

Understanding Race/Ethnicity Disparities in Care

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Evidence of Racial and Ethnic Disparities in Healthcare

- Disparities consistently found across a wide range of disease areas and clinical services
- Disparities are found even when clinical factors, such as stage of disease presentation, co-morbidities, age, and severity of disease are taken into account
- Disparities are found across a range of clinical settings, including public and private hospitals, teaching and non-teaching hospitals, etc.
- Disparities in care are associated with higher mortality among minorities (e.g., Bach et al., 1999; Peterson et al., 1997; Bennett et al., 1995).

From: Unequal Treatment: Confronting racial and ethnic disparities in health care. Institute of Medicine, National Academy of Sciences, 2002

The overwhelming evidence of race/ethnicity disparities in health care parallel those in the education, justice, child welfare, labor and housing sectors.

Why?

- Insurance a major contributor.
- Treatment site associated with residential segregation is close behind.
- **However, disparities persist independent of payer and within each payer category.**
- Class/SES probably as significant.
- However, race/ethnicity disparities appear to persist independent of class.

Why?

- Usual Suspects:
 - Patient behavior
 - Provider behavior
 - Systematic encounter differences, interaction of patient and provider behavior

Patient preference?

- Early favorite
- Strong evidence of subgroup differences in health beliefs
- Failure to link such health belief differences to treatment differences
- Studies examining role of patient factors find that disparities persist controlling for patient factors. (e.g. Ayanian et al, 1999, Conigliaro, 2002; Hannan & van Ryn et al, 1999, Kressin et al, 2002, Petersen, et al, 2002; van Ryn, et al, 2000; Whittle, et al, 1997).
- Possible exception to watch: Acceptability of treatment for depression (e.g. Cooper-Patrick, et al . 1999; 2003)

How might providers contribute to disparities?

Primary Mechanisms

Through influence on receipt of services and/or loss of benefits and rights.

- Gatekeepers (e.g., treatment, tests, information)
- Arbitrators (e.g. CPS, involuntary admissions)

Through influence on view of self and society

- Reflecting and reinforcing messages regarding worth, value, competence, deservingness
- Effects on expectations, hope

Evidence of a provider contribution (independent of payer, site, other confounding factors?)

(see van Ryn, 2002; van Ryn & Fu, 2003 for review)

- Kidney Transplant, placement on waiting lists even among children
- Cardiac Care (preventive and aggressive treatments for CAD)
- Quality of in-hospital care
- Pain assessment, detection & treatment, even among children, in ED for fractures, nursing homes, for cancer pain, at end-of-life.
- Mental health assessment, diagnosis and treatment
- PAD: Amputation vs. lower-extremity revascularization (in VA)
- Child welfare: non-white children are over-represented in child abuse and neglect reporting; more likely to be in the CPS & placed foster homes than white children;
- Justice: more likely to receive an out-of-home placement for infractions (for drugs 48 times more likely).
- Education: Considerable evidence of bias in teacher response

Need for studies of other health & social welfare providers

- Dentists (Evidence of disparities in dental care, causes unclear, e.g. Kressin et al 2002 –extraction vs root canal)
- Occupational, speech, etc therapists
- Physical therapists
- Nutritionists and dieticians
- Medical technicians, dental hygienists
- Home health caregivers
- Battered women and homeless shelter staff
- Welfare workers

Limitations to current evidence regarding provider contribution to treatment bias

- Some of the studies relied on patient report of physician behavior. Although there is no evidence to support the hypothesis that blacks' recall of provider behavior systematically differs from whites, it cannot be definitely ruled out.
- These studies do not provide enough insight into why providers' behavior varied by patient race, or when it does or does not vary.
- Few studies designed to specifically test the provider contribution hypothesis

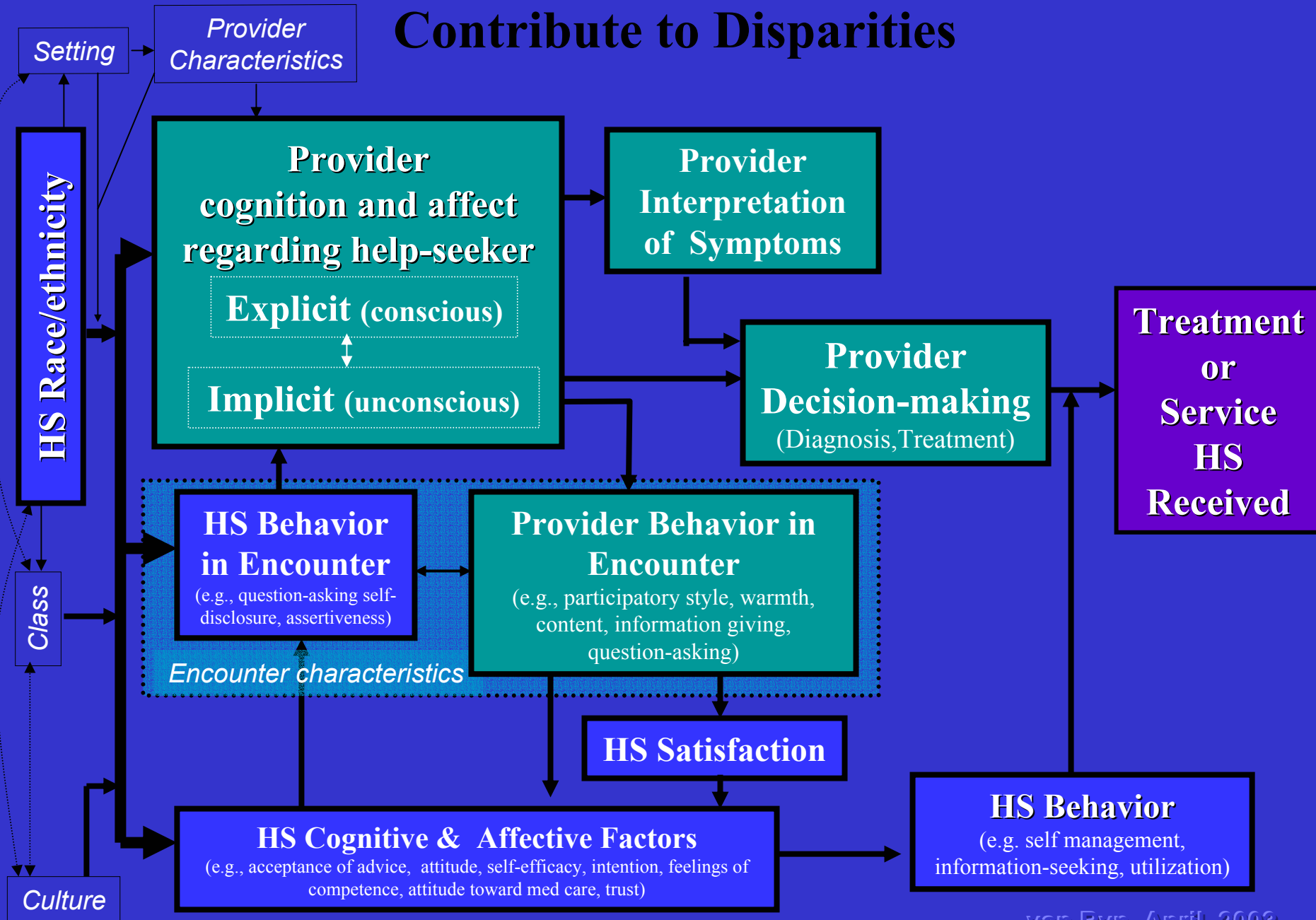
Paved with Good Intentions...

Other than hostile intent...

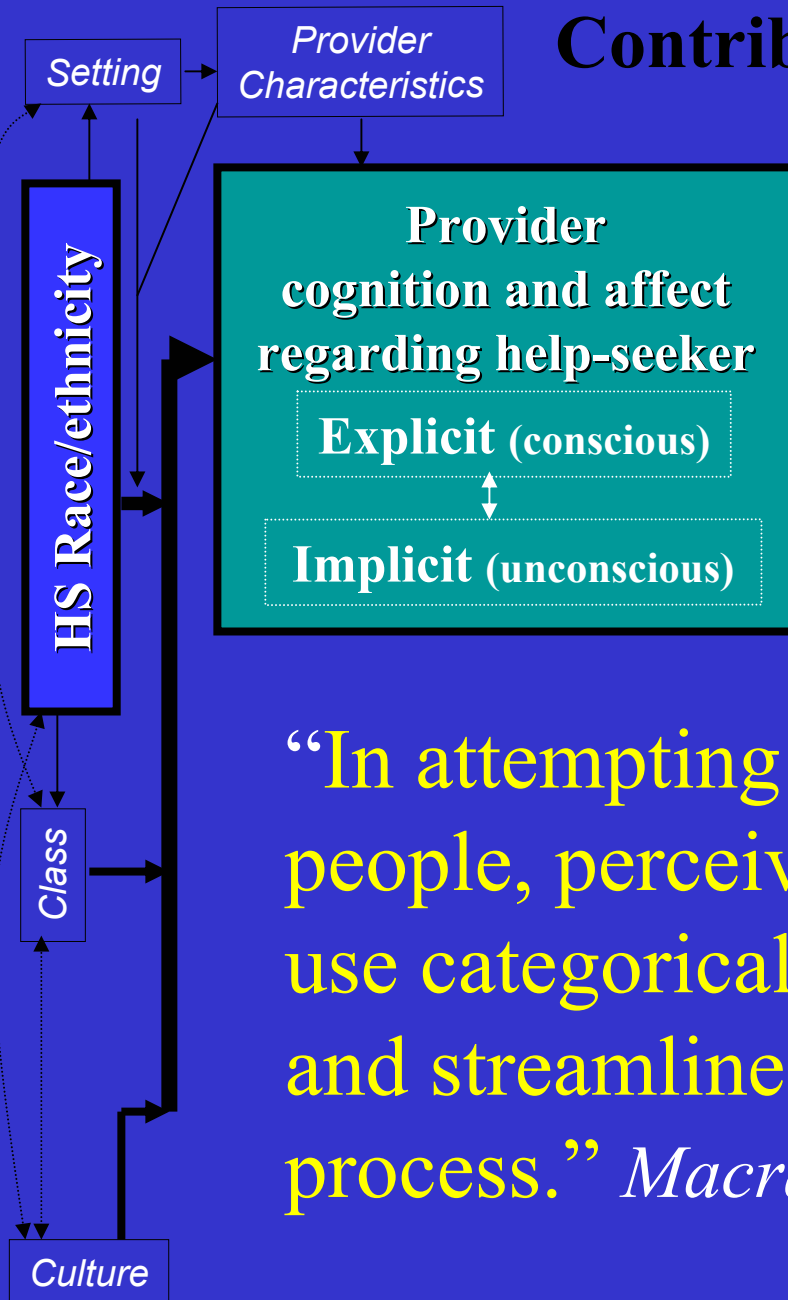
- What factors may be influencing the formal helping processes so as to result in systematically different treatments by race/ethnicity and class?
- What existing bodies of research and theory will provide insight into understanding of the effect of patient demographic characteristics on provider decision-making and behavior?

