this study poses that possibility. Is there evidence for ethnic bias in clinical decision making? The next section is based on the methods presented above and expands to an analysis of the qualitative data from the study.
Analytic Approach

Graneheim & Lundman (2004) suggest the use of familiar concepts to organize an approach to text reduction in qualitative analysis. Trustworthiness of the process is the goal. The concepts of manifest content, latent content, unit of analysis, meaning unit, code, category and theme were used in this analysis. The definitions of each are adapted from the aforementioned authors.

Table 3.2 Definitions for Study Constructs

<table>
<thead>
<tr>
<th>Definition</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manifest content is text that explicitly reveals thought processes.</td>
<td>Latent content is text that expresses subtle differences in meaning and open to interpretation</td>
</tr>
<tr>
<td>Unit of analysis in this study is each interview with a study participant.</td>
<td>Meaning unit used for analysis is a sentence of text.</td>
</tr>
<tr>
<td>A code is the label applied to meaning units that express a similar idea across interviews</td>
<td>A category is a group of codes linked by a common thread.</td>
</tr>
<tr>
<td>Open coding was the process used to reduce text data into codes and categories</td>
<td>Ethnic bias is defined as the unfavorable and subjective beliefs and opinions held by an individual or group about another viewed as dissimilar and less worthy.</td>
</tr>
</tbody>
</table>

Organizing and linking these constructs provided the technique for analysis used in this study. The steps were as follows:

- Each transcribed research session was entered into CAQDA as a word document.
- Each sentence of text was categorized according to similar themes expressed
- Themes were refined until reduction of data captured specific features of the named construct.

Uncovering the essential elements of each theme required attention to several objectives. The Principle Investigator established the criteria below as a result of sixteen years teaching cultural competence and facilitating community dialogues as part of antiracism discussion groups.
• Attributes formed a consistent and coherent whole.

• Qualities provided depth and dimension rather than range

• There was intrinsic parity between the theme and its characteristics and between the characteristics with each other

The results of this study and the identified themes were based on the criteria described above.
Chapter 4

Findings

Introduction

A full explanation of health disparities and its causes has yet to be realized. Access to care, ability to pay, linguistic resources for a multilingual patient population, cultural competence, provider-patient concordance, health literacy, and other well-researched influences provide a certain degree of insight. Still, the knowledge accumulated through systematic study of the aforementioned factors inadequately explains variation in the health outcomes of racial/ethnic groups compared to their White counterparts. Although named, ethnic bias in clinical decision making remains a scientifically vague abstraction as a possible explanation despite having an accepted and distinct existence as a social phenomenon. A review of the literature reveals differences in the health status of White versus minority population groups and therefore necessitates inquiry into ethnic bias as an obscured phenomenon in health care and clinical practice.

The ability to elicit evidence of ethnic bias in clinical decision making requires a measurement strategy that reveals manifest and latent cognitive content. Therefore, the study includes descriptive qualitative design with three phases. Phase one includes findings from the priming game, Final Straw, followed by phase two with a clinical decision in response to a patient vignette video, and finally, phase three with content analysis of statements. The video functioned as a simulation for nurse participants who were asked to make a treatment decision based on the circumstances depicted in the film. The film portrayed a scenario in the emergency department involving a young African American man with complaints of pain related to sickle cell crisis. The content analysis of the dialogue that was part of the priming and simulation
phases is described in relation to the research question and framework of the study. Key findings are highlighted that suggest the means by which clinical decision making may exhibit properties characteristic of ethnic bias.

Sample

The principal investigator solicited volunteers for the study through both a hospital email distribution system used for general announcements, and the distribution of flyers. A website was constructed to enable respondents to register for the study and supply select demographic information as approved by the Institutional Review Board for Human Subjects. Participants received information regarding scheduled participation in a specific session via email, and a research assistant was recruited to facilitate the study groups.

Registration via the website indicated 19 volunteers providing their demographic information and two additional volunteers were considered “walk-ins”. However, 13 study participants made the final count for the cohort of volunteers who participated in the full study protocol. The basic participant demographics in Table 4.0 show that the group was predominantly White, female, baccalaureate prepared, and from every level of the clinical ladder.

Table 4.0

Participant Demographics

<table>
<thead>
<tr>
<th>Race</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>Age</th>
<th>Nursing Degree</th>
<th>Clinical Ladder Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>White (12)</td>
<td>European (12)</td>
<td>Female (11)</td>
<td>50-64 (9)</td>
<td>BSN (6)</td>
<td>Entry (2)</td>
</tr>
<tr>
<td>Male (1)</td>
<td>European (12)</td>
<td>Female (10)</td>
<td>25-47 (2)</td>
<td>MS (4)</td>
<td>Clinical Scholar (4)</td>
</tr>
<tr>
<td>Not Available (2)</td>
<td>Not Available (2)</td>
<td></td>
<td></td>
<td>Advanced Clinician (3)</td>
<td></td>
</tr>
<tr>
<td>Black (1)</td>
<td>European (1)</td>
<td>Female (1)</td>
<td>Not available</td>
<td>BSN (1)</td>
<td>Entry (1)</td>
</tr>
</tbody>
</table>
Sample Size

The definitive challenge to research is the size of the sample. The principle of data saturation and the lack of new items of information surfacing from the qualitative discourse typically lead to the investigator’s judgment that data collection should come to an end. A sample that included a broad range of individuals with diverse social, educational, and clinical experience was of interest to the investigator. These latter factors represented the variables thought to influence personal perspectives as well as clinical reasoning.

The sample for this study included participants with a range of nursing expertise as defined by the parameters of the formal clinical ladder program designed by the test site. This included representation of the entry-level clinician, as well as the advanced practice nurse. The sample was not significantly diverse in ethnicity or gender, but may have reflected the population from which the sample was drawn. There was representative data to support comparisons between age groups.

The rigor of the research design seemed to hamper the recruitment process. The designated website for the study suitably protected the anonymity of the study participants. However, respondents proved unwilling to create a unique e-mail account to further mask their identity. This additional step in the process seemed to function as a disincentive to finish the registration procedure. Instead study subjects chose to register using the business email of the test site.

Data Collection Phases

The design for the research enabled volunteers to progress through two phases of the study. In phase 1 participants played a board game and in phase 2 they viewed a video vignette of a clinical situation. The data from each phase was presented separately along with its meaning.
in relation to the overall research question. As previously indicated, the research question related to the influence that race/ethnicity may have on the clinical reasoning of a nurse engaged in making a treatment decision.

A phased approach to the study accommodated several factors prominent in the bias literature. A significant amount of scientific inquiry provides insight into the effectiveness of cognitive priming or activities that stimulate mental associations between words and memories. The talk out loud method as a consequence of playing the board game was commensurate with such activities. Creating new personas or “playing a part” on behalf of an imagined interpretation of those who are culturally different makes conversational missteps increasingly probable as players engage in conversational banter. The hypothesis was that the circumstances allowed the development and capture of a steady stream of unfiltered perceptions that could manifest as examples of unguarded bias and automatic thinking. The strong likelihood of this occurring was suggested by the implication of cross-cultural portrayals as part of a board game focused on social determinants of health with race as a significant part of the game discussion. In phase 2 of the research process, following the board game, it was posited that when participants resumed the conduct and behavior of a professional nurse to make a treatment decision, it would allow examination of the more conscience and familiar processes that conform to the mental activity known as clinical reasoning. Therefore, a simulation exercise featuring clinical decision making was incorporated into the research design.

In summary, a dedicated website permitted the collection of demographic data and efficient scheduling of research participants. The choice to include a strategy like the board game to establish an opportunity to examine automatic and controlled processing acknowledges the importance of these concepts so prevalent in the literature. A total of six groups comprised
between two and four nurses made up the study sample. The total number of participants in the study was 13.

**Primming Cognitive Schema – The Board Game**

**Pre-test and Post-test Results**

Once at the study site and before playing the board game, a pre-test was administered by the research assistant to each participant. During the test, participants ranked gender, socioeconomic status, age, and race/ethnicity as factors that determine health. After playing game, *The Last Straw*, participants were asked to rank the same factors again. During the game respondents were free to indulge in casual conversation as actors adjusting to their newly created game character. Pre- and post-test rankings provided some indication of any change in perception about the influence of these factors soon after playing the board game. Results displayed by pseudonyms chosen by participants (Table 4.2) suggested the effectiveness of the game as a cognitive prime.

**Table 4.1**

Ranking of Socioeconomic Status Before and After the Board Game

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keisha</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>John</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Mary</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Markie Mark</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Claudia</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Turk</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Margo</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>JoJo</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Marissa</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Louisa</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Harriet</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Allison</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Rajon Rondo</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**NA = not available**
The results indicated that of the 11 players who provided pre/post test data, approximately half were influenced during the game by their conversation focused on socioeconomic status and its impact on the lived experience of an individual. Two participants did not complete all phases of the study session. Socioeconomic status and race were typically sequential in the post-test with little interference from age or gender to interrupt the order. A point of awareness for the participants represented the amount of information about others available to them below the level of their conscious perception. One example was a statement by one participant:

When you have to put yourself in someone else’s place, it kind of heightens your awareness of some of the barriers that you have to face as somebody that is a minority or who is poor.

Another participant stated:

I think the character jumped right out, the initial character seemed to jump right out, without premeditation. So, I think that is always an interesting….what character jumps out. Where your head starts and where you are at.

