University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Multicultural Assessment in Counseling and Clinical Psychology

Buros-Nebraska Series on Measurement and Testing

1996

4. Toward A Methodology For Measuring And Assessing Racial As Distinguished From Ethnic Identity

Janet E. Helms University of Maryland at College Park

Follow this and additional works at: https://digitalcommons.unl.edu/burosbookmulticultural

Helms, Janet E., "4. Toward A Methodology For Measuring And Assessing Racial As Distinguished From Ethnic Identity" (1996). *Multicultural Assessment in Counseling and Clinical Psychology*. 8. https://digitalcommons.unl.edu/burosbookmulticultural/8

This Article is brought to you for free and open access by the Buros-Nebraska Series on Measurement and Testing at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Multicultural Assessment in Counseling and Clinical Psychology by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

TOWARD A METHODOLOGY FOR MEASURING AND ASSESSING RACIAL AS DISTINGUISHED FROM ETHNIC IDENTITY

Janet E. Helms

University of Maryland at College Park

In the 1970s, as an offshoot of the civil rights movements of that era, applied psychologists began to grapple with the issues of how to measure racial and ethnic identity. Given the increased emphasis on improving the life circumstances of disenfranchised peoples in the United States, practitioners and applied social and behavioral scientists sought pragmatic strategies for determining how best to intervene in the environments primarily of peoples of color in order to contribute to positive mental health outcomes for them as well as society more inclusively (Sue, 1992).

However, as Helms (1990a) noted, the sophistication of theoretical models and formulations used to explain the psychological effects of being socialized in racially oppressed and culturally distinct social groups far outstripped efforts to develop strategies for assessing the relevant psychological aspects of racism and ethnocentricism. Thus, in her overviews of existing theoretical models that purported to address aspects of racial or ethnic identity, Helms (1990a, 1990b) located 11 models for African Americans, six for White Americans, two for Asian Americans, two for Latino/Hispanic Americans, and four for Native Americans. She also noted that some of the theorists that she reviewed considered that they had developed models of "ethnic" or "cultural" identity, whereas others contended that they had developed models of "racial" identity, although each seemed to be addressing aspects of the

same societal dynamics of in-group/out-group oppression. In general, it seemed to be the case that theorists who believed that their own discomfort with race or ethnicity was due to racism and the resulting racial discord developed theories of racial identity, whereas theorists who felt that their societal disempowerment was due to cultural mismatch of some sort developed theories of ethnic identity.

However, problems with this language of convenience are that it helped to perpetuate the imprecision in terminology in psychological research when matters of race, ethnicity, or culture are discussed. Furthermore, such imprecise usage makes it difficult to operationally define any of the relevant constructs. Consequently, Helms (1994a, 1994b) recommended that identity models be considered "racial" models if they describe reactions to societal dynamics of "racial" oppression (i.e., domination or subjugation based on racial or ethnic physical characteristics commonly *assumed* to be racial or genetic in nature). She suggested that identity models be considered "ethnic" models if acquisition or maintenance of cultural characteristics (e.g., language, religious expression) are defining principles.

Each of the models that Helms summarized had in common the underlying assumption that an in-group racial or ethnic identity was formed by contrasting oneself and one's societally ascribed racial or ethnic group against the dominant White group if one was a Person of Color or the Black group if one was White. Each of the models also assumed that societal stereotypes and attributions about one's racial or ethnic group are internalized by each person, and influence his or her responses to racial or ethnic stimuli. Yet some of the theories emphasized the intrapsychic processes by which the ingroup/outgroup comparisons occurred (e.g., stages of development), whereas others emphasized the outcomes of differential socialization (e.g., personality types). Since Helms's original reviews, the number of theoretical models for describing the racial identity of each of the racial groups (e.g., Sabnani, Ponterotto, & Borodovsky, 1991) as well as various ethnic groups (e.g., Hutnik, 1991; Phinney, 1990) has continued to proliferate.

However, it is more difficult to count the number of measures of racial or ethnic identity primarily because there is no clear conceptualization of what constitutes "measurement" of racial or ethnic identity, or for that matter, what is meant by "racial" or "ethnic" identity. In addition, measurement efforts have been hampered by a variety of other problems. Perhaps the most important of the measurement dilemmas are the absence of an articulated model for measuring and assessing processes of identity as distinguished from outcomes, and the lack of common measurement approaches for

measuring processes in which person-by-environment interactions are considered to be critical aspects of the process. As a result, researchers have attempted to force processes that are conceptualized as operating on an individual person-environment level to conform to group-level measurement principles (Helms, 1989).

Often the incongruence between conceptual models of racial identity and the measurement models by which they are operationally defined has resulted in the misinterpretation or misapplication of classical measurement theory in addressing certain types of measurement issues common to process-identity measures. The primary purpose of this paper is to discuss each of these issues as they pertain to measurement of racial identity as distinguished from ethnic identity.

A second purpose is to propose strategies for increasing the pragmatism of existing racial identity measures. The issue of pragmatism with respect to racial and ethnic identity measures has been virtually ignored, even though assessment of identity was the issue that originally fueled theorists' (e.g., Cross, 1971; Vontress, 1971; Milliones, 1980) efforts to describe racial and ethnic identity in applied psychology. Pragmatism refers to usage of such measures to intervene in and/or assist the assessed person to make decisions about his or her life.