- Many disciplines interested in this phenomena.
- Focus of social-psychologists for over 50 years
- Furthermore, the persistence of racial bias despite the documented dramatic increase in the endorsement by whites of principles of racial equality has spurred a great deal of research among social cognition researchers.
- Recently has largely focused on understanding how this "disconnect" between egalitarian beliefs and implicit racial bias plays out at the individual and interpersonal level.
- This research may be highly relevant to helping professions (formal social supports).

Hypothesized Mechanisms Through Which Providers Contribute to Disparities



Hypothesized Mechanisms Through Which Providers Contribute to Disparities



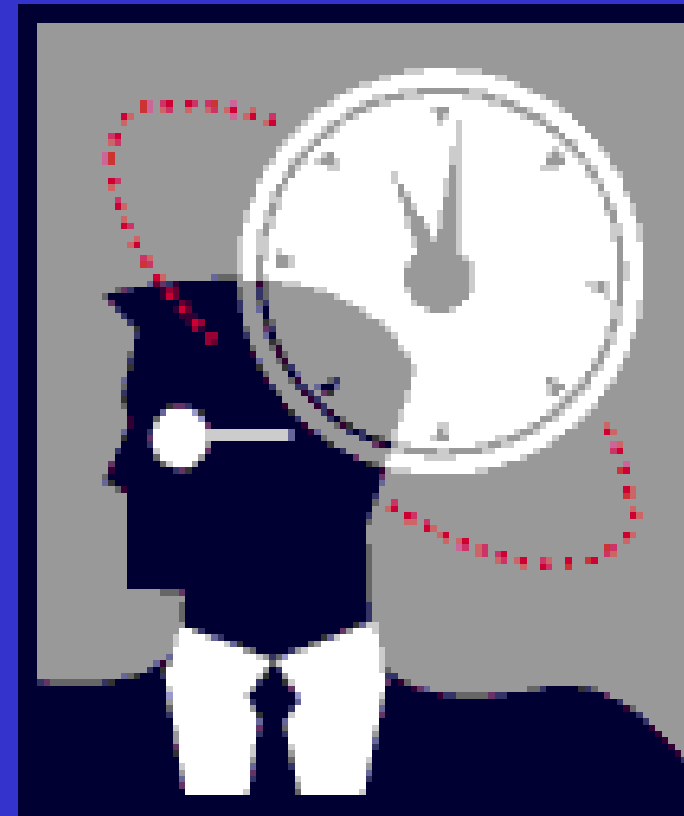
“In attempting to make sense of other people, perceivers regularly construct and use categorical representations to simplify and streamline the person-perception process.” *Macrae and Bodenhausen, 2000*

Social cognition: stereotypes as concepts

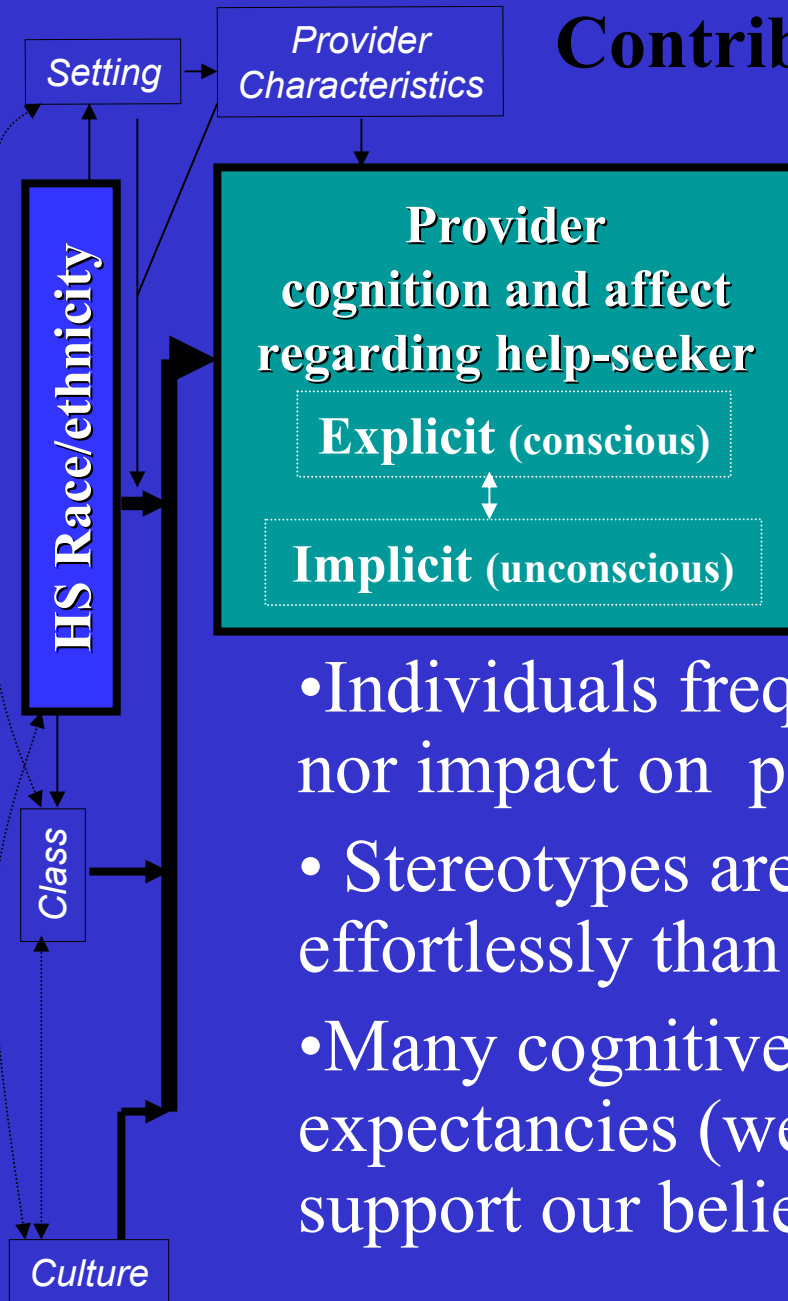
(mental representation, knowledge structure, schemas, scripts)

*Serve need for
cognitive efficiency*

- Concepts are mental representation of a category - a class of objects we believe belong together or hang together in some way.
- Help us **rapidly and effortlessly** extract meaning for the huge amount of information that surrounds us.
- Helps us go beyond information presented in immediate situation.
- Provide a framework for incoming information.
- Guide attention and interpretation.



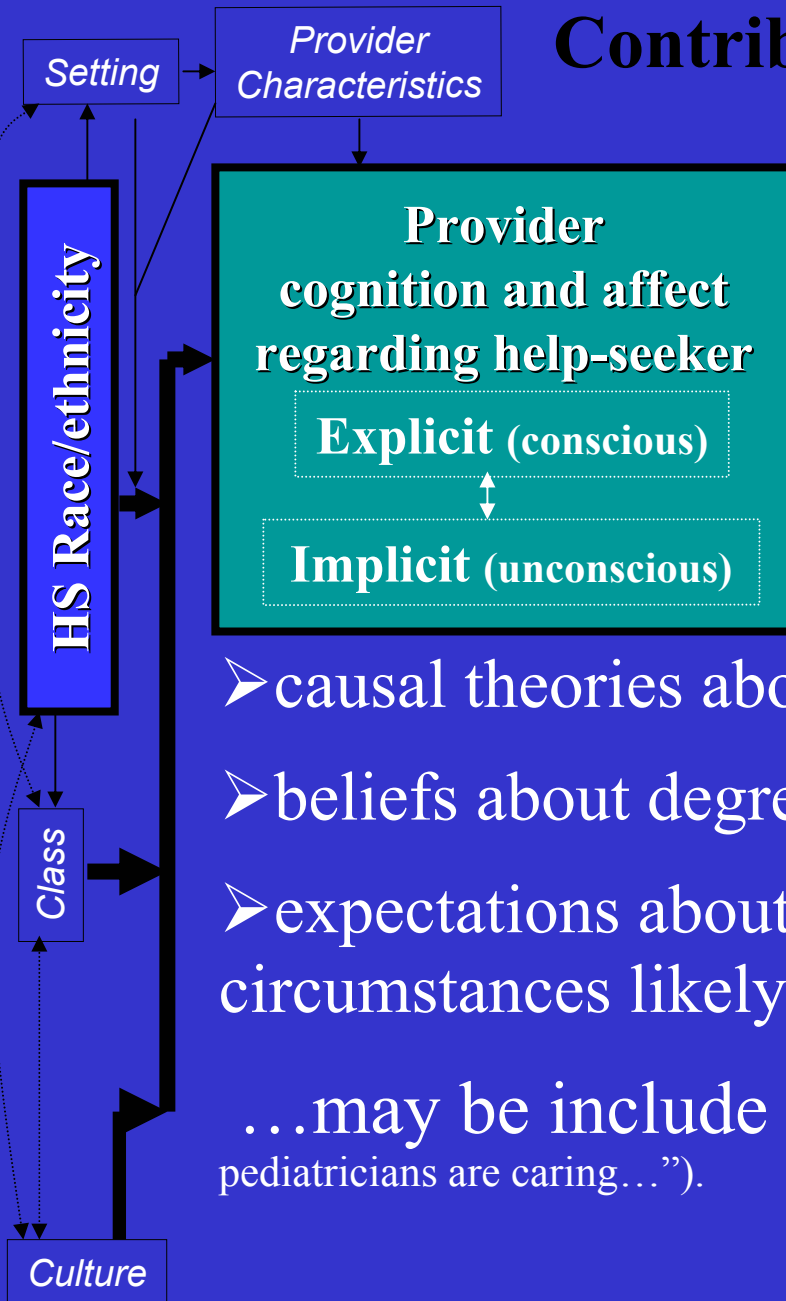
Hypothesized Mechanisms Through Which Providers Contribute to Disparities



- There is conclusive evidence that stereotypes are activated automatically, independent of intent. (Referred to as *implicit* cognition)

- Individuals frequently are not aware of activation nor impact on perceptions, emotions and behavior.
- Stereotypes are activated more quickly and effortlessly than conscious cognition.
- Many cognitive processes result in confirmation of expectancies (we process information in ways that support our beliefs).