Table 4.2 Participants by identification number (ID) and their Pseudonym Character

<table>
<thead>
<tr>
<th>Study ID</th>
<th>Race</th>
<th>Sex</th>
<th>CL</th>
<th>P</th>
<th>Ethnicity</th>
<th>Sx</th>
<th>Occupa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White</td>
<td>F</td>
<td>Scholar</td>
<td>Keisha</td>
<td>Black</td>
<td>F</td>
<td>Working student</td>
</tr>
<tr>
<td>2</td>
<td>White</td>
<td>M</td>
<td>NA</td>
<td>John</td>
<td>Of color</td>
<td>M</td>
<td>Engineer</td>
</tr>
<tr>
<td>3</td>
<td>White</td>
<td>F</td>
<td>NA</td>
<td>Mary</td>
<td>Of color</td>
<td>F</td>
<td>Teacher</td>
</tr>
<tr>
<td>4</td>
<td>White</td>
<td>F</td>
<td>Adv Clinician</td>
<td>Markie Mark</td>
<td>White</td>
<td>M</td>
<td>Trust fund baby</td>
</tr>
<tr>
<td>5</td>
<td>White</td>
<td>F</td>
<td>Entry</td>
<td>Claudia</td>
<td>Filipino</td>
<td>F</td>
<td>Stockbroker</td>
</tr>
<tr>
<td>6</td>
<td>White</td>
<td>M</td>
<td>Entry</td>
<td>Turk</td>
<td>Italian</td>
<td>M</td>
<td>Professor</td>
</tr>
<tr>
<td>7</td>
<td>White</td>
<td>F</td>
<td>Scholar</td>
<td>Margo</td>
<td>White</td>
<td>F</td>
<td>Astronomer</td>
</tr>
<tr>
<td>8</td>
<td>Black</td>
<td>F</td>
<td>Entry</td>
<td>JoJo</td>
<td>Black</td>
<td>F</td>
<td>Nurse</td>
</tr>
<tr>
<td>10</td>
<td>White</td>
<td>F</td>
<td>Scholar</td>
<td>Marissa</td>
<td>Asian</td>
<td>F</td>
<td>Waitress</td>
</tr>
<tr>
<td>11</td>
<td>White</td>
<td>F</td>
<td>Adv Clinician</td>
<td>Louisa</td>
<td>Spanish</td>
<td>F</td>
<td>Manager</td>
</tr>
<tr>
<td>12</td>
<td>White</td>
<td>F</td>
<td>Adv Clinician</td>
<td>Harriet</td>
<td>White</td>
<td>F</td>
<td>Consultant</td>
</tr>
<tr>
<td>13</td>
<td>White</td>
<td>F</td>
<td>Clinician</td>
<td>Alison</td>
<td>White</td>
<td>F</td>
<td>Secretary</td>
</tr>
<tr>
<td>14</td>
<td>White</td>
<td>F</td>
<td>Scholar</td>
<td>Rajon Rondo</td>
<td>White</td>
<td>M</td>
<td>Janitor</td>
</tr>
</tbody>
</table>

Race=Race of study participant  Sex=gender of study participant  CL=Clinical Ladder  P=Game Character name  Ethnicity=Ethnicity of Game Character  Sx=Sex of Game Character  Occupa=Occupation game character
In the preceding table 6* indicates a different study respondent but with a repeat ID number.

Participant Dialogue Results

The intention of posing the three questions about the effect of socioeconomic status on health, quality of housing, and domestic violence was to prime any implicit association participants might have held about these factors and race. It was anticipated that the presence of these cognitive connections would manifest in participant dialogues.

While participants played the board game, the conversations were recorded in real time by a Level V CART stenographer. This approach provided text of the dialogue as a priming activity that was analyzed to yield relevant insights. Some players presented fully developed new personas, while others engaged in meager discussion. These participants gave little personal detail to their make-believe lives and instead relied on circumscribed generalities. In the dissertation proposal pilot study the principal investigator made note of comments, in particular, from players of *The Last Straw* who were White and reported difficulty with taking on characterizations of minorities. “I find myself resorting to stereotypes because I don’t know what to say” was an emblematic response.

The inability or reluctance to add detailed features to the life of a different cultural group can infer several things. There is the suggestion that culturally informative relationships with ethnic minorities were limited in the lived experience of the cultural majority. Consequently, lack of reference material opens potential access to cognitive content that may have been flawed. Also interesting was the tactic reported by those who remarked “I don’t know what to say” when they created their ethnic persona in real time. Namely, “I find myself using myself as a way to fill in the blanks.” The lack of affinity and relationship may have functioned as a barrier to the nursing concept of presence as it relates to ethnic minority patients.
Deductive reasoning was prominent in the dialogue of study participants as they developed their new personas and created answers to the structured interview questions. Interestingly, syllogisms emerged as thought tactics to assist with imagining the life of board game characters. Both thought processes involved creating a premise from which an inevitable conclusion would arise.

**Question 1:** How might socioeconomic status affect where you live?

When answering this question common themes included: quality of home, community, and safety. For the persona of the Black janitor, the participant responded, “I have to share my apartment with other family members because we can’t afford to get an apartment on my own.” For Louisa, the Spanish business manager, the participant expressed, “I live in a lovely home …. And we do have the opportunity…to maintain our married relationship. We go out once to twice a week to have dinner together because we both work full time jobs. And I don’t have any children at this time. So I feel that I have some better opportunity than others.”

For the Asian waitress who works part time, the response was:

> It impacts where I live because I can only afford what is currently a basement apartment, which is a studio, which has no natural light coming through, and even that is a stretch, $629-a-month. And there is …pipes…you know, there are exposed pipes, no window, no adequate ventilation, I’m sure there is mold there because it is just that musty smell. And I only have a…I don’t even have a full stove. Very small refrigerator. And really live in one room.

Within these responses, earnings were the determining factor for where a person lived. Low wages provide cramped quarters and less than favorable surroundings. The study
participants who portrayed ethnic minority characters whom were not part of the middle class presented verbal pictures that depicted the individuals as not well situated.

As noted, analysis revealed that syllogisms by participants were used to assist with imagining the life of board game characters. Below is an example of a response from a player who adopted a middle class background for the character played. This respondent was not a person of color, but answers in the adopted character as a woman of color. Below was the response to the question: How do you think socioeconomic status impacts where you live?

We live in a neighborhood with a lot of people in a similar socioeconomic class. That my family, myself, my children, that’s their environment, so those are the expectations of maintaining healthy lifestyle. I’m able to provide them a single family home that we can provide them…not Multi-family home, I don’t mean it that way, but we have our own home. We have more influence on our own children and their surroundings. We have a yard that they can go out and play in. We have a neighborhood where they can go out and ride their bike. And similar families with the same priorities for their children are probably out doing the same thing.

Syllogism

Premise: People who own a single-family home have more influence on their families and share the same expectations for maintaining a healthy lifestyle

Inference: People who own a multi-family home have less influence on their families to live a healthy lifestyle and live in less favorable surroundings.

Conclusion: People who live in a multifamily home are less healthy than people who live in a single family home.
A different respondent who was not of color answered a question in the persona of a Black male as follows:

It (i.e. socioeconomic status) would affect my health by my ability to purchase healthy food. The amount of time that I need to work to earn a living for my family would impact the amount of time I have to cook healthy foods. It takes more time to often cook, and if you have to work a lot, you don’t have time to cook. Your socioeconomic status also, if you don’t have transportation it is often very difficult to access healthy food because if you have to walk all your food home, you have to think about the weight and all this kind of stuff. It is not easy. And also socioeconomic status, your level of education regarding what is healthy is often affected by that.

**Syllogism**

Premise: Access to, purchase and preparation of healthy food is affected by socioeconomic status.

Inference: As it relates to what is healthy, socioeconomic status mediates education and lifestyle.

Conclusion: Socioeconomic status affects health related activities.

Noteworthy is that the participant answered the question as a Black male but describes tasks usually assigned to women in a household. “To earn a living for my family”, “If you have to work a lot” indicate the typical male role model. On the other hand, men generally viewed as head of household, are seldom presented as the member who shops for or prepares food for the family.

**Finding 1 Related to Board Game Question 1**: This analysis led toward the consideration that syllogisms may explain flawed thinking in clinical reasoning. This format made generalizations about socioeconomic status and race less enmeshed and more distinct.
**Question 2:** How might socioeconomic status affect your health?

When looking at the responses to this question, one example was the participant who played the game as the Spanish business manager. This participant said:

I feel comfortable with the food choices that I can make. I try to live a balanced life with fruits and vegetables. I do belong to a gym and I can afford to take dance classes, and I love to dance with my husband. And I have the opportunity to get to and from the gym and dance classes at least four times to five times a week which helps me live a balanced life.

The respondent who had the persona of the Black janitor, whose socioeconomic status is under the poverty line, stated “I can’t afford a lot of healthy foods because they are very expensive, but I do what I can to eat well, keep my weight down, and I guess that’s it. I play basketball for exercise, and my work is very strenuous, so I try to keep in shape that way.” The respondent with the persona of the Asian waitress, who earned a degree in Liberal Arts but couldn’t find a job, answered:

I wouldn’t have enough money to buy, you know, probably the healthiest foods. So I end up eating a lot of Ramen Noodles, which is loaded with salt. I don’t eat a lot of fruits and vegetables. And because I work as long as I can as a waitress, even though I’m on my feet, I’m really not getting some structured exercise outside of just working because I work long hours for little pay. And my psyche really is not very good either because I really do regret spending all that money and not being able to get a job. So I’m worried about the future.

**Finding 2 Related to Board Game Question 2:** In the mind of the study participants, health is generally defined using the categories of nutrition, exercise, weight, and mental well being. This
index of topics was part of a cognitive model widely accepted in western medicine and credited to people who “take good care of themselves”. Those who may not adhere to this model may be viewed in a less positive light.