To make this latter point, it is necessary to distinguish "measurement" from "assessment." Aftanas (1994) makes the following distinction: "Assessment is the process of obtaining information that may be prenumerical, such as identifying that one has more of something than another person has. There are many different instruments in psychology that give us this information, including human judgment. When an appropriate method can be found to convert this information into numerical information, then we can conclude that measurement has occurred" (Aftanas, 1994, p. 889). Graham and Lily (1984), who consider the use of standardized tests a part of the assessment process, further stipulate that assessment ought to provide information that enables the assessor to make and communicate inferences or predictions about the person being assessed. Although neither explicitly says so, assessment usually is intended to occur at the individual level, that is, to have implications for individuals. Nevertheless, viable racial or ethnic identity strategies for assessing individuals either do not presently exist, or are not widely known.

Definitions

Adequate measurement or assessment of either racial or ethnic identity requires a clear definition of the constructs that one intends to measure. Helms (1994a, 1994b) noted that in psychological re-

search, part of the difficulty in operationally defining racial factors in particular is the ambiguous language used to discuss "racial" and "race-related" (e.g., ethnic groups, culture) constructs. With respect to racial and ethnic identity, the measurement problems are further complicated by the nebulous meaning of "identity." Therefore, it seems necessary to propose some terminology by which racial and cultural matters in conjunction with identity might be discussed. Nevertheless, the proposed terminology is not necessarily intended to convey the message that there is only one right way to discuss such matters, because the contemporary lexicon of race and culture-focused language is in such disarray that the only correct usages are those on which one can obtain some consensus at the time. Thus, the subsequent definitions are Helms's (1994a) attempt to begin the discourse concerning development of terminology that is less equivocal. She contends that reduction in the confusion with respect to terminology will make it possible to increase the conceptual clarity in the research process where issues of racial and ethnic identity measurement and assessment are concerned.

Prior to Helms's (1994a) observations about the lack of meaningfulness to scientists of commonly used "racial" terms, several authors (e.g., Betancourt & Lopez, 1993; Johnson, 1987; Yee, Fairchild, Weizmann, & Wyatt, 1993; Shibutani & Kwan, 1965) had noted the tendency of researchers to collude with society in using concepts such as race, ethnicity or ethnic group, and culture as though they have a clear common meaning and are interchangeable. Of this triad, the concept that is most important for racial identity theory and measurement is the notion of "race" as a psychological construct, whereas for ethnic identity measurement the constructs of "ethnicity" and "culture" are more germane.

Race

According to Gordon (1976), "Race, technically, refers to differential concentrations of gene frequencies responsible for traits which, so far as we know, are confined to physical manifestations [phenotypes] such as skin color or hair form; it has no intrinsic connection with cultural patterns and institutions" (p. 32, italics added). The obvious implication of Gordon's definition is that societal racial categories are biologically or genetically defined. However, many scholars (e.g., Spikard, 1992; Zuckerman, 1990) have advised that if different biologically determined racial groups exist anywhere in the world (a doubtful premise at best), it is not in the United States where a long history of involuntary and voluntary cross-group miscegenation has resulted in so-called mutu-

ally exclusive "racial" groups, which share biological and genetic ancestry in typically unassessed amounts.

In anthropological, psychological, and medical research as well as lay society, a person's "racial" category typically has been "measured" by means of crude indicators of phenotypes or physical appearance (Helms, 1994a; Jackson, 1992; Yee et al., 1993). As is true of society more generally, preferred indicators in the social and behavioral sciences have included imprecise "empirical" criteria such as perceived skincolor, self-reported racial classifications, and researcher racial designations. However, Scarr (1981) notes that phenotypes reveal virtually nothing about a person's underlying "racial" genetic composition. Offspring of the same set of parents may demonstrate different phenotypes (e.g., skincolor), whereas offspring of different parents may exhibit similar phenotypes (e.g., skincolor). People of the same racial classification may exhibit different phenotypes, whereas people of different racial classifications may exhibit similar phenotypes (Zuckerman, 1990). Moreover, Jackson (1992) contends that existing anthropological models have never been adequate for demonstrating the presence of biologically defined racial differences worldwide, given their frequent assumption that geographic locations differentiate racial populations from one another.

One consequence of the crudeness of measurement of race is that people who possibly are genetically similar are treated as though they are different. In other words, racial categories that have no known valid inclusion criteria (other than legally defined standards and social custom) become the definers of who is permitted access to societal resources and define the manner in which such access can occur (Gotunda, 1991; Takaki, 1993). Helms (1994a) proposes that the term "sociorace" replace "race" in acknowledgement of the fact that typically the only criteria used to assign people to racial groups in this country are socially defined and arbitrary. In other words, racial classifications are imposed. Be that as it may, at an individual level, a person's ascribed status in the society initially depends upon the location on the racial hierarchy of her or his outwardly defined group (Spikard, 1992).

Racial identity may be broadly defined as the psychological or internalized consequences of being socialized in a racially oppressive environment and the characteristics of self that develop in response to or in synchrony with either benefitting from or suffering under such oppression. Some theorists (e.g., Vontress, 1971) conceptualize the characteristics as stable personality "types," whereas others (Hardiman, 1982; Helms, 1986, 1990a, 1995) describe them as "stages,"

"worldviews," or "ego statuses." The primary focus of this paper is the racial identity perspectives that purport to examine dynamic processes such as stages or statuses rather than static personality traits or types. Given the foregoing definition, then the relevant measurement and assessment tasks are to construct measurement devices for quantifying differential levels or amounts of relevant internalized oppression-related characteristics, and adapting them for usage at the individual or person level.