Hypothesized Mechanisms Through Which Providers Contribute to Disparities



Stereotypes

contain expectations, affect (feelings), knowledge & beliefs about a social group including:

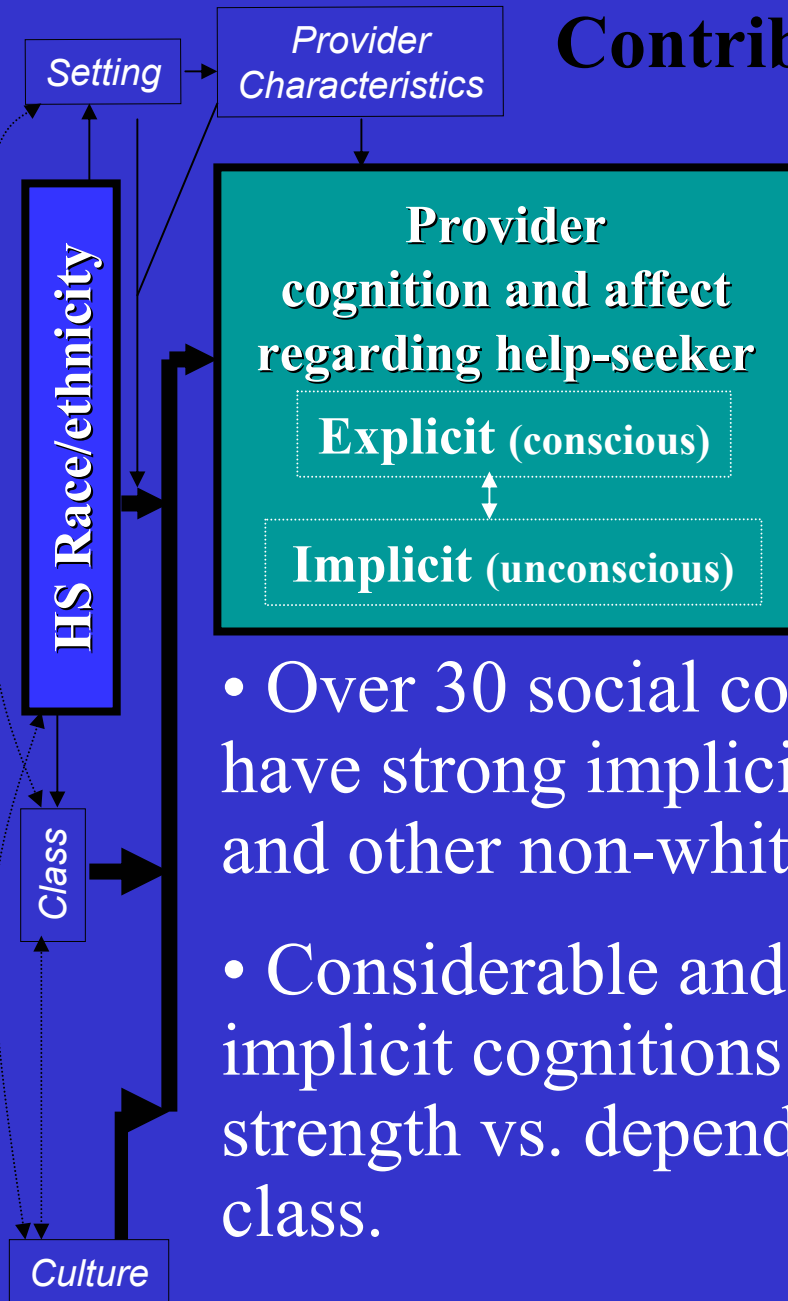
- causal theories about how group obtained characteristics,
- beliefs about degree of group variability,
- expectations about the traits, behaviors and circumstances likely for a given group or category.

...may be include subtypes (“Doctors in general are arrogant... but pediatricians are caring...”).

Hypothesized Mechanisms Through Which Providers Contribute to Disparities

In past 10 years there has been burgeoning empirical literature on implicit cognitions

- Over 30 social cognition studies showing that Whites have strong implicit negative associations with blacks and other non-white groups vs. whites
- Considerable and growing evidence of differential implicit cognitions associated with gender (aggression, strength vs. dependence weakness) age, occupation, class.



Why is stereotyping a universally used strategy?

- **Serves cognitive efficiency**
- Can serve to meet deep human needs and motives.
 - need for belonging (to ones own group vs. out-group).
 - need to promote self-esteem through downward social comparison (feel superior to others).
 - need to justify existing social order, distribution of resource.
 - need to believe in a just world.

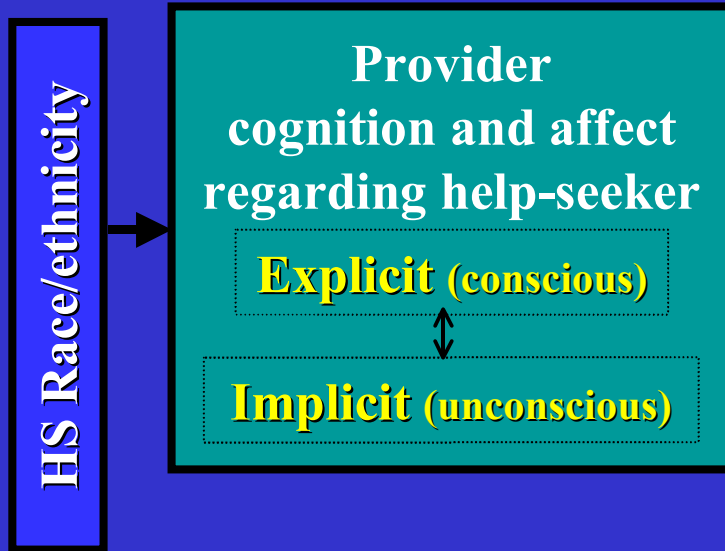
*“Providers learn to be good judges
of a patient’s character.”*

Beliefs about, predictions of and attributions for others’ traits and behavior are frequently wrong

A massive body of communication, social interaction, and social cognition research has shown that it is very common for people to apply...

- Incorrect beliefs
- Inaccurate theories
- Inaccurate memories
- Attributions errors (beliefs about causes or motives for others’ behavior)
- Mistaken notions of what others believe

...to their interpretations of others and the social world.

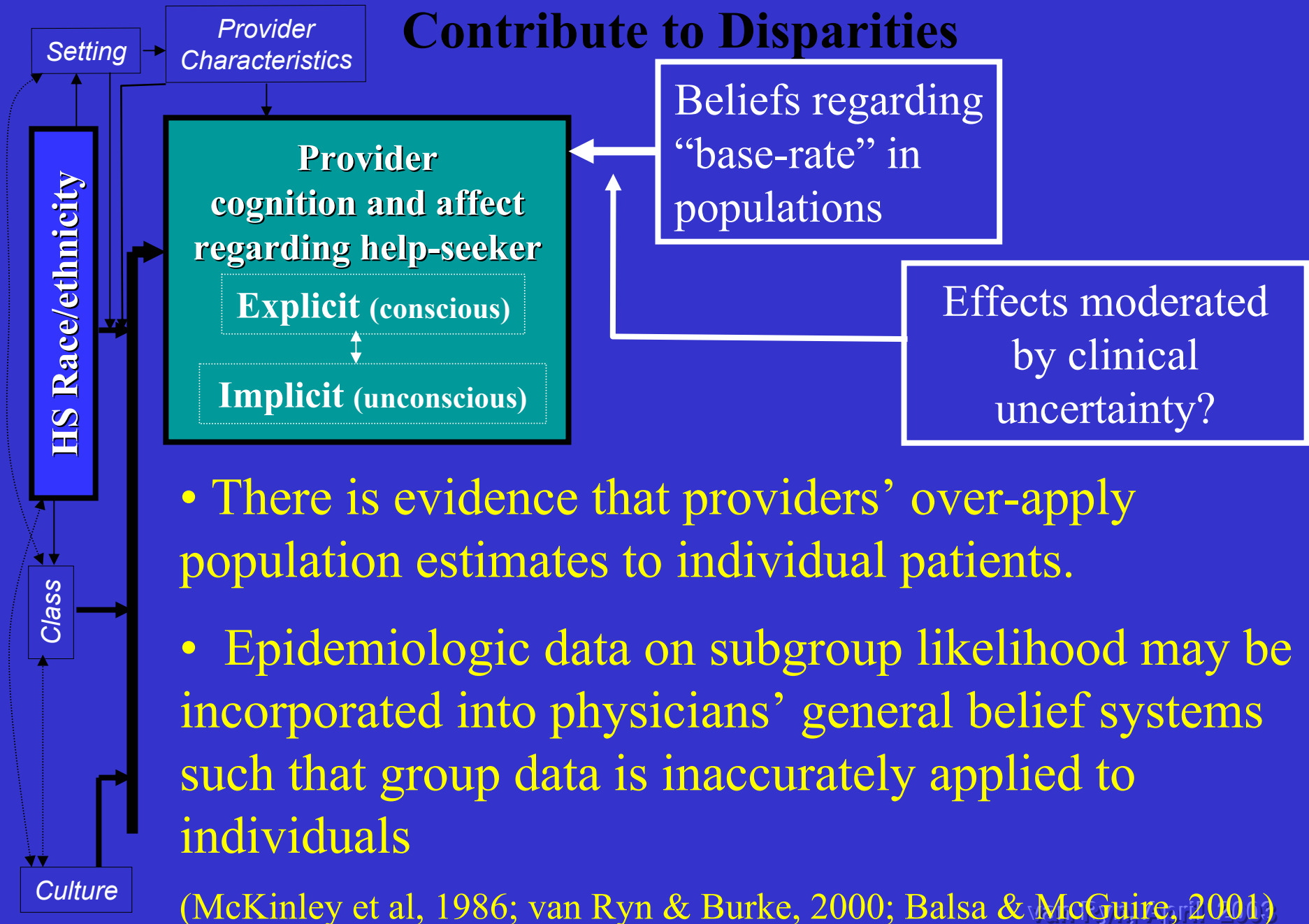


There is ample empirical evidence that patient sex, age, diagnosis, marital status, sexual orientation, sickness and **race/ethnicity** can influence providers' beliefs about and expectations of HS independent of other factors.