**Question 3**: How do you think socioeconomic status might provoke violence in the family?

The first example was the participant responding as an Asian waitress:

> Well, it can provoke violence because there is not enough money. And if there is not enough money, the stress is trying to at least make the bills you have somewhere, at least with a roof over your head. There is resentment that either one can’t make a living and then I would get the frustrations come out and the violence ensues. Also, the inability to seek out help for the lack of money or insurance or available resources around.

The participant who responded as a Black janitor said:

> My family, we get along pretty well, actually considering we don’t have much money. We try to do things together as a family that doesn’t cost that much. Just, playing basketball and going to church, being involved in community activities. So my family we don’t have much violence, but I see it all in my neighbors and my friends.

The respondent using the voice of a Spanish business manager responded, “Well, I know in our culture that, that in many ways the, woman is more subservient to the male. And as a business manager, I have, tried to manage our home, but also manage our relationship and sometimes my husband has become impatient and tried to put me in what I consider, I guess, he considers, my place.”

**Finding 3 Related to Board Game Question 3**: Stereotypical content can serve as frames for a line of reasoning. The subservient Hispanic wife, as well as the basketball playing, church going
Black janitor are both familiar frames for individuals from black and Hispanic backgrounds. The response of the Asian waitress was mainly a generic depiction of stress and its effects.

The Game as Influential Prime

Playing the game, *The Last Straw*, presented increased cognitive access to embedded ethnic images. Participation in the board game created an interactive process for participants that supported the free flow of conversation. Here figures of speech, iconic representations, and mental images begin to appear without social safeguards to prevent their expression. Thus, ingrained thought processes and their ethnic frames were accessed more easily.

Video as a Priming Element and Opportunity for Clinical Judgment

The video vignette modeled several generalized complaints from Black populations regarding their lived experience with the healthcare system. Anecdotes abound with criticism about the quality of encounters between Black patients and White providers. In the video the “gang look” of a young Black man created a stereotyped response from the emergency department personnel. The intervention of the assertive young Black woman opened to conjecture the appropriateness of her behavior from the perspective of the emergency department staff. The lack of documentation to support the claim of sickle cell disease as a confirmed diagnosis put into question the credibility of a request for a controlled substance to treat acute pain. This multifaceted scenario served as a second phase priming mechanism following the participant discourse generated by *The Last Straw*.

The Nurse Who Is Not a Cultural Match

The insertion of comments from John, the nurse, into the conversation taking place between the White doctor and the Black patient functioned as a key priming element. The
following quotes (listed in Table 4.4) tell the viewer familiar stereotypes typically presented in movies, television, 6 o’clock news reports, and music videos about young Black men.

Table 4.3
Explicit Stereotype Primes From Video Vignette

<table>
<thead>
<tr>
<th>Quote</th>
<th>Stereotype related to Black men</th>
</tr>
</thead>
<tbody>
<tr>
<td>“This young man was out here screaming. Thought he was with a gun shot.”</td>
<td>Gang member</td>
</tr>
<tr>
<td>“I think I’ve seen him here before. I should have known” (response of the nurse to the young black man’s request for Demerol)</td>
<td>Habitual violence, drug seeking</td>
</tr>
<tr>
<td>“They come here all the time dressed just like Him. Either looking for drugs or wanting us to Take a bullet out”</td>
<td>Habitual violence, Junkie</td>
</tr>
<tr>
<td>“Should I call detox?”</td>
<td>Drug or alcohol abuse</td>
</tr>
<tr>
<td>“I’m getting security.” (comment from the nurse after the young man grabs the doctor by the neck).</td>
<td>Dangerous, no self control</td>
</tr>
</tbody>
</table>

The Doctor Who Is Not a Cultural Match

The emergency room doctor functions as respondent to the nurse, patient, and girlfriend in addition to serving as the authority figure in the scenario. In his role as clinician he represented a range of possible actions that could be taken. At one end was autonomous action. At the other was institutional constraint in the form of hospital policy (summarized in Table 4.5). Policy served as a line of argument rationalizing his course of action.
Table 4.4 Justifications for Decision Standpoints

<table>
<thead>
<tr>
<th>Quote</th>
<th>Autonomous action</th>
<th>Institutional Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Where does it hurt?”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“Demerol?!”</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“If you have sickle cell we’ll take good care of you.”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“I don’t want to give him Demerol. I’m gonna take him in the back and give him 5 mg of morphine”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“I want to help you but we need to check Your care and the computers are down.”</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“Look, we can’t just give out drugs to Anyone who walks in.”</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“Have you ever been through detox?”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“Yes, I know” <em>(loaded tone in response To girlfriend’s statement that he just Needs Demerol).</em></td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“It’s not that simple”</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>“He says he has sickle cell”</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“He gave us a member card, but our Computers are down. When they come Back up I’ll be able to check his card. Look, I’m sorry. But we have a policy About giving out drugs.”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Look, I have no proof that your boyfriend Has sickle cell. I don’t care what color he Is.”</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>Can you please wait? Look, I really would Like to help <em>(calling after couple as they Leave the Emergency Department Without receiving treatment)</em></td>
<td></td>
<td>√</td>
</tr>
</tbody>
</table>

Concepts embedded in the list of preceding statements:

- Ineffectual, invalidated ethnic patient
- Right decision as a moral form contrasted with correct decision as a dispositional form.

Two judgment types identified within the context of this study.
The Black Patient and Family

Heightened emotion in a health crisis is not unexpected in the dominant culture. However, what is deemed appropriate presentation of frustration, feelings of powerlessness, and a sense of offense in a healthcare environment is codified culturally. In the vignette, emotion was behavioral, as well as verbal (Table 4.5).

Table 4.5

Verbal and Behavioral Expressions of Emotions Based on Quotes

<table>
<thead>
<tr>
<th>Emotion based quotes</th>
<th>Verbal</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It hurts”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“You’re holding your stomach. Does your Stomach hurt?”</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>“Ah, please! Give me something for the pain!”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“Just give me the G-damn Demerol! (grabs doctor by the neck)”</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Patient rolls head from side to side on back of chair</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Patient yells out.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“What’s the matter with you? (girlfriend yells at doctor)”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>Girlfriend moves closer to doctor, almost In his face.</td>
<td></td>
<td>√</td>
</tr>
<tr>
<td>“Please. Just give him the Demerol this One time. He does have sickle cell. Honest!”</td>
<td>√</td>
<td></td>
</tr>
<tr>
<td>“Alright. He’s a drug addict. Is that what you Want to hear? Now give him something for the Pain!”</td>
<td>√</td>
<td></td>
</tr>
</tbody>
</table>
Concepts embedded in the list of preceding statements include:

- An entreaty/response dynamic linked to a painful loss of pride
- Indication of an affront
- Aggressiveness

Taken as an organizing principle, the priming process of the video identified several mental models. More specifically, the procedure exemplified the manner in which the cognitive schema containing stereotype content was inserted into a clinical scenario. It demonstrated the degree to which an incongruent cultural match between patient and provider allowed stereotype content to permeate an unfolding interpersonal process. Lastly it displayed the problematic affect that attended the clinical interaction resulting from that lack of congruity.

Treatment Decision

Turning now to the decisions made by the study subjects, the following table (Table 4.6) depicts the participant demographics and their treatment decisions. Out of the cohort of 13 nurses, of those who were White, approximately 60% made the decision to give the pain medication. In a sample of this size it is not possible to draw any conclusions related to educational preparation. However, it is interesting to note that all clinical scholars made the decision to treat. Only one of the three advanced clinicians made that choice. And two of the three entry level nurses decided they would also give the Demerol. Of note was that the only participating Black nurse said “no” to providing medication. On the other hand, the one male respondent made the decision to treat.
### Table 4.6
Nurse Participant Demographics and Decision To Treat

<table>
<thead>
<tr>
<th>Race</th>
<th>Eth</th>
<th>Sex</th>
<th>Age</th>
<th>Edu</th>
<th>Degree</th>
<th>CL</th>
<th>LBG</th>
<th>ValEdV</th>
<th>Treat</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>NAM</td>
<td>F</td>
<td>64</td>
<td>PostG</td>
<td>MS</td>
<td>Scholar</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>F</td>
<td>51</td>
<td>College</td>
<td>BSN</td>
<td>AdvC</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Black</td>
<td>Euro</td>
<td>F</td>
<td>na</td>
<td>Grade School</td>
<td>BSN</td>
<td>Entry</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>M</td>
<td>58</td>
<td>PostG</td>
<td>MS</td>
<td>Entry</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>White</td>
<td>NAM</td>
<td>F</td>
<td>57</td>
<td>PostG</td>
<td>MS</td>
<td>Clinician</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>F</td>
<td>56</td>
<td>College</td>
<td>BSN</td>
<td>Scholar</td>
<td>yes</td>
<td>yes</td>
<td>.yes</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>F</td>
<td>63</td>
<td>College</td>
<td>BSN</td>
<td>Scholar</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>F</td>
<td>27</td>
<td>College</td>
<td>BSN</td>
<td>Entry</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>White</td>
<td>NAM</td>
<td>F</td>
<td>53</td>
<td>PostG</td>
<td>BSN</td>
<td>AdvC</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>F</td>
<td>43</td>
<td>College</td>
<td>BSN</td>
<td>AdvC</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>White</td>
<td>Euro</td>
<td>F</td>
<td>56</td>
<td>PostG</td>
<td>MSN</td>
<td>Scholar</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>White</td>
<td>NA</td>
<td>F</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>no</td>
</tr>
<tr>
<td>White</td>
<td>NA</td>
<td>F</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>yes</td>
</tr>
</tbody>
</table>