Ethnic Group and Ethnicity

In an effort to overcome the research limitations that result from the reification of race as a biological construct, some theorists have attempted to resolve conceptual ambiguities by substituting the terms "ethnic group" or "ethnicity" for "race" (e.g., Gordon, 1976; Johnson, 1987). However, this linguistic compromise ignores the importance of ethnicity as a distinct construct. Ethnicity implies membership in a particular group. According to The *American Heritage Dictionary*, *ethnic* is defined as "Of or pertaining to a social group within a cultural and social system that claims or is accorded special status on the basis of complex, often variable traits including religious, linguistic, ancestral, or physical characteristics" (Morris, 1975, p. 450).

It should be noted that although "physical characteristics" is included in the definition, in fact, one does not have to share the same physical attributes to belong to an ethnic group. For example, Casas (1984) notes that Latinos/Hispanics can be of any racial classification, even though they may share Spanish cultural heritage. Also, Spikard (1992) has observed that members of the African-American ethnic group historically only have needed 1/32 (i.e., "a drop") of presumed African ancestry in order to be classified as "black."

Moreover, inclusion of presumably visible physical characteristics as a definer of ethnicity rather than race belies the fact that historically such information was used to identify people as belonging to different "racial" groups (see Spikard, 1992; Takaki, 1993). For example, in this regard, Takaki has noted that for most of their history in this country, Asian Indians were classified by society as "Caucasian" but not of the White race. Although ethnic groups may exhibit physical manifestations of their group-specific culture (e.g., clothing, symbols), these markers typically are not permanent. In most cases, when they are removed, the person is assumed to be of and is treated by outgroups as though he or she belongs to the socioracial group he or she most resembles.

Betancourt and Lopez (1993) recommend that "ethnicity [be] used in reference to groups that are characterized in terms of common national-

ity [tribe, community, or geographical region], culture, or language [of one's original ancestors in this country]" and share an "ethnic quality or [group] affiliation ... which is normally characterized in terms of culture" (p. 631). Thus, the critical ingredients in their conceptualization of ethnicity is culture. Consequently, from their perspective, "ethnic group" implies a group whose members are identifiable because of shared cultural characteristics which can transcend societal racial categories.

Gordon (1976) subsumed a variety of racial and cultural (e.g., language, religion) groups under the generic label of "ethnicity." His justification for doing so was that due to historical experience, each group shares with the others "a sense of peoplehood" and this group kinship is recognized in the American lay public's often interchangeable use of racial and cultural terms. However, it can be argued that not only do people have different internal representations of their various potential types of groupness or peoplehood, that is, social categories, but also that these various representations differentially influence their covert and overt behavior.

With respect to racial identity, for example, the inner sense of interconnectedness presumably results from the historical circumstances of racial domination or subordination, whereas with respect to ethnic identity, common cultural socialization is assumed to be the source of interconnectedness. Thus, presumably, even if societal racial oppression no longer existed, multiple ethnic groups still might exist to the extent that different cultural socialization was needed to insure a people's survival and/or the members of the ethnic group continued to value their own culture.

Moreover, it can be argued that American society conceptualizes race and ethnicity differently. Hypothetically, ethnicity is something to be abandoned or blended into a common societal or "American" melting pot. Therefore, acknowledgement of ethnicity is largely voluntary, whereas race is not. For example, governmental agencies such as the Census Bureau only include ethnic-group classifications if they are requested to do so vociferously enough by the groups who intend to use the categories (e.g., Takaki, 1993).

Ethnic classifications rarely have differential long-term implications for national social and political policy in and of themselves, unless specific phenotypes also accompany them. Furthermore, ethnicity typically is permitted to adapt itself across generations to conform to environmental conditions. However, race is valued or devalued according to which group one belongs to, and is considered to be deep-rooted and life-long, although the number and names of the groups may change to reflect societal sensitivities. For example,

the "mulatto" and "coloreds" group designations in the 1870 Census became "blacks" in later censuses (Spikard, 1992).

Be that as it may, in order to measure or assess ethnicity, the researcher must measure cultural manifestations in some manner. Thus, the critical measurement and assessment issues for ethnic identity theorists are to (a) operationally define the group-specific culture (i.e., ethnicity) in a manner that visibly distinguishes it from reactions to racial oppression, and (b) determine the extent to which the identified culture has been absorbed. Otherwise, ethnicity and race are merely redundant. Table 1 summarizes the dimensions that are proposed to differentiate (socio)race from ethnicity.