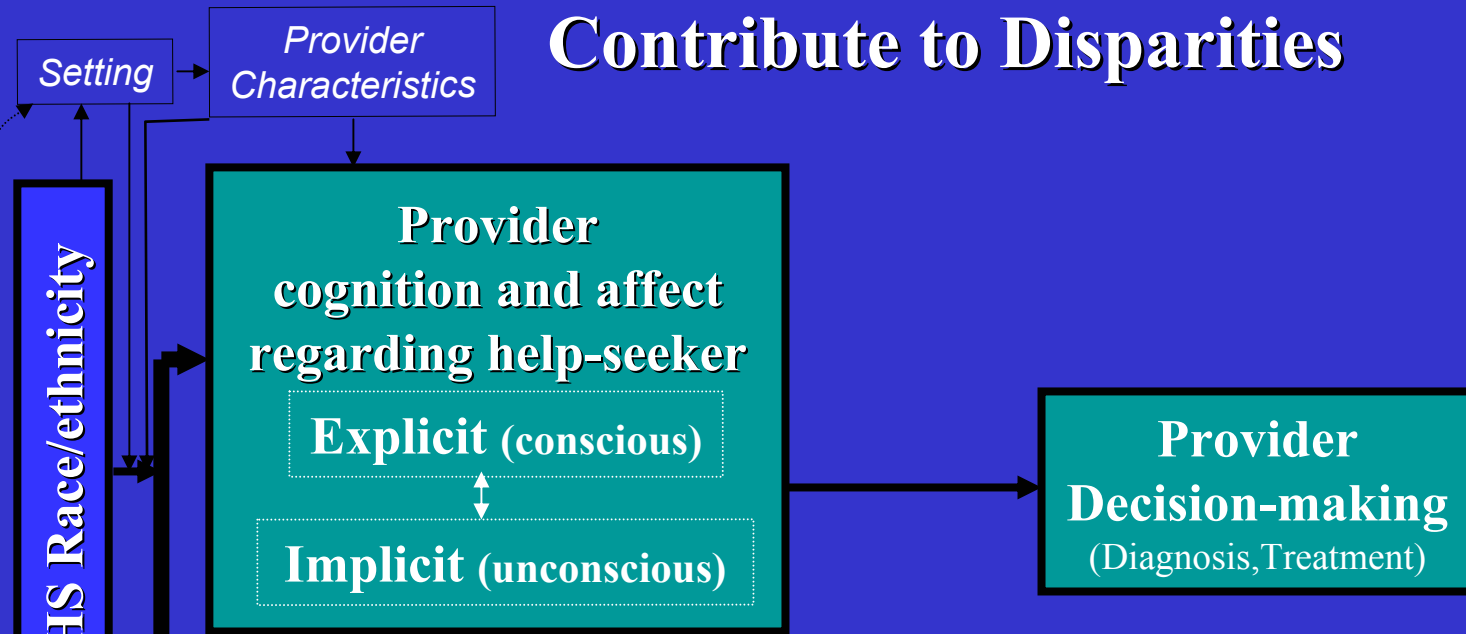
e.g., see Gerbert B., 1984; Hall et al., 1993; Kearney et al., 2000; Krupat et al., 1999; Lewis et al., 1990; Revenson, 1989; Shortt, 2001; Ross et al., 1991; Stern et al., 2001; Stern and Arenson, 1989; Kelly et al., 1987; Schulman et al., 1999; van Ryn and Burke, 2000;

Example: Cardiac patients' race/ethnicity and SES were found to independently and negatively influence physicians' post-encounter ratings of patients' personality, education, intelligence, career demands, and likely adherence independent of physicians' characteristics and patients' personality, clinical, and socio-demographic characteristics. (van Ryn & Burke, 2000)

Hypothesized Mechanisms Through Which Providers Contribute to Disparities

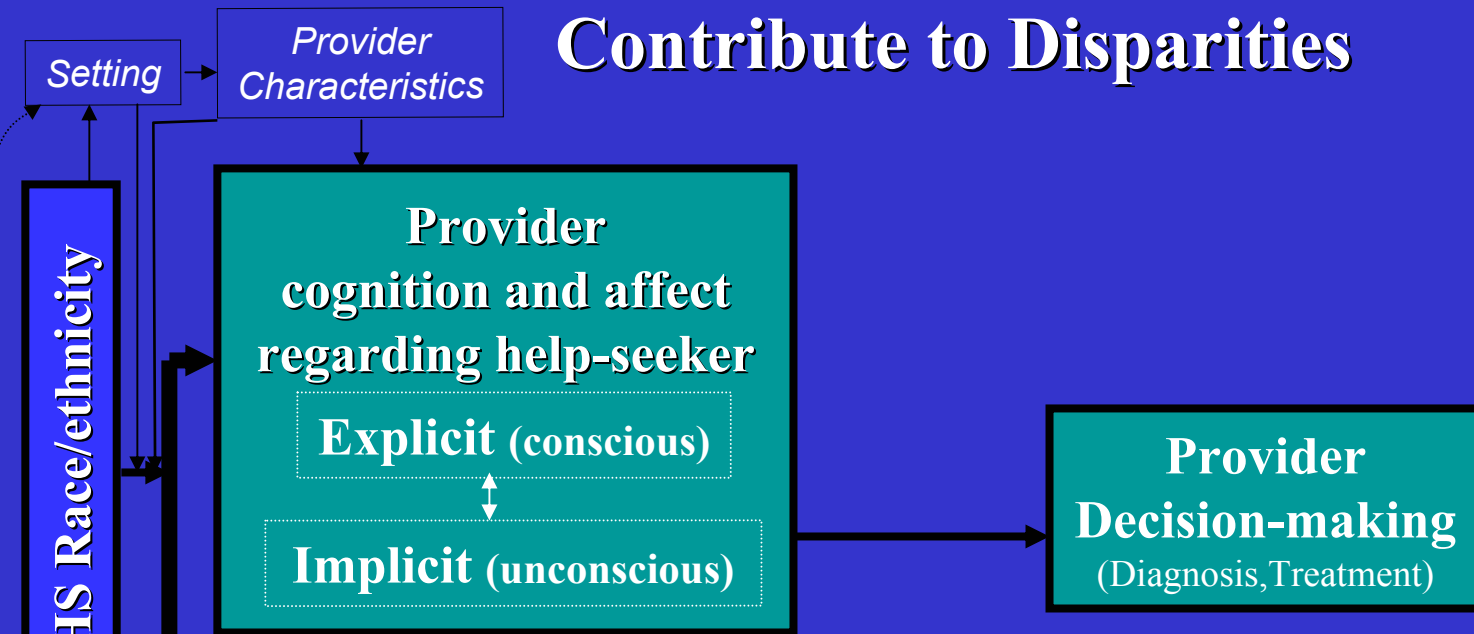


Hypothesized Mechanisms Through Which Providers Contribute to Disparities



- Bogart and colleagues found that physicians were more likely to provide highly active antiretroviral therapy (HAART) to HIV/AIDS patients when they perceived them to be likely to be adherent.
- Randomly assigned physicians to review patient vignettes that varied only on patient gender, disease severity, ethnicity, and risk group. Physicians were significantly more likely to rate the African American simulated patients as non-adherent.

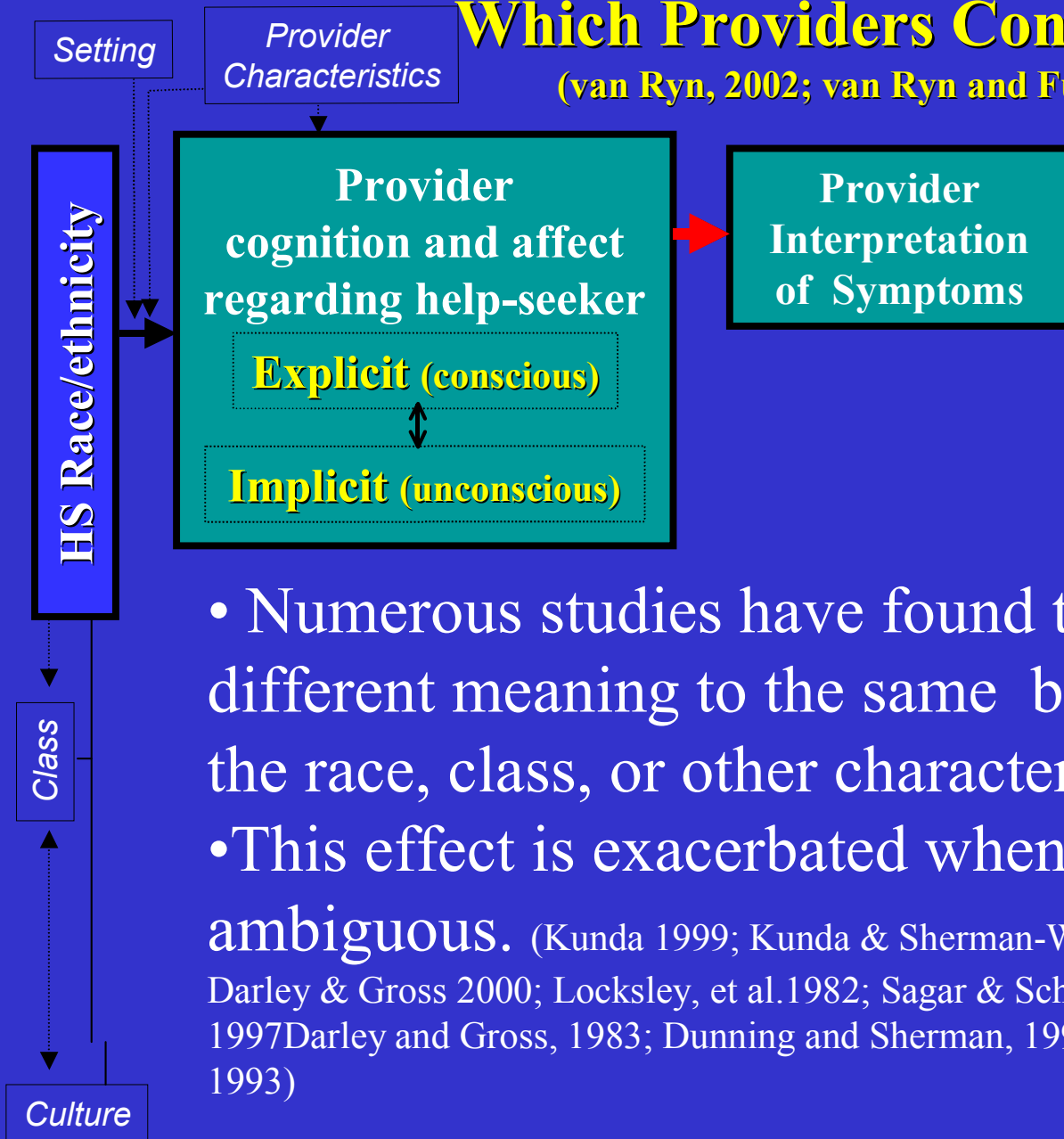
Hypothesized Mechanisms Through Which Providers Contribute to Disparities



- Cardiologist ratings of patients' likelihood of having adequate social support and/or participating in cardiac rehabilitation as found to predict physicians' recommendations for revascularization (independent of clinical appropriateness for revascularization and other demographic characteristics).
- Same group of physicians were more likely to rate African American patients as lacking in social support and unlikely to participate in cardiac rehabilitation than white patients, indep of pt MOS social support score.