Eth=Ethnicity  Edu=Education  CL=Clinical Ladder  LBG=Likes Board Games
ValEdV=Values Educational Videos

Euro=European  NAM=North American  PostG=Post Grad  AdvC=Advanced Clinician
NA=Not Available

### Manifest and Latent Content

Content analysis was described by Krippendorf as a research technique for making replicable and valid inferences from text to the contexts of their use. A broad analysis of multiple texts provided general concepts. Six areas of manifest and latent content generally embedded in the conversation between members of each study session are shown in Table 4.7.
Table 4.7

Latent and Manifest Content from Video: Interpretation with Sample Quotes

<table>
<thead>
<tr>
<th>Manifest Content</th>
<th>Latent Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for evidence of diagnosis</td>
<td>Credibility of patient as source of information</td>
</tr>
<tr>
<td>Challenging affect from patient and girlfriend</td>
<td>Angry black man, angry black woman</td>
</tr>
<tr>
<td>Lack of knowledge related to disease process</td>
<td>A certain point of caution limits options</td>
</tr>
<tr>
<td>Need for information</td>
<td>Use of autonomy in decision making</td>
</tr>
<tr>
<td>Adherence to habitual methods and procedures</td>
<td>Different initial treatment plan for addict versus sickle cell patient</td>
</tr>
<tr>
<td>Stereotyping</td>
<td>Need for control over process</td>
</tr>
</tbody>
</table>

Decision Dilemma for Respondents

The first question posed to study participants centered on their decision to administer or not to administer the Demerol requested by the African American patient. Lacking access to a medical record complicated the situation and required full use of their ability to make a differential diagnosis as well as set priorities for care. Credibility of the patient who was unknown to the staff in the scenario, apprehension about conforming to principles of safe clinical practice, and identifying factors that qualified the patient for treatment were all components of the decision process. Participant responses included withdrawal symptoms as a possibility for determining steps in treatment. For the nurse who would not treat, a typical reason for their decision was:

Because, as I say, I was very curious for the fact that he just came in, talking Demerol, boom. And how do we know? He could have been a patient for a long time. But for me
it is like it is too -- it is so easy for a patient to come in and say what they want because if they were really in pain they would take the other options, too. Why were they pushing for Demerol? I would not. I would go even further and figure out, making sure that what they are saying, and to see sickle cell disease and all of that. I would. Not right away, though. I wouldn't treat them right away because they say "give me this," I would not, no.

The language used to express the cross cutting decision not to treat was expressed in such terms as the need for proof, the sense of being a detective, the need to “making sure,” insufficient data, and knowing nothing about the patient other than what he is saying. These ideas express clinical decision making as a form of problem solving that divests the process of an empathetic or advocacy-based alliance with the patient. Consequently, the patient becomes only the sum of what is known.

For the nurse who would treat, the focus appeared to be different:

Pain is pain, there is no reason for somebody to be in pain. Whether the source of the pain is sickle crisis or if it is, you know, withdrawal, there is no reason to leave someone in pain. You don't want someone in agony, very visibly doing that. If it was someone I knew in my family that was coming in for help, and they can't get help anywhere else they need to come to the hospital, our job is to help.

The shared idea among the cohort of respondents who decided to treat was expressed as “he exhibited all the signs and symptoms of sickle cell crisis,” “give him some comfort,” “there is no reason to leave someone in pain,” and “I would rather err on the side that he really had the sickle cell and I was helping him.”
One respondent who decided to treat came closest to bridging the difference between the contrasting choice of whether to treat or not.

I would treat extremely conservatively, because I don’t know what the Demerol might do to him….It is a big drug…. I think I would want to explore it more…. I think any drug that you are going to give to somebody you really need to know…. Is he exhibiting all the classic signs of pain? I would bring him in, examine him, maybe give him a very small dose to see, not knowing anything about the patient’s medical history, aside from them saying that they have sickle cell. I would just give them maybe a small dose to see if that helped with the pain.”

Prioritizing an alliance either with patient need or protocols of practice in the form of strict adherence to professional safeguards proved to be a practice dilemma for the participants.

Themes Relating to Clinical Decision Making

Four themes were identified as factors that may contribute to ethnic bias in clinical decision making with possible implications for unequal treatment. They include: invalidation, uncertainty, affect, and lack of affinity.

Invalidation

Primarily the study participants who chose not to treat described the necessity for a medical record. For instance, “I agree with the legal decision of the doctor and that he needed proof that the patient has or the gentleman had sickle cell.” Another example included, ‘Insufficient data and “talking Demerol” as a specific medication raised warning signs for some.’ In these cases, the inference was that the patient was not a credible source of information and his
physical presentation of symptoms was not sufficiently convincing, which therefore raised the question of “why” to a higher priority. The ideas of “making sure” and “there is all this protocol” overrode all other considerations. Alternative steps such as a hands-on assessment as opposed to only the diagnostic interview were put forward as an appropriate intervention. For example, “I’m aware that it would mean the patient would be in pain. But I would try alternative methods until we could get to a point where we could show proof of his sickle cell anemia.” These alternative methods included: “Put him in a bed,” “Assess him,” “Get his vital signs,” and “You know, do all of the things. In the meantime do what I need to do to get his history.” On the other hand, one respondent acknowledged that it was important to establish a relationship when they stated, “A physician or a provider relationship has to be established and that is not in a waiting room.”

Several of the study participants focused on the idea that much of the exchange between the patient and provider occurred in the waiting room of the emergency department. The significance of the location appears to support the necessity of being in more control of the unfolding and intensifying conversation.

For those who decided to treat the patient, they expressed that their decision was “driven by what the patient needs.” Here the question of sickle cell crisis or withdrawal from narcotics was not an overriding concern. One participant explained, “I would rather err on the side that he really had the sickle cell and I was helping him.” Although assessment was also a theme within the reasoning of those who decided to treat, there was a willingness to go further. For instance a participant said, “I would treat extremely conservatively because I don’t know what the Demerol might do to him.”

Study participants who chose to treat assumed that the pain symptoms exhibited by the patient were related to sickle cell crisis. Phrases such as “It is real,” “Quicker treatment,” and
“Hopefully it will alleviate some of his pain” described their thought process. Interestingly, in this instance some of the participant remarks began to incorporate issues of race as part of the thinking process.

I think it means that we are treating him like a human being instead of leaving him out there and not even moving him from the waiting room. At least listening to him. And that whole pre-conceived notion that you could just feel--- first of all, is it a gunshot wound and drug seeking? And that is why we give people with sickle cell the card because many times, whether you are 17 or 110, they are perceived as drug seeking individuals. And particularly, unfortunately, young African American males.

Additionally, insight into the experience for the young Black man depicted in the video was expressed by the statement of another participant:

I think for the patient, he would have felt that he was trusted, that he was valued as a patient, and that, being--- that he was in a caring environment as opposed to an accusatory environment.

For the group of respondents who chose the option not to treat the patient, the meaning of their decision continued to reflect doubt about the veracity of the young man.

I’m aware that it would mean the patient would be in pain. But I would try alternative methods until we could get to a point where we could show proof of his sickle cell anemia.

Opting not to give the Demerol did not indicate that nothing should be done for the patient, but assessment was the chosen intervention. These participants expressed that getting more medical history and clinical data should be the goal.
What does that mean for him? I mean if he is really in pain then, you know, and
he doesn’t allow me to give him anything else, that is not--- that is not that
regulated, then he is just going to keep going in pain. And if he is faking it,
then, you know, it is---it is hard to tell.

What was interesting about the rationale provided by the “do not treat” group was the
dilemma created by the suggestion that the young man’s pain could have been related to
withdrawal symptoms from drug addiction. This concern was inserted into the waiting room
conversation by the nurse, but there were no facts to back the hypothesis as relevant information.
Yet, the idea became a critical processing point for the treatment plan for the patient. Moreover,
there appeared to be a lack of cognitive dissonance. The ability of the “treat” group to be
unequivocal with stating as a fact that the patient was in pain was in stark contrast to the group
who chose not to treat because the reality of the patient’s pain, from their perspective, did not
take precedence over protocols for the administration of controlled substances.
Based on the interpretation of the qualitative data about this theme, the following attributes were
identified.

**Theme Attributes**

- Behaviors based on flawed assumptions
- Nullify cultural identity as a cue in interactions

It is important to acknowledge other responses from the study respondents. Some participants
expressed concerns related to the safe practice. This reasoned approach to critically think about
the given situation depicted in the vignette would seem to preclude concerns about inequities.
Principles of safe practice would suggest adherence to clear standards that are a reference for the
identification of any deviation from established requirements.
Uncertainty/ Ambiguity

Each study participant gave careful thought to the clinical decision to treat or not to treat. Responses to the structured interview began with the theme of uncertainty. A recurring concern across interviews related to a need for more documented information about the patient. Specifically, was the African American patient’s complaint of pain related to substance abuse and symptoms of withdrawal or, alternatively, was the reported pain associated with sickle cell crisis as stated by the patient? The decision dilemma appeared to originate from the basic tenets of safe nursing care. These underlying principles of “do no harm” set up expectations for routines of care that could not adequately be fulfilled as presented in the video; namely assessment, ready access to documented medical history, and adherence to relevant organizational policies and procedures. In the events that transpired in the research scenario these expectations were not met and the clinician was left with procedural uncertainty. A respondent who chose not to treat expressed the decision in this way:

Because I really know nothing about the patient. Other than what he is telling me.

We should have some kind of medical record on him. Whether it be paper, we’ll get some stuff that is his girlfriend, if that is his loved one, but no matter. The way I was trained, no matter what patient would come in and say “give me Demerol”, you know, and I do listen to patients because they have a lot, but you just can’t give Demerol without having some facts.