Culture

Psychological or internalized culture might be defined as those beliefs, values, customs, traditions, and rituals that are transmitted in

Table 1. Summary of Characteristics That Distinguish Sociorace From Ethnicity

Characteristics				
Sociorace	Ethnicity			
Defines group members' position in a societal hierarchy	Does not define a definite place in a societal hierarchy			
For most people, it is not mutable	It is mutable for all people			
Does not define a single culture	Defines a single culture			
Implies knowledge of racism and own-group racial stereotypes	Implies knowledge of own-group culture			
Determined by law and custom	Determined by in-group desires			
For most people, it lasts across generations	For most people, it virtually disappears after three generations			
Can generally be recognized by out-group members	Can rarely be recognized by out-group members			
Does not require the person to do anything to belong	Requires some familiarity with group's culture to belong			
Does not require infusion of immigrants or visits to homeland to persist	Requires an ongoing infusion of immigrants or sojourns to a homeland to persist			

some form across successive generations of a group, are present during critical eras of a person's lifespan socialization, and become a part of the person's inner psychological experience. Triandis (1994) distinguishes between subjective culture (e.g., values), meaning those aspects of culture that a person learns or incorporates as a part of oneself; and objective culture, meaning the products (e.g., art work) that typify a particular cultural group. Also, Helms (1994a) distinguishes between metacultures and cultures. Thus, she suggests that the dominant culture, that is, the culture to which everyone in a society is expected to conform, is a metaculture, whereas cultures are the customs of smaller social groups and communities within the society such as ethnic groups. In the United States, contemporary Anglo-Saxon culture is the metaculture (see Alba, 1990; Feagin, 1984; Katz, 1985).

Presumably, familiarity with and competence in one's subjective culture(s) is the substance of ethnic identity and its measurement. However, knowledge of or capacity to express a particular culture is not the essence of racial identity or its measurement, although attitudes and feelings toward or evaluations of group-specific cultures might be relevant content. In other words, racial identity theorists usually hypothesize that a person might choose to embrace or reject a culture assumed to typify one's societally ascribed racial group, even if he or she has inaccurate knowledge about and/or is not competent in the culture(s) involved.

Identity

Racial and ethnic identity measurement problems are compounded by the fact that the term identity has no clear conceptual meaning. Erikson (1963, 1968) is generally considered to be the personality theorist who not only made the term identity a watchword in psychology, but also explicitly incorporated the notion of collective identities (e.g., occupational, gender, religious) into a theoretical formulation. Thus, he described a developmental process by which a person could integrate most of his or her various social group memberships into a healthy personality configuration.

Briefly, Erikson proposed that in general, psychosocial identity development is characterized by the following four-stage developmental sequence: (a) foreclosure, commitment to specific personal and group-defined goals, values, or beliefs without ever considering other alternatives; (b) diffusion, a lack of solid commitments or efforts to establish them; (c) moratorium, a state of crisis during which a person explores his or her life options; and (d) achieved, firm social commitments based on engaging in and resolving personally relevant

life crises. This portion of his model is relevant to the issue of measurement and assessment of racial and ethnic identity because measures derived from this perpective are often used in racial/ethnic group comparison studies (see Phinney, 1990).

Nevertheless, anticipating future measurement problems, Erikson complained that identity "is used without explanation as if it were obvious what it means"; and researchers use terms such as "self-identity" as though they refer to "social roles, personal traits, or conscious self-images, shunning the less manageable and the less obscure (and often more sinister [racial]) implications of the concept" (Erikson, 1966/1976, p. 60). However, for him, identity meant "a subjective sense of invigorating sameness and continuity" (emphasis in original).

Erikson (1975) proposed that psychosocial identities in particular were characterized by an individual (i.e., intrapsychic) and a communal component. For him, the intrapsychic aspect involved the person's complex internal experiences in reaction to ingroup and outgroup socialization relative to a group. A part of this intrapsychic aspect was "a subjective sense as well as an observable quality of personal sameness and continuity, paired with some belief in the sameness and continuity of some shared world image" (p. 18). The communal component refers to the person's interpersonal relations within his or her own collective environment(s), where adequate adjustment is defined as her or his capacity to be integrated into that community by adequately fulfilling social roles given the relevant historical circumstances. Other social or collective identity theorists (e.g., Tajfel, 1978) also suggest that communality may refer to the interplay between majority-status and minority-status groups (i.e., intergroup relations) and the person's adaptation to those dynamics.

Racial identity theorists tend to emphasize the intrapersonal or intrapsychic ramifications of the person's interpersonal and intergroup conditions of oppression, whereas ethnic identity theorists tend to emphasize interpersonal (e.g., social role fulfillment) and/or intergroup dynamics (e.g., acculturation). Thus, it is reasonable to assume that racial identity theorists would choose operational definitions of identity that permit assessment of internal processes. Similarly, ethnic identity theorists seem apt to use operational definitions that assess the person's fit within his or her group(s) as well as the metacultural group.

WHAT ARE RACIAL AND ETHNIC IDENTITY?

Although Erikson (1968) perhaps introduced the notion of racial classification (specifically, membership in the "American Negro" and "white majority" groups) as critical aspects of personal identity devel-

opment, he did not include it as a potential source of identity enhancement. In addition, although his theoretical framework has been used so far to discuss the conceptual difficulties in measuring and assessing racial and ethnic identity, it would be fallacious to consider his work to be a direct ancestor of most contemporary racial and ethnic identity theorists because judging from the absence of citations of his work in most of their reference lists, it is unlikely that these theorists were aware of his work. Rather, it is more appropriate to suggest that racial identity theories are in the genre of Erikson.