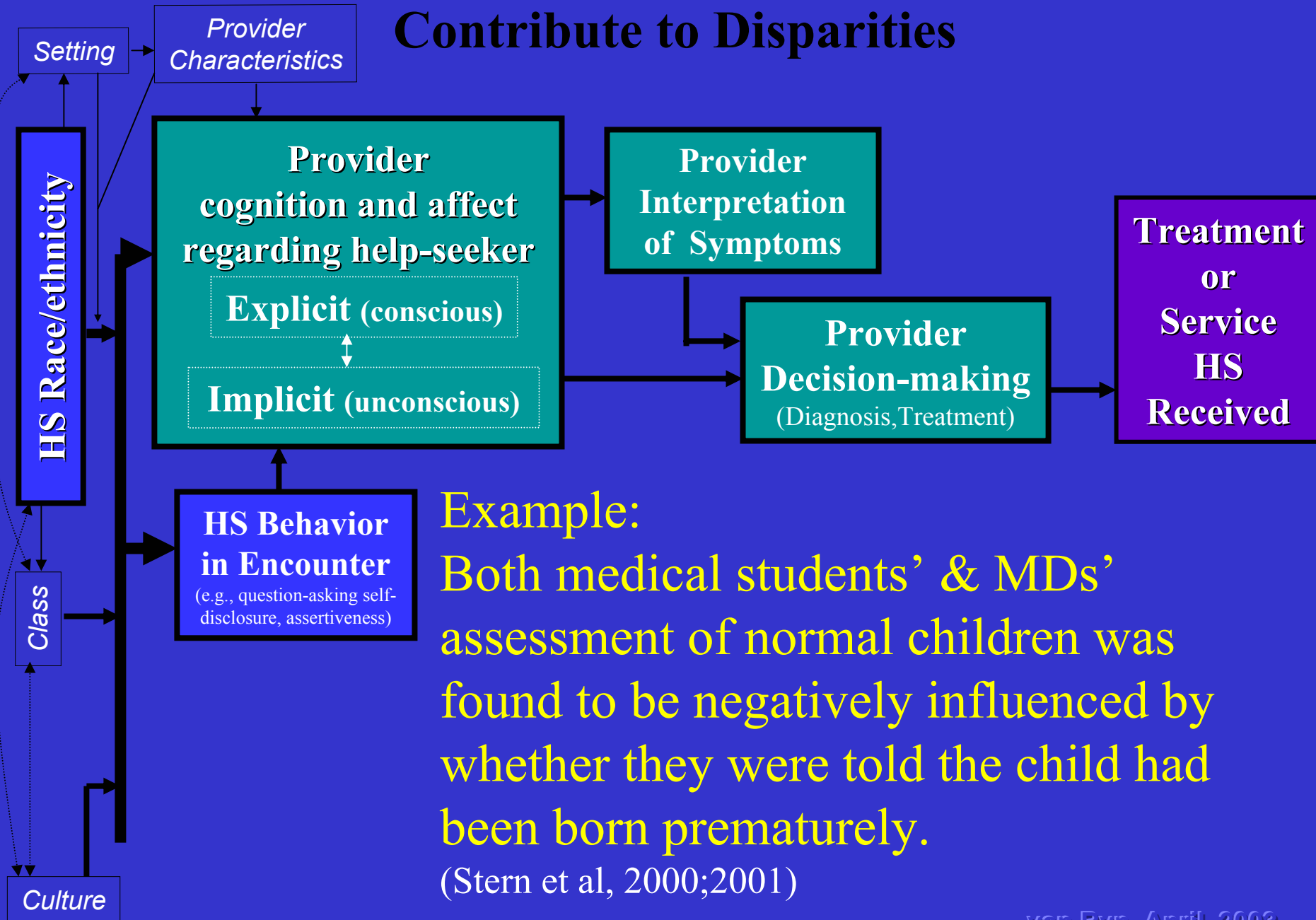
Hypothesized Mechanisms Through Which Providers Contribute to Disparities

(van Ryn, 2002; van Ryn and Fu, 2003; van Ryn and Burgess)



- Numerous studies have found that observers assign different meaning to the same behavior depending on the race, class, or other characteristics of the actor.
- This effect is exacerbated when the behavior is **ambiguous**. (Kunda 1999; Kunda & Sherman-Williams 1993; Darley & Gross 2000; Darley & Gross 2000; Locksley, et al.1982; Sagar & Schofield 1980; Lepore & Brown 1997; Darley and Gross, 1983; Dunning and Sherman, 1997; Kunda and Sherman-Williams, 1993)

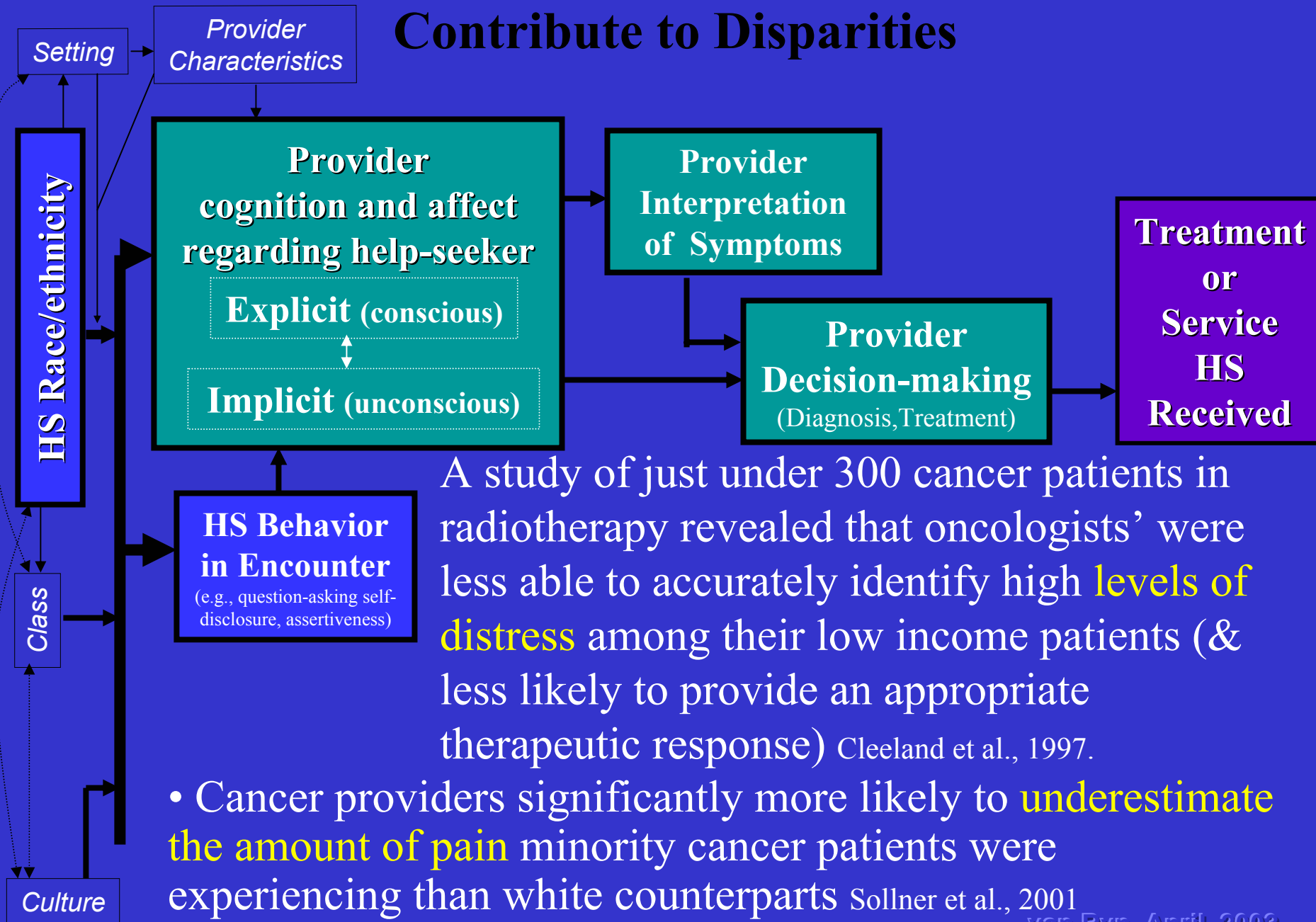
Hypothesized Mechanisms Through Which Providers Contribute to Disparities



Example:
Both medical students' & MDs' assessment of normal children was found to be negatively influenced by whether they were told the child had been born prematurely.

(Stern et al, 2000;2001)