The resulting questions, speculations and opinions based on incomplete information form the basis of the answer to the question posed in this research. Is there ethnic bias in clinical decision making?

I maybe would have altered some of the plan that he wouldn’t leave, but
I wouldn’t have given in the manner of being in the waiting room with
the drama of the girlfriend and all of the… that, to me, is just totally
inappropriate. And I think it goes on a lot. It is a method of path of least
resistance, especially when you are dealing with that environment, the
massive humanity. People know the buttons to push to get something first;
whether it is legitimate or not. But saying whether the outcome there is
right or wrong, with the person leaving, I don’t think that was necessarily
correct either.

When the sense of being unprepared was linked to an expectation to act, a great sense of
discomfort was created. For example, one responded expressed:

   Oh, just fraught with unanswerables. You know, because I mean clearly it
   is brought that he does have sickle cell and he needs the medication. The poor
doc, he was trying to be reasonable, and what if he really didn’t have sickle
   cell, and even worse he was allergic to Demerol or something?

   There was an acknowledgement that the patient was alert and oriented. At the same time,
one respondent reflected that the patient appeared to be in too much pain to serve as a source of
information. Trapped by these contradictions, respondents on both sides of the question
presented a stepwise approach to describe “what ifs”.

   One participant who made the original choice to treat looks at the situation from a novel
perspective:

   If he was White and told me he had sickle cell crisis I probably would be
   questioning that. Umh, or if he did not, you know, show any of those other
   signs, I think that would change my mind. If he came in calm and not in pain
and knowing what works for him and so on, I probably would question his validity or voracity, you know, of what he is saying.

As part of the post-video debrief, there was a question asked during the structured interview that related to what would have made a difference in the decision made by the respondent. The general response was the need for more information as the pivotal point. One participant explained:

I guess just to put him on the monitor, get a set of vitals, have a little--- some medical record, I guess, and then you could treat for pain. But have some assessment. Written. Documented.

Based on the interpretation of the qualitative data about this theme, the following attributes were identified.

**Theme Attribute**

- Vague parameters for needed decision
- Potential to do harm
- Justifications

Comparing the responses that produced the previous two codes there were additional themes.

**Affect**

During the answer to this question the variable of affect makes an appearance as a significant factor in the process. In the video both the young man and his girlfriend presented themselves as emotionally challenging.

Girlfriend: Honey, are you alright?
Steward: Are you related to Mr. Gwinn?
GF: I’m his girlfriend.
Steward: Your boyfriend needs some help.
GF: He just needs some Demerol.
Steward: Yes. I know.
GF: So give him some!
Steward: It’s not that simple.
Ned yells out.
GF (to Steward) What’s the matter with you?! Can’t you see he’s in pain?

A respondent who decided to treat stated:

…that his girlfriend, you know--- probably you try to help, but she responded very angrily towards him (i.e. the doctor), like assuming that you are just not treating him because he is a young Black male that came into the emergency room.

Another respondent expressed the impact of affect in this way:

What would need to be different? So, I chose to treat. What would make me not treat? Maybe I’m having a hard time of thinking something here. Maybe if there was a threat of violence.

Although not in response to the answer to this question, the importance of affect appeared in the comment of another participant who was describing the meaning of their decision for the patient.

In the video, the couple left the hospital without getting treatment after an intense verbal exchange. “I think the girlfriend meant well, but she made it harder for the doc. Just because it was…it was adding more affect and less reason to the whole situation.”

Affect modifies perception. It is self-generated and self-produced.

Based on the interpretation of the qualitative data about this code, the following attributes were identified.
Theme Attributes

- Feeling ill at ease
- Contrasting use of role-based power when interacting with ethnic and non-ethnic groups

The fourth theme suggests a significant influence on the ability of any Black patient-White clinician dyad to connect for the purpose of communication, relationship, and rapport.

Lack of Affinity

Profiling entered the social lexicon to point out when distinct characteristics about specific population groups were used to take questionable action. The issue of ethnic bias in clinical reasoning proposes that there is an interface where social information with a negative valence forms a common boundary with clinical knowledge. Knowledge gained from observation and clinical data must be distinct from knowledge based on social opinions and viewpoints. The following table (Table 4.9) extracts opinions and viewpoints contrasted with statements that exemplify information expressed as clinical assessment by the respondents.

Table 4.8
What Creates Confrontational Affect and What Diffuses Conflict

<table>
<thead>
<tr>
<th>Opinions and Viewpoints that Create Conflict</th>
<th>Assessment that Diffuses Conflict</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Accusatory environment”</td>
<td>“Pain is pain. There is no reason for somebody to be in pain.”</td>
</tr>
<tr>
<td>“Distrust”</td>
<td>“I used to take care of sickle cell people and they are in a great deal of pain.”</td>
</tr>
<tr>
<td>“We are detectives discerning the truth”</td>
<td>“Obviously he doesn’t have a gun shot wound.”</td>
</tr>
<tr>
<td>“I wouldn’t have given in… with the drama”</td>
<td>“Even if you are drug seeking, there are some other things that you can look at that doesn’t look like he is withdrawing. The fact that he could articulate why he had symptoms.”</td>
</tr>
<tr>
<td>“People know the buttons to push whether it is legitimate or not”</td>
<td></td>
</tr>
<tr>
<td>“Preconceived notions, you could just feel it”</td>
<td></td>
</tr>
<tr>
<td>“Not be confrontational”</td>
<td></td>
</tr>
<tr>
<td>“Desire not to stereotype”</td>
<td></td>
</tr>
</tbody>
</table>
Opinions and viewpoints create a different care environment than one based in objective assessment as a form of care. Both are forms of evaluation. However, the complexities of engagement marked nursing presence, rapport, and relationship building. Determining the correct range was calibrated by the degree to which opinions, viewpoints, and assessments gained dominance as part of the clinical encounter.

Based on the interpretation of the qualitative data about this code, the following attributes were identified.

**Theme Attributes**

- Detachment
- Flawed interpretation of events
- Overemphasis on irrelevant details

Summary Using Conceptual Model Derived From Findings

The process for the manifestation of ethnic bias in clinical decision making can be expressed as:

Figure 4.0 Conceptual Model of Themes

The above diagram makes the case for ethnic bias as an implicit process. For example, a problematic situation that involves an ethnic minority would be a case in point. In such a
circumstance a decision maker might choose to remove the construct “giving the benefit of the doubt” as part of a flawed race-based cognitive schema. In relation to this scenario, the benefit of the doubt would be defined as a situation in which an individual is unsure of which side to take, but, nevertheless, takes the side unfavorable to the ethnic minority. The latter would feel invalidated and respond with affect that would signal that state of mind. In response the decision maker could step into an either/or thought process. The organization of the reasoning process allows for reframing of the issue at hand. That is to say, the stated situation would manipulate such that cognitive dissonance would abate and a sense of “right” would be established. In the case of a clinical situation, the nurse would frame an issue in such a way that any underlying ethical considerations would not create cognitive dissonance. In other words, the either/or choice presents as primarily clinical concerns that are accompanied by nominal ethical concerns (i.e. bias and prejudice would not be present because acknowledgement of ethical concerns would contradict the adequacy of the clinical situation as the chief focus). Therefore, the possibility of unequal treatment cannot exist. In this study the either/or characterizes the decision to not treat the patient. This suggests an explanation that would allow a nurse participant to decide to withhold medication despite the presentation of pain by the young Black man in the video. The decision to treat, on the other hand, would exemplify the combination of primarily clinical and fundamentally ethical decision making, i.e. both would be acknowledged parts of the decision process and judged to be complementary instead of contradictory.
Chapter 5
Discussion

This qualitative study examined the hypothetical proposition that the priming and application of ethnic stereotypes could bias the treatment choice of a nurse engaged in clinical decision making. The difficult challenge to the premise of “if X (i.e. priming) then Y (i.e. application)” is that activation of a stereotype does not necessitate its application (Kunda & Spencer, 2003). As mentioned in the literature review, previous research has addressed this impasse through such explanations as implicit associations, conscious, and unconscious bias. These latter interpretations have provided a certain degree of understanding. However, they do not decrease the vagueness related to operationalized ethnic bias. As a combination of qualities that are active in decision making, the characteristic properties of ethnic bias require precise definition and method of operation.

In pursuit of additional clarity, analysis of the data from this research study provided a more pointed examination of the prime-activation-application hypothesis. This study approach allowed for new insights to emerge, in addition to results consistent with previous explanations such as controlled and automatic processing. Furthermore, the second phase of the study explored the treatment choice of nurse participants as they reviewed their reasons for making one of two clinical decisions regarding the care of an African American patient.

Main Findings

The results of this study indicate four codes. When these codes were found in combination, it increased the probability of biased thinking actively functioning in the care of an African American patient. Namely, the four codes included: (1) strong affect by patient/provider, (2) clinician/patient invalidation, (3) uncertainty/ambiguity related to the clinical narrative, and
(3) a lack of affinity between patient/clinician. The codes were found to be reciprocal in the patient/provider dyad.

**Consilience of Interdisciplinary Epistemology**

External to the nursing field, sociology and social psychology have made important contributions to the research literature to help organize the epistemology of race in society. The assumption that clinicians have recourse for professional ethics and objectivity if their personal belief systems are called into question has been the paradox of race/ethnicity as a factor in health care. The systems in which clinicians practice have also provided a filter against any outgroup socially-based responses commonly linked with ethnicity. Therefore the crux of the argument that opposes the idea of ethnic bias as an important explanation for unequal treatment in health care is for clinicians to be uninfluenced by negative emotions and personal prejudices. This stance implies that the professional self would prevail over the social self in the work life of the practicing nurse and other health care providers. The aforementioned fields of study call this premise into question and help build a relevant background that informs this research.