Be that as it may, later theorists (e.g., Cross, 1971; Thomas, 1971) began to conceptualize racial identity as a developmental process that potentially had positive as well as negative implications for visible racial/ethnic group (VREG) individuals residing in the United States as well as members of the White majority group. Originally, theorists who conceptualized racial identity as involving a developmental process used the construct of "stages" to describe the process. However, Helms (1995) has suggested that "ego statuses" be used instead because it is more consistent with theoretical descriptions of the developmental process as involving not necessarily obvious or conscious intrapsychic person-environment dynamics that are central to the person's racial self-conception. As previously mentioned, Helms (1990a: 1990b) summarizes many of these models. Also, Phinney (1990) reviewed empirical studies of racial and ethnic identity, although she does not differentiate between the two. However, the racial identity models that have generated the most measures (Helms, 1984; Helms, 1990; Helms & Carter, 1990; Parham & Helms, 1981) and measurement controversy (e.g., Ponterotto & Wise, 1987; Tokar & Swanson, 1991; Swanson, Tokar, & Davis, 1994) are those developed by Helms and her associates. Therefore, it might be useful to summarize briefly the basic principles of her racial identity conceptual models, and discuss some measurement implications for development or evaluation of the Black (Helms & Parham, 1985) and White (Helms & Carter, 1990) racial identity measures, the measures whose psychometric soundness has been challenged most frequently. Also, conceptual models and measures of ethnic identity will be briefly discussed to permit consideration of the possibility that racial and ethnic identity might be better served by different measurement models.

General Principles of Racial Identity

Racial identity theory and consequently, racial identity measurement deals with the psychological consequences to individuals of being socialized in a society in which a person is either privileged (i.e.,

White identity) or disadvantaged (e.g., Black and other People of Color identity) because of her or his racial classification. Thus, the biological or genetic realities or illusions of race are not relevant aspects of racial identity conceptualizations. Rather, the focus is on examining the person's internalized reactions to being treated as though he or she belongs to a "real" racial group. Thus, in the United States, members of the Asian, Black, Latino/a, Native, and White American groups are typically treated in society as though they belong to different mutually exclusive racial groups when such is not truly the case. Moreover, individuals who are known mixtures of more than one of these societally ascribed groups also tend to be socialized according to the physical appearance of oneself or one's presumed ancestors. Thus, racial assignment is evident in statements such as he or she "looks" Hispanic or _____ (fill in the blank).

As previously discussed, it is the case that socioracial groups (and consequently members of those groups) occupy different positions along the national sociopolitical power hierarchy such that in the U.S., Whites are assumed to define the superior group, whereas Blacks are assumed to be their opposites or the inferior group, with all other groups of color falling somewhere between the two extremes (cf. Hacker, 1992; Spikard, 1992). Moreover, differential treatment or racial discrimination is such that Whites on average occupy the top rungs of the societal sociopolitical and economic hierarchies, whereas Blacks on average occupy the bottom rungs. The other socioracial groups typically occupy intermediate rungs, although the order of their occupation may vary depending upon which dimension is being considered.

Thus, for racial identity theoretical and measurement purposes, it is assumed that lower status socioracial groups generally contrast themselves against Whites, whereas Whites generally contrast themselves against Blacks. Considerable empirical evidence exists to the effect that Whites generally consider Blacks to be their "opposites," although the term "blacks" historically was more inclusive of all groups of color than the term "Blacks" is today. Such evidence includes several decades of social distance and racial stereotype studies (Feagin, 1984; Gardner, Lalonde, Nero, & Young, 1988). Also, Gardner et al. (1988) reported that even when objective surveys of racial attitudes indicate a diminishment in such biases, more subtle forms of measurement (e.g., behavioral measures) reveal that they are still prevalent.

Unfortunately, People of Color are rarely asked about their feelings and attitudes about either other groups of color or Whites in

empirical studies. Consequently, the supposition that conflictual relations with Whites define the primary racial identity themes of People of Color is based on previously cited theoretical formulations in which Whites were identified as the relevant contrast group. Most of these perspectives propose similar thematic concerns, although their concepts may be differently labeled (e.g., Atkinson, Morten, & Sue, 1989; Myers, Speight, Highlen, Cox, Reynolds, Adams, & Hanley, 1991).

Thus, Helms's Black (and People of Color) and White models differ in content so as to be consistent with relevant societal themes or, in Erikson's (1975) words, "the historical moment". However, all of Helms's racial identity models (e.g.,1989, 1990a, 1992, 1995; Helms & Piper, 1994) are based on the following underlying common racial-identity themes: (a) one's racial identity develops in comparison to one's "contrast" racial group; (b) healthy identity development involves the abandonment of societal impositions of racial-self in favor of one's own personally relevant self-definition; (c) members of all of the socioracial groups develop racial identity by means of a sequential process in which increasingly more sophisticated differentiations of the ego evolve from earlier or less mature statuses; and (d) qualitative differences in *expression* of racial identity statuses can be measured, but development must be inferred from responses to measures.

Helms uses the term ego status to refer to the cognitive-affective information-processing strategies (IPS) by which people encode, analyze, react to, and retrieve racial information. Therefore, statuses in her framework are hypothetical constructs. She uses "schema" to refer to the observable (and therefore, measurable) manifestations of statuses. Thus, existing measures of racial identity can potentially assess schema, but not statuses (or stages). As shown in Tables 2 and 3, different strategies may underlie each of the schema. Thus, two individuals governed by the same status may actually express themselves via different information processing strategies.