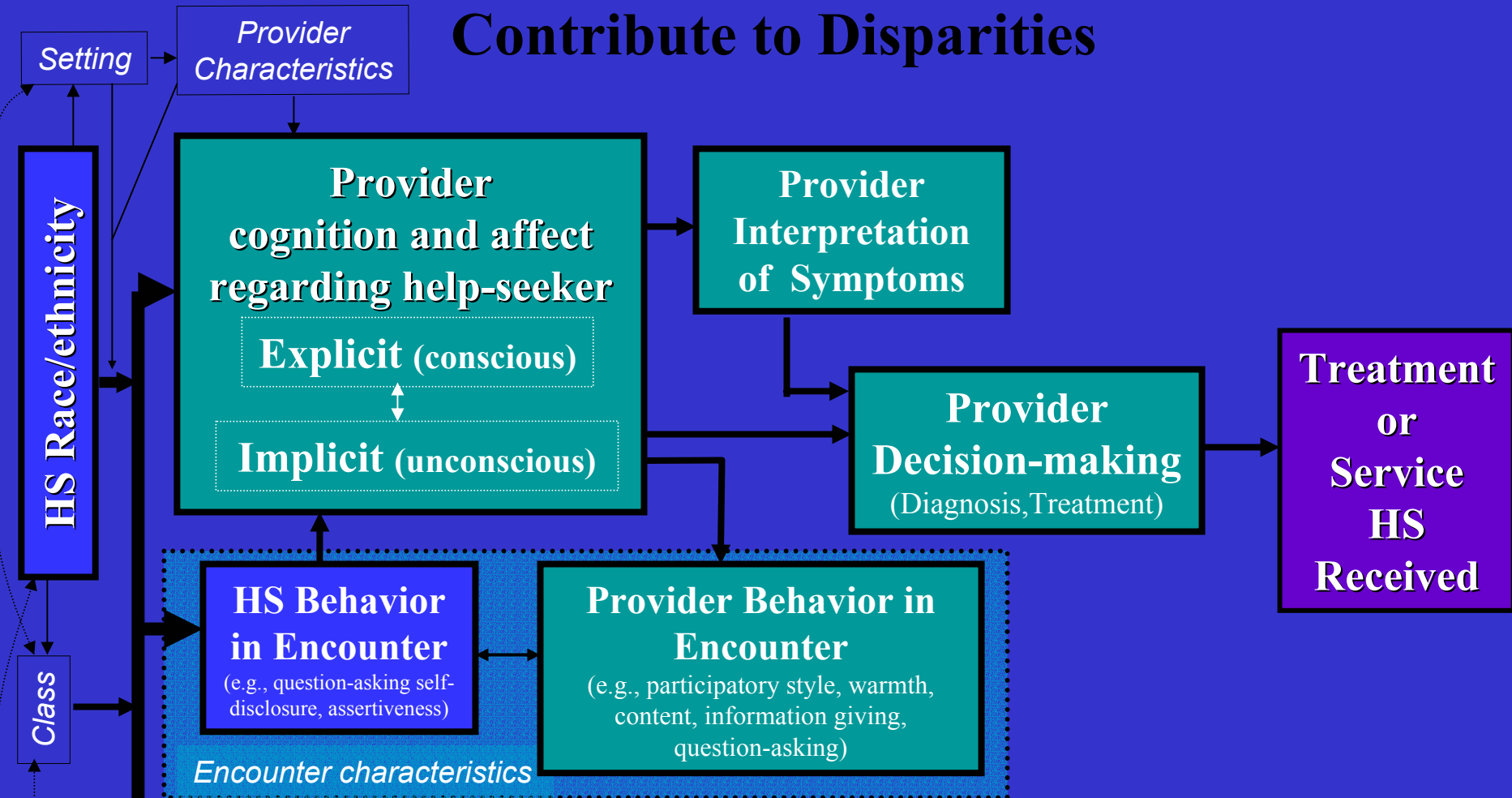
Hypothesized Mechanisms Through Which Providers Contribute to Disparities



A study of just under 300 cancer patients in radiotherapy revealed that oncologists' were less able to accurately identify high **levels of distress** among their low income patients (& less likely to provide an appropriate therapeutic response) Cleeland et al., 1997.

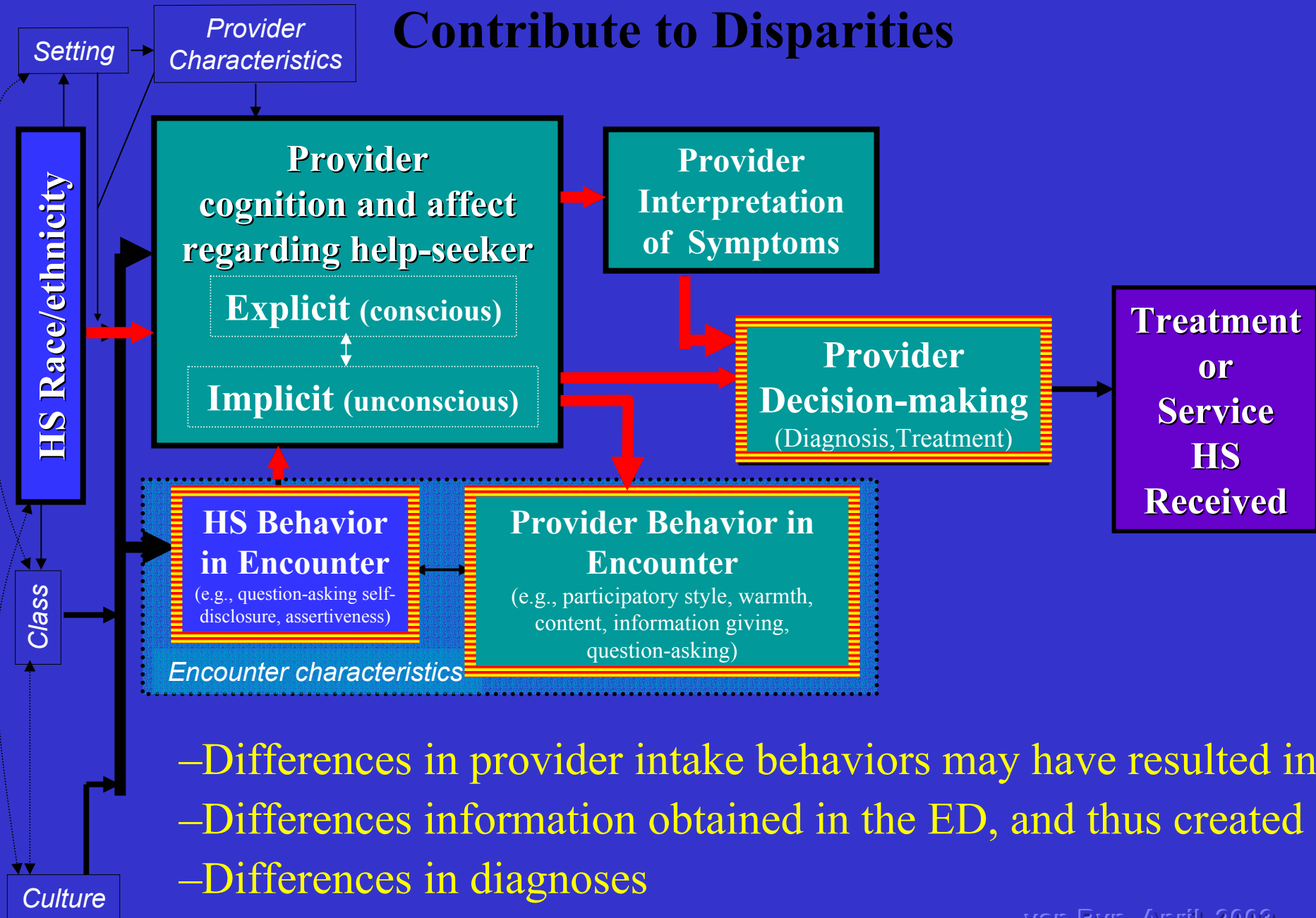
- Cancer providers significantly more likely to **underestimate the amount of pain** minority cancer patients were experiencing than white counterparts Sollner et al., 2001

Hypothesized Mechanisms Through Which Providers Contribute to Disparities

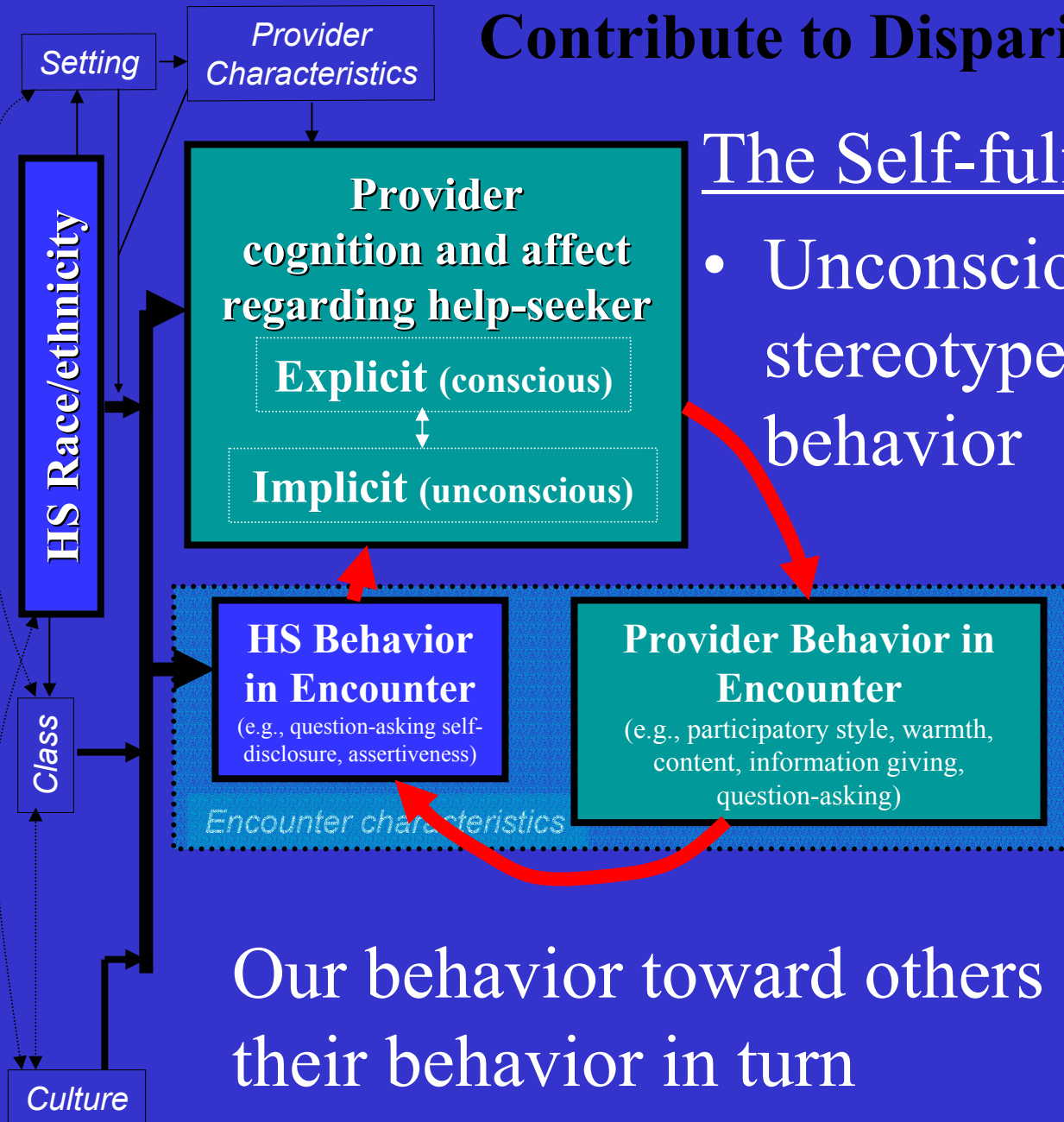


- Non-whites over dx w/schizophrenia & under dx w/depression.
- Non-white children at risk for under dx of ADHD & Autism.
- Two studies examined the processes through which these differential diagnoses occur.