Social psychologists seek cause and consequences of human thinking and associated behavior. A representative concept is fundamental attribution error, which has been defined as assigning causes for behavior to a person or a situation in which internal and external attributions are similar constructs. In the nomenclature of the field, the theory of attribution and its use in research assist with understanding dispositional (personal characteristics as causal) and situational (circumstances as causal) phenomena as explanation for individual behavior. The theory of attribution includes group comparisons and the inherent influence of race. For example, when Blacks are involved in a problematic event, attribution is made to the person as
the source of difficulties. Conversely, when a troublesome occurrence involves Whites, attribution is made to the situation as the determining factor.

Similarly, social psychologists offer other ideas that could explain the influence that race/ethnicity can have on person-to-person interactions. For instance, the familiar idea of a self-fulfilling prophecy illustrates this construct. If an individual perceived to exhibit behavior that evoked in the observer unease and anxiety, the perceiver might then engage with said individual in such a manner that the individual’s return behavioral or verbal response would serve to confirm the original sense of threat. Confirmation bias is an alternate name for this case in point. These concepts exemplify explanations about individuals as social beings linked with belief structures that are influenced by race/ethnicity. The proposition that the clinician can suppress the social self under the rubric of professionalism was open to the argument presented in this study.

Sociology, on the other hand, examines the social institutions (e.g. healthcare system, social and cultural factors) and interconnections that describe society through individual and group life (e.g. community). Public health, for instance, is part of the frame for sociology and its contribution to the aggregate of knowledge related to health disparities. The following quote from Jones (2002) defines racism as a social institution:

First of all, racism is a system. It is not an individual character flaw, nor a personal moral failing, nor a psychiatric illness. It is a system (consisting of structures, policies, practice, and norms) that structures opportunity and assigns value based on phenotype, or the way people look. And what are the impacts of this system? It unfairly disadvantages some individuals and communities. (p. 9)
Sociology research has also contributed prevalent concepts, such as personally mediated racism, internalized racism, and institutional racism just to name a few. The focus in this discipline is on changing social systems to support social change. Barbee (1993) outlined the presence of racism in nursing through the identification of racism and its types. Denials, the conceptual laundering of racism through the promotion of the less provocative term ethnocentrism, and color blindness are attributes highlighted by the author.

The corpus of nursing research contributes its own observations. Some studies have used a social justice frame to explore the nursing profession as a culture that both promotes conformity, and is not inclusive of nurses from diverse backgrounds (Giddings, 2005). A meta-analysis of nursing research provided themes of caring, such as connecting, using the cultural lens, discovery, and putting the patient in context of “in their world and not mine” as approaches to understanding the definition of a nursing practice focused on patients from diverse backgrounds (Coffman, 2004). Other studies designed conceptual models that featured possible intervention points for the care of vulnerable populations that was motivated by the philosophy that communities are responsible for the health of its residents (Flaskerud & Winslow, 1998).

Nursing theory is an important perspective contributing to the results of this study. The Roy Adaptation Model (RAM) is particularly relevant because of its focus on adaptation. Nursing theory must account for the impact that a multicultural, multilingual, and multiethnic patient population has on the discipline. Traditionally, nursing in the United States has been dominated by White, Western, and educated individuals. In 2010, this same group made up 83% of those licensed to practice nursing during an era when many population areas were increasingly minority-majority (www.rwjf.org). The ability of nursing professionals to adapt to this demographic change may require a paradigm shift in order for the discipline to explicitly hold
itself accountable to eliminate racial/ethnic bias as a contributing factor to unequal treatment of vulnerable populations.

In the previously mentioned statistical reality of diversity the concepts that underpin RAM were adaptation, person, environment, health, and nursing. These concepts were explained from the care designed with that reality as the referent. In the new paradigm, the true adaptive system is the clinician. The health care environment (at the macro and micro levels) is the stimulus. The outcome of adaptation is the improved quality of care provided to ethnic groups. The discipline of nursing promotes adaptation to unique populations. Health is co-defined from both a patient cultural perspective, as well as a biophysically-based perspective. This model concept for nursing could help eliminate health disparities. A propositional statement incorporating the adaptive modes of the theory follows below:

**Propositional Statement related to Study Codes and the Adaptive Modes of the Roy Adaptation Model**

The phenomenon of ethnic bias in the clinical reasoning of a nursing professional is related to the influence of affect, invalidation, lack of affinity and ambiguity on the self-concept, role function, physiologic-physical (as objective clinical data), and interdependence that exists in the clinical encounter between an ethnic minority patient and a non-ethnic nurse.

**Conceptual Model**

Social Psychology informed the conceptual model for this research. Attribution errors, cognitive schema, and social identity are all content from that discipline. The study model suggested that within the interaction between a cultural minority patient and a cultural dominant clinician, the cognitive schema that each held of the other would be affected by uncertainty or ambiguity. The research model specified the variables that influence mental models and conflate
opinions with clinical reasoning. Ethnic groups tend to be culturally unfamiliar and socially mysterious to one another. The research scenario of the young Black man with an undocumented diagnosis of sickle cell anemia was analogous to the sense of misgiving mentioned above. The level of uneasiness exhibited by the clinicians was a representative example of the study questions. More specifically, to what extent was a treatment decision influenced by the ethnicity of the patient?

The knowledge contained in the conceptual model suggested decisional influences when ethnicity was inserted into the reasoning process. A positive correlation relationship between ethnicity, bias, and treatment decision was expected. With regard to the schematic of the study concepts as a Venn diagram, the patient was conceptualized as one set of factors and the nurse clinician as another. The area of intersection was the field of operation where ethnicity could have been an unfavorable influence on the cross-ethnic encounter.

Ethnicity as a factor incorporated into the decision process placed two study codes within the overlapping area of the larger inner circle. These two codes were ambiguity and affect as the probable catalyst. However, although the phenomenon of active ethnic bias in a clinical judgment produces a dichotomous outcome of biased or not biased, the process itself as outlined in the research codes was more complex. The reasoning of drawing a conclusion places ethnicity in several positions. It can be tangential, circumstantial, or of consequence. The codes of this research defined when the clinical decision was contingent on ethnicity.

Part of the difficulty with identifying ethnic bias in any given situation was that the designation was based on slight differences in comparative situations. More specifically, when all extraneous variables were controlled, if difference remained, was the explanation essentially
that of race/ethnicity? The ability to anatomize the nuance of said difference was at the core of
the study question.

The study’s conceptual model captured the dynamics of the interethnic encounter. The
identified codes suggested the motivating forces that determined the quality of such an encounter
between clinician and patient. The model was designed to capture the interpersonal domain as
well as the larger environment in which the encounter took place. The inner domain functioned
to depict the one-on-one interaction between the patient and the provider when the use of mental
models and recall of past experiences were most likely to occur.

The pressures of time and task completion that define the larger healthcare environment
provided context for rapid decision making in the conceptual map. These parameters conformed
to the representative situation in which the likelihood of automatic and unconscious heuristics
(e.g. stereotype content, social identity, and ethnicity) increased. The problem with heuristics
was that they would infer the normative example. Stereotypes are conventions that categorize
groups in the form of models and patterns regarded as typical. As such, stereotypes become a
basis for comparison against which others can be evaluated. An individual’s frame of reference
supports an idea that something is “this” but not “that” and provides useable heuristic
information from antithetical perspectives. The averaging of behaviors to outline the typical case
is a norm. Norms are established standards that reinforce conventions and become formulaic.
For example, according to Celious & Oyserman (2001) as they synthesized information on ethnic
identity from the literature, some conventions about African Americans were: low intelligence,
aggressiveness, musicality, poverty, single, welfare dependent and out of work. The researchers
wrote that these types of attributions gave rise to the fear of hostility that attend the Black
stereotype.
Identification of Primes

The archetypal study of ethnic stereotypes in existing research has generally involved self-report measures, implicit association tests, and word fragment completions. The focus of this study was the real time capture of an abstract phenomenon (ethnic bias) in motion.

Effectiveness of Board Game as Priming Mechanism

The board game, *The Last Straw*, was an innovative approach designed to capture the latent and manifest content that often permeates everyday conversation. The lack of acumen attending these missteps exemplified the social and cultural unknowns that limit affinity through relationship and connection in a cross-cultural encounter. Awareness of difference should not be a necessary component in every casual encounter. However, embedded conversational cues stimulate emotional affect and disengagement as functional responses from the recipient to whom the cue has meaning.

The study subjects experienced the board game as an opportunity for empathy. The vicarious experience of taking on the identity of another character created a measure of dissonance. The increased awareness of barriers for the poor and the minority brought new perceptiveness for most respondents. “I think knowing what race I was, what my living conditions were, et cetera, really influenced, how I took care of myself.” Or another respondent indicated that their inability to explain abuse as part of the profile for a Spanish-speaking, upper middle-class woman left that study participant without a frame of reference. The resulting cognitive dissonance was disorienting and uncomfortable. For this respondent, the game “kind of put me in a different head space ….But I heard the other two participants and their roles, and it make me think. So I guess what I’m saying is the profile sheet and the game really raised my awareness.” Most interesting for this participant was their ability to readily create the details of a
middle-class lifestyle. As an employed nurse, it can be inferred that a certain affinity enabled the imagining of conventions and symbols of this socioeconomic group. The insertion of an ethnic background that was not that of the respondent generated the stereotype of the subservient female to the Hispanic male based upon “I know in our culture that…” This respondent, whose decision was to treat the young man in the research scenario, found him to be a credible source of information, placed value on the assessment of the signs and symptoms of pain, and accepted the girlfriend as a corroborating witness to the patient report. The definitive challenge to making a judgment activated by ethnicity was the ability to separate a negative social perception of the patient from the objective clinical picture.