The extent to which statuses evolve and consequently, schema can be expressed depends, in part, on the versions of racial identity expression modeled in the environment as well as the manner in which race-related rewards and punishments are dispensed in a person's significant (that is, rewarding or punishing) environments. Therefore, an adequate measure of racial identity has to incorporate such dynamics as they presently occur in the dominant or superordinate societal environments in which respondents to such measures can be reasonably expected to have been socialized. The descriptions of the schema constitute thematic content that is presum-

Table 2. Black Racial Identity Ego Statuses, Information-Processing Strategy (IPS), and Sample Schema Items

General Principles	Black Statuses		
Status 1—acceptance of societally imposed racial characterizations and rules for dispensing societal resources.	Conformity (Preencounter)—External self-definition which implies devaluation of one's own group, and idealization of Whites and White standards omerit.		
IPS: denial, distancing, own-group blaming, individualism	Sample: "I feel uncomfortable around Black people."		
Status 2—Confusion concerning one's racial group commitment and ambivalent racial self-definition.	Dissonance (Encounter)—Ambivalence and confusion concerning one's role relative to one's own racial group and the White group.		
IPS: disorientation, repression, vacillation	Sample—"I feel guilty or anxious about some of the things I believe about Blac people."		
Status 3—idealization of one's group and use of external standards to define oneself, and the contrast group, resisting outgroup oppressive forces.	Immersion/Emersion—idealization of one's own racial group, denigration of that which is perceived to be White, emphasis on group empowerment.		
IPS: hypervigilance, judging, dichotomizing, combative	Sample: "I frequently confront the system and the (White) man."		
Status 4—resolving of intrapsychic conflict with contrast racial group and internalizing of positive racial characteristics.	Internalization—intellectualizing, capacity to objectively assess and respond to members of the White group, and use of internal criteria for self-definition.		
IPS: analytic, flexible, intellectualizing	Sample: "People regardless of their rac have strengths and limitations."		
Status 5—questioning, analysis, and comparison of racial group status relative to other socioracial groups, universal resistance to oppression.	Integrative Awareness (Internalization/Commitment)—Capacity to value one's own collective identities as well as recognize similarities between oneself and other oppressed people.		
IPS: probing, restructuring, integrating	Sample: "I involve myself in social action and political groups even if there are no other Blacks involved."		

Note: The Black racial identity statuses are listed in ascending order of evolution and complexity of expression, and are adapted from Helms (in press) and Helms and Piper (1994).

General Principles

Table 3. White Racial Identity Ego Statuses, Information-Processing Strategy (IPS), and Sample Schema Items.

White Statuses

Concrai i imerpres	THE States	
Status 1—acceptance of societally imposed racial characterizations and rules for dispensing societal resources.	Contact—satisfaction with racial status quo, obliviousness to racism and one's participation in it.	
IPS: denial, obliviousness, naivete	Sample: "I wish I had a Black friend."	
Status 2—Confusion concerning one's racial group commitment and ambivalent racial self-definition.	Disintegration—Disorientation caused by racial moral dilemmas which force one to choose between commitment to one's racial group and principles of humanity.	
IPS: disorientation, suppression	Sample: "I do not feel that I have the social skills to interact with Black people effectively."	
Status 3—idealization of one's group and use of external standards to define oneself, and other groups.	Reintegration—idealization of one's own racial group, denigration of other racial groups, championship of own-group entitlement.	
IPS: minimization, selective perception, outgroup distortion	Sample: "I get angry when I think about how Whites have been treated by Blacks."	
Status 4—"good-bad" dichotomizations of racial groups and imposition of owngroup's standards as condition for acceptance.	Pseudo-Independence—rationalized commitment to own racial group and of ostensible liberalism toward other groups.	
IPS: rationalization, selective perception	Sample: "I feel as comfortable around Blacks as I do around Whites."	
Status 5—questioning, analysis, and comparison of racial group status relative to other groups.	Immersion/Emersion—search for an understanding of how one benefits from and contributes to racism.	
IPS: hypervigilance, probing, analyzing	Sample: "I am making a special effort to understand the significance of being White."	
Status 6—self-affirming commitment to one's societally assigned racial group; flexible standards for perceiving other racial group members.	Autonomy—informed, integrated positive racial-group commitment, use of internal standards for self-definition, capacity to relinquish the privileges of registry.	

racism.

(continued...)

Table 3 (continued)

General Principles	White Statuses	
IPS: integrating, intellectualizing	Sample: "I involve myself in causes regardless of the race of the people involved in them."	

Note: The White racial identity statuses are listed in ascending order of evolution and complexity of expression, and are adapted from Helms (in press) and Helms and Piper (1994).

ably relevant in contemporary society, but may change as the racial zeitgeist changes.

From Helms's perspective, the racial identity developmental process (that is, evolution of statuses) and expression of one's racial identity (that is, racial identity schema) are not necessarily synonomous. The process defines the sequence by which various racial identity ego statuses may become available for influencing behavior as broadly defined; expression concerns the race-related quality of the observed behavior. One can infer the presence of particular statuses from behavior samples (e.g., responses to scale items). Presumably, one cannot use a particular schema unless the underlying status has evolved to some extent. However, one cannot conclude that any single sample of racerelated behavior necessarily reveals all of the statuses that are potentially accessible to the person. Because a status has differentiated to some extent in the person's ego (i.e., is present) does not mean it will necessarily govern the person's behavior. Therefore, measures of each schema ought to include more than one sample of the behavior intended to reflect a particular form of identity expression so that consistency of the person's response can be determined.