Hypothesized Mechanisms Through Which Providers Contribute to Disparities



Hypothesized Mechanisms Through Which Providers Contribute to Disparities

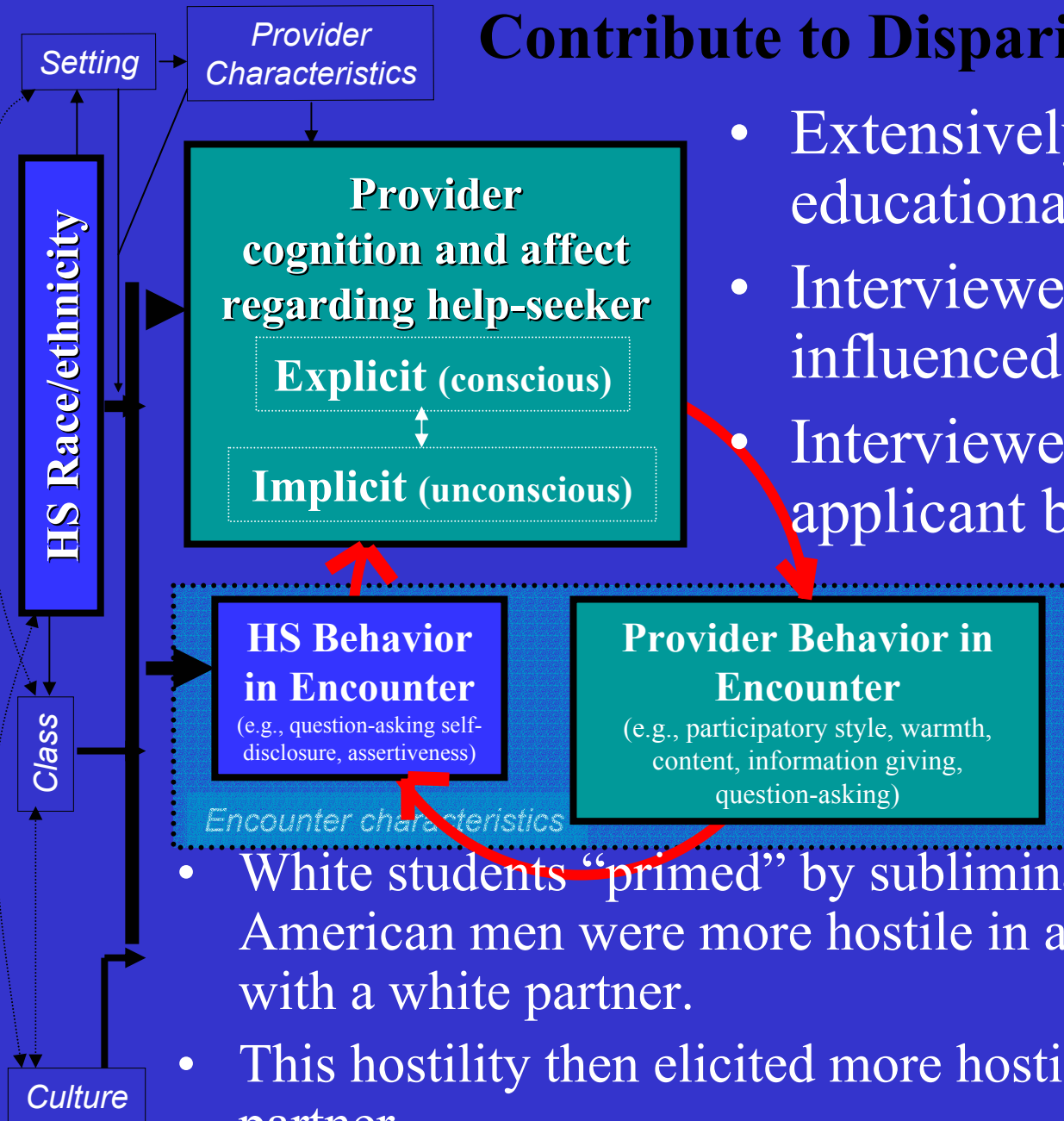


The Self-fulfilling Prophecy

- Unconsciously activated stereotypes affect our behavior

Our behavior toward others influences their behavior in turn

Hypothesized Mechanisms Through Which Providers Contribute to Disparities



- Extensively studied in educational & job interviewing.
- Interviewers' behavior influenced by race of applicant
- Interviewer behavior influences applicant behavior.

- White students “primed” by subliminal images of African American men were more hostile in a word-guessing game with a white partner.
- This hostility then elicited more hostility from naïve white partner.

What is effect of different explicit and implicit beliefs on encounter?

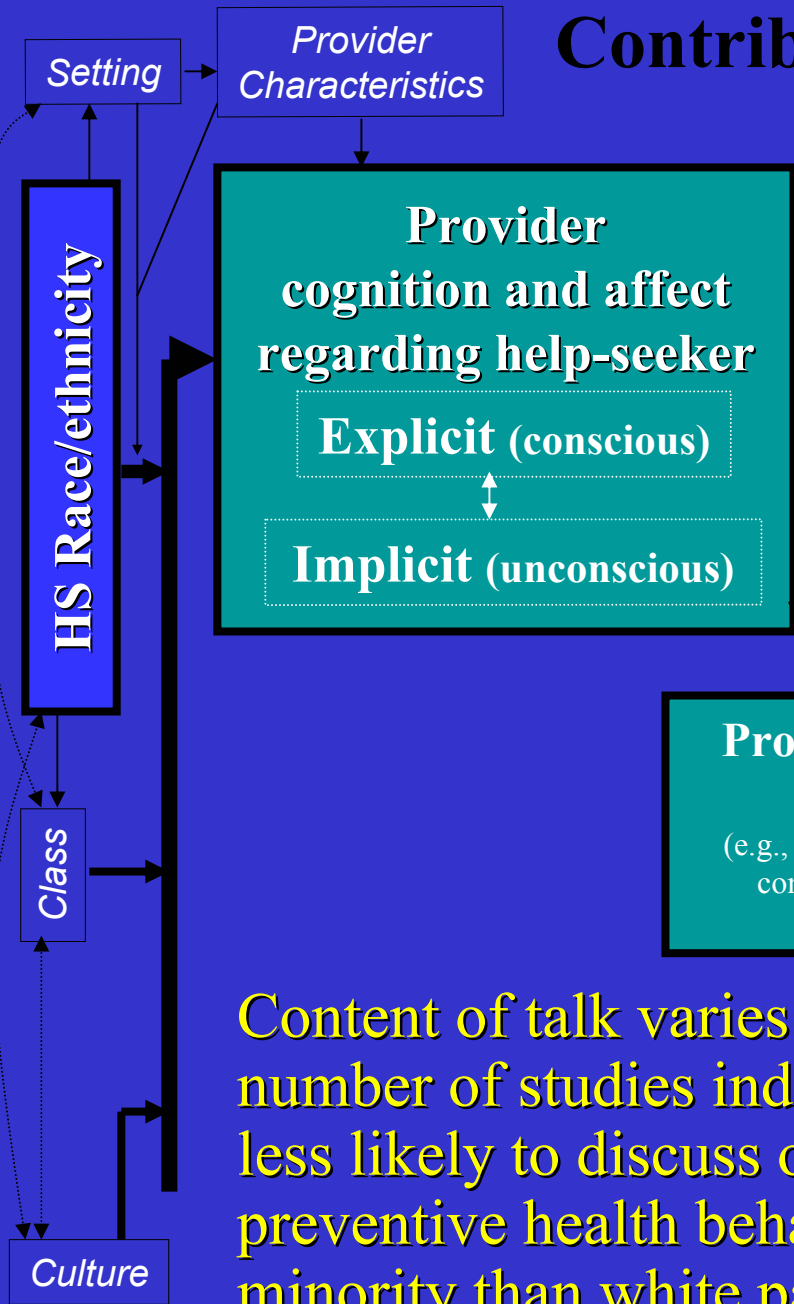
- Explicit may be better predictor of content
 - (behavior that is consciously controlled (such as what is said))
- Implicit may be better predictor of non-verbal behavior
 - (behavior less subject to control)

Example:

- Whites' **explicit** racial attitudes predicted their *verbal* behavior and self-assessed friendliness to Blacks.
- However, **implicit** racial attitudes predicted:
 - Whites' **actual** overall friendliness to Blacks as rated by independent observers
 - Whites' **nonverbal friendliness** as assessed by observers viewing videotapes of interaction without the sound.

Dovidio, J. F.; Kawakami, K., Gaertner, S.L. (2002.) Implicit and explicit prejudice and interracial interaction. Journal of Personality & Social Psychology, 82, 62-68

Hypothesized Mechanisms Through Which Providers Contribute to Disparities



Number of studies indicate that patient race affects behavior of providers: African Americans reported lower levels of participatory decision-making style; higher rates of narrowly biomedical communication;

observers reported lower nonverbal attention, empathy, courtesy, information giving.

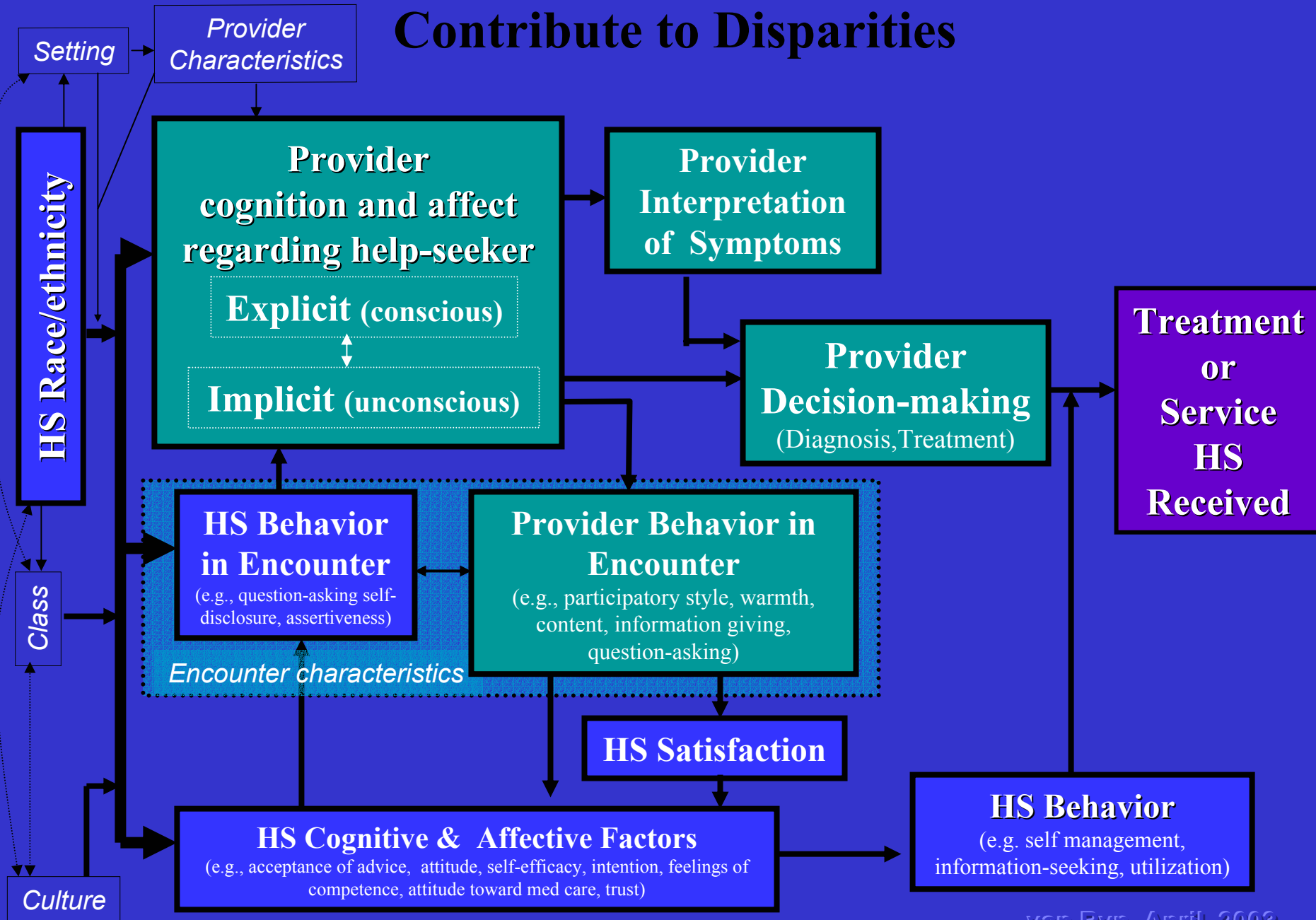
Content of talk varies also; e.g. number of studies indicate providers less likely to discuss or advise preventive health behaviors with minority than white patients.