Evidence of Primes in Cognitive Processing

Contemplation by the participants during the course of the board game provided them a deeper perception of dissimilarity between ethnic groups. An interesting sequence in the conversation between two participants during the board game discourse provides some insights. The following are within the adopted characters of the game.

Participant A assumed persona: male, wealthy, Black

Participant B assumed persona: female, wealthy, Filipino

A: Does your mother have a 1,000 pairs of shoes?

B: No. No. We live comfortably.

Later in the game Participant A had domestic violence in the home and Participant B offered the advice to force the abuser out.

A: Is that what Filipinos do, give up on them and throw them out of the house?

B: We don’t give up. But have you tried to reconcile and do a plan?
Participant A did not stay for the post-video interview. Participant B offered the following in reflection on the board game experience:

You try to think as the character and not, you know, you kind of wanted to create a different... not what you would say as a person as you, but when you made up a character, try to be opposite of maybe what you were going to be in life. It was hard to do. You try to do it that way, but you go back to reflect on your own values, I think, and what you practice and find to be true, and how you treat others. But that was interesting to see. Definitely.

Like I was trying to think, okay, you know, the way I was raised, middle-class, and, like, I've never -- I've lived comfortably, but never could buy the name brand clothes growing up, and, uhm, and when she said oh, you have a lot of shoes, I'm like I don't even have -- it is like I have no closet full of shoes. So it is -- I went -- I was raised in a town like X, and, you know, I wasn't... one of the kids growing up, I didn't -- I didn't own any of those name clothing, or getting the jewelry from Tiffany's that a lot of girls were getting. And I was 22 when I got the first Tiffany's bracelet, and I bought it. So stuff like that you appreciate more after you see that...where you came from.

The preceding portion of conversation elicited several important observations. Cultural identity is associated closely with social icons that consequently represent exaggerated social norms that can lead to stereotyping. Culture also provides heuristic approaches to problem solving (i.e. is that what Filipinos do?). Further, taking on the character of someone else can generally be a difficult principle. Nevertheless Participant A clearly incorporated aspects of personal background to build the character of the game persona. This implied that there was less
effort involved in building rapport between individuals with similar backgrounds than those marked by dissimilarity.

The processing of affect was most clearly articulated by a respondent who stated that a plan to deescalate the patient was a concern in the vignette. Interestingly, this same respondent chose a famous former rock star as the adopted game persona. The chosen celebrity was known for a background that included petty crimes, drugs, and assaults on minorities.

The story, the game, built up to watching the movie. Definitely. There was an implied to get the mind cranked up to watch that. It was hard to watch. I think that was a hard decision, and a hard situation to watch, but unfortunately it is all too common. And the violent part, it is so huge that medical people, nursing, physicians, address the continual bombardment of violence that we go through. Whether it is the, you know, being yelled at, being talked to angry, anger is coming through in these -- in the sick people who are down. We take a lot of crap in this job, and we have to know how to figure it out that we are not throwing it back. And all those other words about kind, gentle, I think that focuses back on where you want to stay. So the tools were all there. Where you can go in this business, you can go pretty out there with, uhm, the things that happen. Especially the violence. I think it is really real. And we have to all figure out a way to handle that. I mean you can't cave in, but you still can't take it home to the family, either.

The treatment decision was explained as follows:

I would not necessarily treat on the circumstances. I would have tried to keep them there. Somehow by getting an associate if I was called back into the other room for an emergency, I would have called and made them feel particularly -- sometimes if you put
them in a, ah, in an area, even though they didn't want to go to the back, out of the mainstream, it deescalates the, ah, the issue.

**Patterns and Relationships Among the Data Related to Race**

Extracting race and its associated semantics provided insights into the stability of stereotypical frames as they appeared in the discourse of study participants.

Table 5.0
Respondent quotes and frames for black stereotypes

| “Treat him like a human being” |
| “Preconceived ideas” |
| “Don’t be confrontational” |
| “Feeding an image that’s not necessarily there” |
| “Profiling of the patient” |
| “Accusatory environment” |
| “Maybe blacks are viewed as a lower socioeconomic group” |
| “These people, the race” |

Generally, it is commonplace to take exception to statements perceived as devoid of racial connotations. As one respondent stated:

I reacted to his pain and how uncomfortable he was. But those people reacting to the fact that he could be a gang person and he is just drug seeking. Would that happen with a White -- with a young, White male in there? Same circumstance?

Another participant stated:

I wondered if it had been a White man in that scenario how people would have reacted to him, as opposed to having a Black man there in a mostly White group.
As suggested by the quotes above, substituting White as an inserted descriptor for the phrases outlined in Table 5.0 resonates with the essential attributes familiarly aligned with Black history and that are without connotation in White history. However, although present in the debrief portion of the study, there was no consistent link between those who used such phrases and their choice to treat or not to treat.

**Implications for Practice**

The clinician and patient variables that influence bias have been studied for appropriate methodology (Lopez, 1989), cultural competence of providers (Johnson, Saha, Arbelaez, Beach & Cooper, 2004), and provider experience and patient specific information (Richardson, Irvin & Tamayo-Sarver, 2008). Some studies provide significant evidence of disparities in pain treatment from the perspective of race and treatment facility (Bonham, 2008). Other studies point to ethnicity as an influential hindrance on forming a therapeutic alliance (Snowden, 2003). The empirical evidence of the existence of health disparities is not argued. On the other hand, cause remains inexplicable.

This research contributes to the identification of factors that may have a definitive effect on the culturally incongruent therapeutic alliance. Operationalizing these factors suggests interventions to enhance the patient-centered clinical relationship. More specifically, the ability to manage affect, ambiguity, affinity, and invalidation as a combination of factors that influence the quality of the bond between patient and provider clarifies characteristics that either build or impede rapport.
The main feature of this thesis examined the question of ethnic bias in clinical decision making and was not a defense or refutation of its existence. It was a presentation of the interaction between patient and clinician that is pictured in Figure 5.1.

![Figure 5.1 Conceptual Model of Bias in clinical decision making](image)

The principle contribution of this research study was the content of the patient-clinician interaction. Nursing practice utilizes applied knowledge. The ability to establish cross-cultural rapport is an intentional exercise in skilled communication. This research identified the four building blocks for that skill set. Cultural minority patients often describe disrespect, patronizing attitudes, poor communication skills, and being rushed as influences on their satisfaction with care (Cooper, Roter, Johnson, Ford, Steinwachs & Powe, 2003). The cataloging and classifying of biased reasoning was found to be correlated with unequal treatment decisions. Refining affect, affinity, ambiguity, and invalidation as skills of cultural competence have been found to improve the latter.
Findings of Significance to Nursing Practice

Race and affect are difficult variables to untangle within the context of ethnic stereotypes. In particular, Black populations are prefigured for the wide latitude of judgment that determines the difference between assertiveness and aggressiveness by individuals from non-Black backgrounds. For example, in the case of the classic stereotype of the angry Black man, Burgess, Crowley-Matoka, Phelan, Dovidio, Kerns, Saha and van Ryn (2008) did not find significant evidence to support their hypothesis that race and affect could influence physician treatment decision in managing chronic pain. Instead other insights emerged. Using a cartoon strip with dialogue and pictures to portray a vignette, the researchers noted that nonverbal cues of anger helped the White patients in the portrayal to receive a dosage increase in the requested pain medication. This contrasted with verbal cues of anger as the more effective strategy for the Black patient to gain the same result. The findings presented an additional paradox; whereas only the White patient with an unchallenging affect received the requested increase in pain medicine, both the verbally and the nonverbally challenging Black patient (i.e. looking dejected, angry, confident) received the requested increase. This would seem to be at odds with a significant amount of literature on disparate treatment between racial groups in studies about pain control. On the other hand, this difference may provide clear evidence that the black patient is not individualized.

The thesis of this research suggested a possible explanation for the situation described above. The pattern of responses between the nurses who chose to give the Demerol compared to those who chose not to treat the patient rest in comparative focus. For the former group assessment and treatment of the pain were the points of attention. The judgment was made that the observable symptoms of pain were convincing and undeniable. Establishing withdrawal or
sickle cell disease as the etiology did not take precedence over providing relief first. For the comparison group, the patient’s credibility dominated their appraisal despite their observations of the patient’s body language and communication. More specifically, invalidation and uncertainty compromised the nurses’ ability to do an intervention that consequently resulted in delayed treatment. Ethnic stereotypes can decrease feelings of empathy (Johnson, Bushman & Dovidio, 2008) and make detrimental concessions that limit the motivation to help others. Described in this study as a lack of affinity, it poses no difficulty to posit the influence that the decrease in empathy could have on under treatment of minority patients.

Suggestions for Further Research

The literature is replete with such subjects as implicit associations, cognitive load, aversive racism, and unequal treatment as indirect evidence of the impact that bias can have on the quality of care provided to ethnic minorities. However, to solve the problem of disparities, a paradigm shift in the approach to research is necessary. A more vigorous multidisciplinary strategy would advance the work with a renewed sense of imperative. Dovidio, Penner, Albrecht, Gaertner, Norton & Shelton (2008) made the point that findings from social psychology and the health disparities literature are not organized into an interconnected knowledge base. In like manner, Drevdahl, Canales & Dorcy (2008) have offered the same research challenge to nursing stemming from its focus on cultural competence as the best-yet effectively unproven intervention to eliminate disparities. These authors have argued that in the discipline of nursing cultural competence currently lacks consensus on theoretical models, definition of relevant terms, and is absent the identification of skill sets that define competence for clinicians. This is especially pertinent. Until the nature of this specific competence is characterized, it will remain impossible to evaluate the situation that defines when a clinician is
operating at nothing more than a satisfactory standard. Fulfilling all requirements of safe nursing practice in the performance of autonomous decision making symbolizes an entry-level execution of the concept. Clinical reasoning in nursing allows a great deal of latitude in scope of practice as an indication of expertise. On the other hand cultural competence connotes a level of acumen that goes beyond what is merely adequate and moves practice forward to exceptional quality and ability. The advancement of nursing practice is linked to its capacity to respond to a diverse patient population. To disregard this competence would be to have nursing practice remain in a fixed state and reducible to its past rather than its evolving relevance to the future.