Moreover, the rate at which statuses differentiate within individuals is proposedly determined by each person's own level of cognitive-affective maturity in combination with the amount and quality of his or her race-related socialization (Helms, 1984). For measurement purposes, these idiographic aspects of racial identity may be problematic to the extent that one relies on group-level measurement principles for developing one's measures without adjusting them for person-level characteristics. Be that as it may, in general, the statuses (i.e., cognitive-affective information-processing strategies) are assumed to evolve in approximately the following sequence: (a) adaptation of societal interpetations of one's racial group(s) relative to others; (b) confusion and disorientation; (c) idealized identifying with one's own group; (d) capacity to question

societal racial ascriptions with respect to one's own self relative to societal socioracial groups, and (e) internalizing of a personally affirming racial identity.

Depending on which socioracial group the person being assessed seemingly belongs to, and where the group lies in the sociopolitical power hierarchy with respect to these issues, the names given to the various statuses of the developmental process and the details of their thematic content may differ.

In Tables 2 and 3, respectively, the Black and White models of racial identity are briefly summarized for the purpose of illustrating measurement conundrums. More detailed explications can be found in Helms (in press, 1992, 1994b, 1995). In Column 1, the contents or basic themes of the expressed statuses (i.e., schema) and the cognitive-affective information processing strategies (IPS) of the statuses are described. Column 2 provides an example of relevant items from the respective identity measures.

Nevertheless, conceptually, the racial identity development process is similar. That is, regardless of the person's racial classification, the capacity to respond to racial stimuli in one's environment involves multiple intrapsychic processes that differ in the complexity of reactions to racial environmental catalysts they can generate. The process within the United States is "universal" because racial classification is omnipresent in this country, but aspects of the content of the process may be unique to groups as well as to individuals within the groups. Moreover, content may change as society changes its manner of socializing racial groups, but the process of developing racial identity should persist as long as socioracial groups are differentially valued by the society.

Black and (People of Color) Identity. In actuality, the process of racial identity development for Blacks is not incongruent with that of other disenfranchised groups of color in many respects. In fact, Atkinson et al. (1989) developed a general conceptual model of oppression to reflect their belief that "oppressed-group" identity, that is, for groups socialized under similar conditions of racial discrimination and oppression, healthy identity development requires that they resolve similar identity conflicts within themselves.

Thus, many of the theoretical issues raised with respect to Black Americans' racial identity development and expression also pertain to other groups of color. Furthermore, concerns related to the measurement of their racial identity should pertain to various VREGs to the extent that the other groups have been socialized under similar conditions of cross-generational racial oppression, and the measure purports to assess intrapsychic reactions to such oppression.

Consequently, if one is a member of the less empowered groups, then one's primary racial (social) identity issue is to overcome the internalized negative stereotyping associated with membership in such groups in order to avoid permanent psychic wounding and to form curative bonds with one's own group members. Because Blacks are a numerical and sociopolitical minority in American society, it is virtually impossible for them to exist without encountering society's pro-White/anti-Black socialization in some form. Therefore, it seems conceivable that more Blacks than not will have developed complex racial information-processing strategies at early ages because their psychological and social survival requires such adaptation.

Table 2 summarizes the basic characteristics of the ego statuses hypothesized to typify the racial identity developmental process for Black Americans. It should be noted that Helms (Helms, 1984; Helms & Parham, cited in Parham & Helms, 1981) originally used Cross's labels for the racial identity stages (now called statuses) and related subscales. However, to conform to her subsequent revisions of her conceptual models (Helms, 1995; Helms & Cook, in press), she relabeled the subscales by using a combination of Atkinson et al.'s (1989) and Cross's (1971) labels. The amalgamated labels are intended to reflect more accurately the dynamic developmental processes underlying the subscale measures. Thus, in Table 2, labels in parentheses are Cross's original names of the statuses where applicable.

White Racial Identity. If one is a member of the dominative group, one's primary racial identity issues are to (a) overcome the entitled stereotyping associated with membership in the White group, and (b) learn to appreciate one's group and oneself as a member of the White socioracial group without colluding with other group members in commandeering societal resources. Moreover, because a White person experiences majority status because he or she is a member of the White group, then the person does not have to cope with resolving issues of racial identity development unless he or she finds himself or herself in a personally relevant situation(s) that challenges his or her entitled status, and from which he or she cannot conveniently escape (Helms, 1984). In other words, if it is true that the majority of Whites do not have to contemplate their racial identity very much, then it is likely that any randomly chosen group is likely to interpret racial stimuli (e.g., racerelated measure items) simplistically. Moreover, even individuals who might be predisposed to process and respond to information by means of cognitively and affectively complex statuses, might not be able to do so if White role models who can exhibit complex racial responses are not present in their socialization environments.

Implications. Perhaps it is evident from the summaries in Table 2 and 3 that major measurement dilemmas with respect to Black and White racial identity occur because each status may be expressed by means of one of several dynamic nonlinear processes. Each of the processes occurs in response to the three core components of racial identity: individual, intragroup, and intergroup. These core dimensions are defined as follows: (a) intrapsychic or personal cognitive-affective maturation processes, the extent to which a person is capable of processing racial information; (b) the manner of internalizing one's own-(racial) group affiliation (i.e., inward representations of societal messages about one's ascribed racial group as communicated by significant members of that group); and (c) the internalizing of outgroup relations, intrapychic evaluations of the contrast group (e.g., Whites for Blacks) relative to one's own socioracial group.