“Physicians' use of communication strategies can act to reinforce an experience of patient dependence or self-reliance in regard to the patient-physician relationship generally and treatment decision-making, in particular.

Certain communications enhance patient participation in the medical visit's dialogue, contribute to patient engagement in problem posing and problem-solving, and finally, facilitate patient confidence and competence to undertake autonomous action”

(Roter 2000, pp. 17)

Hypothesized Mechanisms Through Which Providers Contribute to Disparities



Possible strategies for reducing disparities

Current initiatives

- Provider training (cultural competence)?
 - Increase non-white workforce
- QI (specific criteria & guidelines, monitoring, feedback, accountability)

Suggested areas of focus:

4. Develop consensus on role of social factors in clinical decision-making & methods of assessing same.
5. System change to create conditions that allow for incorporation of individuating information, better assessment
6. Move preventive health services outside of usual medical care; use alternate models including community based and lay helpers

Current Initiatives

Increase non-white workforce

- Intrinsically good idea: improving opportunity structure, diverse organizational members creates beneficial effects.
- I support it.
- I wonder how far will it take us in reducing disparities?
- Class & professional socialization effects likely to persist
- Minority groups subject to same, internalized stereotypes and majority group members
- I support it
- It is a good idea but not a panacea
- I support it

Current Initiatives

Increase non-white workforce

Positive:

- African Americans who saw African American provider reported higher satisfaction levels than counterparts (LaVeist and Carroll, 2002)
- Race concordance increased ratings of providers' participatory style. So did seeing a woman provider for both sexes and races (Cooper-Patrick et al, 1999)

Less Promising

- Race concordance did not improve dx of depression (Cooper, 2002)
- SES concordance, but not race concordance, positively predicted time in encounter (Malat, 2001)

Current Initiatives

Increase non-white workforce

The Contact Hypothesis

- emerged from the human relations movement: prejudice is a result of ignorance. “Getting to know one another” will solve.
- Refinement of hypothesis: under *certain conditions* contact can reduce prejudice. (Allport)
 - equal status
 - **common goals & interdependence**
 - no competition
 - authority sanctions contact
 - (success at joint tasks)
- Recent meta-analysis of 203 studies (73% US)
 - Contact between individuals under stated conditions fairly consistently reduced individual prejudice.
 - More so for majority than minority group members.

Current Initiatives

Increase non-white workforce

Unresolved issues:

- What are implications of allowing (or encouraging) people to choose a provider by race/ethnicity?
- What about social class discordance?
- Will working with more non-whites as peers in organization influence white provider implicit bias?
- Maybe, could make an argument based on current research either way.

Current Initiatives

Increase non-white workforce

- Are the conditions descriptive of medical student and residents' joint experiences?
- What if jobs are perceived to be scarce?
- There is evidence that when faced with disconfirming instances, we subtype.
- More likely to subtype when disconfirming instances hang together in some way.

“Two major factors move perceivers from the category-based (e.g. race based) to the attribute-based (i.e., individual trait-based) end of the continuum. These catalyzing factors are **information and motivation.**”

Fiske (2000) Interdependence and the reduction of prejudice, in Ed Oskamp Reducing Prejudice and Discrimination, 2000 p 116

Current Initiatives

Cultural Competence Training

- Training types that give information of typical issues associated with a given subgroup likely to exacerbate problem.
- Cultural sensitivity in combination with communication skills (especially skills at eliciting self-disclosure, active listening) show promise for increasing provider obtaining individuating information.

Current Initiatives

Cultural Competence Training

- Current cultural competence programs target explicit beliefs and are unlikely to influence implicit beliefs.
- Relationship building, listening, and communication skills are excellent for providers.
- Unlikely to completely ameliorate disparities.

Current Initiatives

Cultural Competence Training

- Possible unintended adverse effects:
- Efforts at stereotype suppression can backfire (“stereotype suppression rebound”)
 - When experimental participants are asked to suppress stereotypes in arriving at judgements of an individual, they can do so.
 - However, in some conditions initial suppression of stereotypes leads to increased activation and use in other settings encountered shortly thereafter

Current Initiatives

Cultural Competence Training

On the other hand:

- Do these programs affect explicit beliefs? Unknown.
- If they do, increases in conscious egalitarian intention should increase motivation to overcome automatic deleterious beliefs.
- Individuals with explicit egalitarian belief systems are less likely to activate negative implicit beliefs when exposure is neutral (but not when negative).

Current Initiatives

Cultural Competence Training

On the other hand:

- Under certain conditions individuals can consciously replace automatically activated stereotype with egalitarian response:
 - Must be aware of potential for judgment, emotions and behaviors to be biased.
 - Have awareness of stereotype activation
 - Have high level of motivation
 - Have sufficient cognitive resources (time and cognitive capacity).

Current Initiatives

Cultural Competence Training

Potentially promising findings

- Perspective-taking has been successfully used to reduce stereotypes and prejudice. (Compared to a no-instruction control group and a “stereotype suppression group” that was instructed to actively try to avoid thinking about the person in a stereotypic manner.)
- For example, Whites who wrote about a day in the life of an elderly or Black person, showed less **explicit and implicit stereotyping**
 - “imagine a day in the life of this individual as if you were that person, looking at the world through his eyes and walking through the world in his shoes.”

Galinsky, A. D. & Moskowitz, G. B. (2000). Decreasing Stereotype Expression, Stereotype Accessibility, and In-Group Favoritism. Journal of Personality and Social Psychology.

Current Initiatives

Cultural Competence Training

Potentially promising findings

- Related to the SCT approach, promotion of counter-stereotypes may have beneficial effects.
- Counter-stereotype mental imagery (e.g. imagining a strong woman) influenced activation of implicit gender stereotype
 - Requires time, effort, cognitive resources

Blair, I. V., J. E. Ma, et al. (2001). "Imagining stereotypes away: the moderation of implicit stereotypes through mental imagery." *J Pers Soc Psychol* 81(5): 828-41.

QI monitoring and feedback strategies

- Idea: Interventions promoting adherence to guidelines, e.g monitoring, feedback, and accountability should reduce disparities.
- Some support for this (Sehgal, 2003; Owen, 2002; Smith, 2001) intensive interventions differentially benefit most vulnerable (who have furthest to go).

However:

- Current quality performance measures are neither adequate for identifying disparities nor for evaluating QI interventions (Fiscella, et al., 2000)
- Clinical performance measures should be stratified by race/ethnicity and socioeconomic position for public reporting

QI monitoring and feedback strategies

Disparities-specific QI?

Some recent studies show that when low-prejudice (in explicit beliefs) people get feedback regarding their behavior that are discrepant from their conscious beliefs &...




- Experience guilt or negative self-evaluation as a result &

- Have freed up cognitive resources...

...they are able to exert control over implicit negative beliefs and reactions in a subsequent situation

Evidence-based & rigorous methods for incorporating social factors into clinical decision-making?

- Lots of noise about need to take patient social context into account.
- Pretty quiet on when, why, how to assess and apply.
- Considerable evidence that providers do incorporate beliefs regarding patient social factors into their decisions.
- Evidence of over-application of stereotypes and population estimates to non-whites, low SES.
- Evidence this mediates at least some of the observed disparities (e.g. Bogart et al, van Ryn et al)
- Class effects likely to be as large or larger

-  Lack of clarity on role of social factors
 -  Lack of valid methods, encounter time, and provider training in assessing patient status on such factors combined with
 -  Prevalent stereotypes reinforced by population statistics
- = fertile ground for disparities in treatment
- We need explicit attention to the development of consensus on role of social factors in clinical decision-making.
 - What factors matter when?
 - How do we assess patient status on these factors?
 - How do we incorporate such assessment into current clinical practice?

Need for system change: Situational factors influence the likelihood of stereotype activation and application

Considerable evidence that stereotypes are more likely to be activated and applied (vs. individual information) when individuals are:

- tired
- distracted (except when distracted from attention to group category)
- pressed for time
- anxious
- cognitively busy

Probably because these conditions leave little cognitive resources for processing individuating information and/or suppressing stereotypes.

Move preventive health services outside of usual medical care; use alternate models

- Providers unlikely to be willing and able to control all aspects of interpersonal behavior.
- Difficult to overcome implicit bias effects on counseling for preventive health behaviors.
- Physicians do not generally select into career because of a significant interest in prevention.
- Use other models (e.g. lay outreach workers in community settings may be more effective).
- For example, the Monroe county child immunization study use lay caregivers with intensive follow-up strategies for overcoming barriers eliminated disparities (Szilagyi et al., 2002).

Conclusion

- Addressing the provider contribution to disparities likely to require a multi-modal and multilevel approach.
- Significant devotion of resources and will required.
- Strategies to reduce disparities are likely to improve care for all.
- There are few ideas for reducing disparities that have not already been suggested in other contexts for other or related reasons – to improve quality of care and/or effectiveness.

Despite massive evidence to the contrary...

... evidence indicates that people tend to believe that they can see through stereotypes and are unprejudiced in their own perceptions and expectancies.