**Limitations**

This qualitative study is a preliminary step to the cataloging of biased reasoning and ramifications for unequal treatment in health outcomes. The relatively small sample size limited the researcher’s ability to generalize the study results. Several uncontrollable factors contributed to the number of study subjects: There was an unexpected reluctance to adhere to the study protocol that protected anonymity; some participants left before completing all aspects of the study, and there were volunteers who scheduled themselves to participate in the study, but did not follow through. A larger sample could provide further clarification of themes and their characteristics.

The study design could benefit from more racial/ethnic and gender diversity of the participants. Comparisons of the decision to treat or not treat based on specific demographics have the potential to provide addition insights into the influence of gender and cultural congruence.

While the study provided an opportunity for the participants to identify and process their treatment decision, the study design did not allow for the participants to reconvene for a small
group discussion about their individual decisions. Nurses often seek out the opinions of colleagues when ambiguity is present in a clinical scenario. The exchange of ideas and rationales would be rich with justifications and personal philosophies of patient behavior and motivations.

A future study would also benefit from additional analysis and corroboration of findings from other researchers familiar with the concepts of ethnic bias and the fundamentals of critical thinking as it relates to the nurse in an acute care setting.

**Implications for Policy**

The social and demographic state of American society in relation to the health status of the population groups that make up that society remains disturbing. Health disparities are long studied with little significant change in national outcomes. Reduction or elimination of disproportionate results linked to access, affordability, and quality in treatment are as little understood today as they were in 1986 when the first report from the Department of Health and Human Services was published on Black and minority health. Then, as now, mortality and morbidity rates resist explanation.

Presently the Affordable Care Act is positioned to better leverage the voice of the consumer. Reimbursements based on patient outcomes and patient satisfaction have introduced new approaches to the patient’s role. This emerging shift in the healthcare system should not discomfit the ethnic minority patient and family. The resulting inclusion of the marginalized will necessitate new nurse-patient compacts that will address rights and responsibilities based in cultural interpretations. For example, standards of practice that address new ethical frameworks for end of life decisions may hold implications for models of care delivery not previously experienced.
Implications for Education

Self awareness is a cornerstone to the development of personal knowledge related to bias. The conscious ability to explain thoughts, feelings, and observations in preparation for reasoned judgment are basic assumptions about any understanding of presented information. Ethnic bias is a unique and specific type of information for processing. It is a distortion that prevents objective consideration of a person, circumstance or issue. There is need for pedagogy focused on the experiential because the impact of misrepresentations cannot be challenged outside the act of speech. Casuistry often provides the means for avoiding a troublesome problem-solving situation that involves ethnicity and hinders transparency if not facilitated well. Retreat into disbelief and denial is most effectively challenged during activities that support an opportunity to share the story of personal practice. True-to-life illustrations, reasons for actions taken, and acknowledgement of sensitized words promote skills in communication, nursing presence, and equitable standards of care.

Summary

The question of ethnic bias as a phenomenon in the clinical practice of a health care professional is ethically unacceptable. Automatic or controlled, conscious or unconscious, this factor and its occurrence require identification. The manifestation of bias and the circumstances under which it appears often signals questionable care. This research suggests that the combination of strong affect, the lack of affinity between patient and provider, verbal and nonverbal invalidation of the personhood of those involved in the clinical encounter and the presence of uncertainty related to cultural knowledge about ethnic groups forms the set of circumstances that increases the probability of bias functioning in a treatment decision.
References


*For the benefit of all: Ensuring immigrant health and well-being* [Issue brief No. 24]. (2005). Retrieved from Grant Makers in Health: www.gih.org


Health Affairs, 24(2), 317-324.


Webster’s new world dictionary of the American language. (1982). In (2nd ed. New York: Simon and Shuster,).


Appendix A

Game Profile Sheet

**Character Name**

**Gender**

**Socioeconomic Status**

**Race/Ethnicity**

**Education**

**Town you Live in**

**Type of Work you do**
Appendix B

Video Script

Ned: Help! Somebody help me please!!
John (rushes onto the scene): What’s going on out here?!
Ned (bent over, clutching his abdomen, grimacing): I need some help.
John: Alright. Let me give you a hand.
Steward: What’ve you got, John?
John: I don’t know, doctor. This young man was out here screaming. Thought he was with a gun shot.
Steward: I’m Dr. Steward. What’s your name son?
Ned: Ned Gwinn.
John: I think I’ve seen him here before.
Steward: What’s the problem, Mr. Gwinn?
Ned: It hurts!
Steward: Where does it hurt?
Ned: All over.
Steward: You’re holding your stomach. Does your stomach hurt?
Steward: Demerol?
John: I should’ve known
Ned: I have Sickle Cell.
John: Sickle Cell?
Steward: You have Sickle Cell?
John: Do you have your Sickle Cell form?
Ned (searches his wallet and hands over a card): Forms. Cards.
Steward: Mr. Gwinn, if you have Sickle Cell we’ll take care of you.
John: This is a member card. Where’s your Sickle Cell form?
Ned (writhing): I don’t know. I don’t know.
Steward (talking to John in front of Ned): I don’t wanna give him any Demerol. I’m gonna
Take him in the back and give him 5 mg. of morphine.
John: Go ahead.
Ned: No! Don’t take me in the back. I just need the Demerol.
John (to Steward): They come through here all the time dressed just like him. Either looking
For drugs or wanting us to take a bullet out.
Steward: Go ahead and check his card out.
John: Can’t. The computers are down.
Ned: Ah, Please!! Give me something for the pain!
John: Should I call detox?
Steward: Mr. Gwinn, I want to help you but we need to check your card and the computers are
down.
Ned: Just give me the Demerol!!
Steward: Look, we can’t just give out drugs to anyone who walks in.
Ned, who has been seated, leans over in his chair. Steward is stooping to be at eye level with
Ned. Ned grabs Steward by his neck and demands...

“Just give me the G___ damn Demerol!!
John rushes over to assist Steward.
John: I’m getting security (leaves the room)
Steward: Mr. Gwinn, have you ever gone through detox?
Ned (rolling his head from side to side on the back of his chair): No. No.
Steward: We can begin the process now.

Girlfriend rushes into the room.

Girlfriend: Honey, are you alright?
Steward: Are you related to Mr. Gwinn?
GF: I’m his girlfriend.
Steward: Your boyfriend needs some help.
GF: He just needs some Demerol.
Steward: Yes. I know.
GF: So give him some!
Steward: It’s not that simple.
    Ned yells out.
GF (to Steward) What’s the matter with you?! Can’t you see he’s in pain?
    Ned’s Girlfriend moves closer to Steward, almost in his face.
Steward: He says he has Sickle Cell.
GF: He does. That’s why he needs the Demerol.
Steward: Well, where’s his Sickle Cell form?
GF: In his wallet. (she begins to look through Ned’s wallet). He had his form. (attempts to
    Look around when she doesn’t see the form in the wallet)
Steward: He gave us a member card. But our computers are down. When they come back up
    I’ll be able to check his card.

Another nurse enters the room
    “Dr. Steward, we need you in Trauma 1.
GF: Please. Just give him the Demerol this one time.
Steward: I need to check his card.

GF: He does have Sickle Cell. Honest!
Steward: Look. I’m sorry. But we have a policy about giving out drugs.
GF: Alright. He’s a drug addict. Is that what you want to hear? Now give him something
    For the pain!
Steward: Has Ned ever gone through detox?
GF: Is it because he’s Black!
Steward: Black?!
GF: OH, he’s young. Black. He must be on drugs!
Steward: I never said that!
GF: But, that’s what you were thinking!
Steward: Look. I have no proof that your boyfriend has Sickle Cell. I don’t care what color he is.
The GF gathers up Ned and their things and leaves.

Steward: Can you please wait? Look, I really would like to help!

End Script
Appendix C

Study website Demographic Sheet

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<thead>
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<th>Race</th>
<th>Eth</th>
<th>Sex</th>
<th>Age</th>
<th>City</th>
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<th>Email</th>
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<tr>
<td>Edu= Education</td>
<td>Nsg Degree= Nursing Degree</td>
<td>Clin Ladder = Clinical Ladder</td>
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<tr>
<td>Lk Games= Like to play board games</td>
<td>Lk Video= Like videos as education tools</td>
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Appendix D

Interview Questions

1. Would you give the pain med to the patient? In other words, What is your decision? Treat or Not to Treat?

2. What is your reason?

3. What does your decision mean for the patient?

4. What contributing factors inform your decision?

5. What would need to be different in the case for you to make a different decision?

Funneled Debrief

Instructions to participants: Before you leave, please answer the following 4 questions. Be concise in your answers.

1. What do you think the purpose of this project was?

2. What do you think this project was trying to understand?

3. Did you think that any of the tasks you did were related in any way? (if “yes”) in what way were they related?

4. Did anything you did on one task affect what you did on any other task? (if “yes”) how exactly did it affect you?