Each of the dimensions may covary in opposite directions. Thus, for example, when a person's reactions are being directed by the Conformity (Preencounter) status, he or she may function by conceptualizing himself or herself as an individual rather than as a member of a group. Also, such a person presumably uses internalized negative stereotyping pertaining to his or her racial group to encode, interpret, and react to racial stimuli pertaining to her or his own group; but uses unrealistically positive internalized stereotyping to process racial information pertaining to Whites.

Therefore, a measure of a particular schema (i.e., manner of expressing statuses) should incorporate all three dimensions, individual characteristics, owngroup affiliation, and outgroup relations. This assertion does not mean that every item or behavior sample within a relevant measure should include all three dimensions, but rather that the collection of items or behavior samples should be at least tri-dimensional. Relatedly, the owngroup-outgroup or racial elements of each status may be inversely related (i.e., function in opposite directions), positively related (i.e., function in the same directions), or not be related at all. For example, the Dissonance (Encounter) and Disintegration statuses describe a person who is being pulled in contradictory directions, toward his or her own group as well as toward the out group. Consequently, an adequate measure of racial identity ought to include the tension of racial-group dynamics as a defining dimension.

A measurement implication of the observations concerning the potential tenuousness of White identity development and the virtually mandatory nature of Black identity development pertains to the possibility that White and Black identity when examined on a group

level, may be skewed in opposite directions for the two groups. The more-or-less voluntary nature of White identity development means that the population of White people should express racial identity skewed in the direction of less mature identity statuses (positively skewed). On the other hand, the more-or-less mandatory racial identity development of Black people means the population with respect to racial identity reactions should be skewed toward more complex statuses (negatively skewed).

It has been argued (Brown & Gore, 1994; Nunnally, 1978) that a measure is more capable of differentiating among individuals if the distribution of scores underlying the measure is symmetrical (and preferably normal). Therefore, depending upon the severity of the skewness, it may be difficult to differentiate among individuals with low scores when a measure's distribution of scores is positively skewed, and among individuals with high scores when a measure's distribution is negatively skewed. Moreover, it might be difficult to develop racial identity measures or to investigate the psychometric properties of existing measures without selecting one's sample to compensate for potential skewnesses within the population under investigation.

Ethnic Identity

The informal notion of an internalized ethnic identity as a phenomenon that is influenced by a person's connectedness and interactions with primary social groups has been around at least since Freud (1959) proposed his own irresistable "attraction" to "Jewry and Jews" as an explanation for his intellectual accomplishments. Perhaps Freud also provided the initial first-person description of the psychological experience of possessing a collective identity. Here, collective identity refers to a person's internalized ascribed (societally determined) or achieved (earned) membership in social categories (e.g., racial classification, ethnic classification, gender).

Thus, Freud, who described himself as a life-long "unbeliever" and a man "without any religion," is quoted as having described his Jewish identity as follows: "[My Jewish identity consisted of] many obscure emotional forces, which were the more powerful the less they could be expressed in words, as well as a clear consciousness of inner identity, the safe privacy of a common mental construction. . . . [And b]ecause I was a Jew I found myself free from many prejudices which restricted others in the use of their intellect; and as a Jew I was prepared to join the Opposition and to do without agreement with the 'compact majority'" (cited in Erikson, 1976, p. 62, italics added).

Thus, from Freud's revelation, it becomes clear that as is the case for racial identity, ethnic identity can also be a nebulous motivational force that functions at the individual or person level. He also raised the notion of ethnic identity as a "mental construction," which presumably distinguishes it from an objective reality. However, in this paper, it is contended that the motivational force for ethnic identity, which distinguishes it from racial identity, is cultural in nature, and need not necessarily be "Oppositional." In fact, to be consistent, theories and measures are discussed as ethnic in focus if they incorporate group-specific culture in more than a superficial (e.g., self or theorist designation) manner, and racial if they only deal with the dynamics of in-group/outgroup opposition and conflict.

This definitional strategy excludes those theoretical models that purport to be ethnic identity models, but only deal with ethnicity in comparison to other racial (rather than ethnic) groups; or—perhaps more accurately—includes such models under the racial identity rubric. However, it includes identity (sometimes called acculturation) models that propose different styles of cultural adaptation based on inevitable metacultural acculturative or assimilative pressures toward conformity (e.g., Aboud, 1987; Aboud & Skerry, 1984). The definition also includes models that attempt to describe ethnic-group cultural affiliation or lack thereof (e.g., Bernal et al., 1990). Several measures have been developed to assess ethnic cultural characteristics for various ethnic groups. Therefore, it is probably useful to summarize some of the basic tenets of the cultural adaptation and group-affiliation perspectives.

Cultural Adaptation. Several theorists have conceptualized ethnic identity as cultural styles or patterns that groups evolve in response to metacultural pressures to relinguish traditional cultures (e.g., Aboud & Skerry, 1984; Birman, 1994; Bulhan, 1980; Ruiz & Padilla, 1977; Szapocznik, Scopetta, Kurtines, & Aranalde, 1978; Stonequist, 1937; Tajfel, 1978). Many of them propose some combination of the following patterns: (a) moving away from or relinquishment of one's traditional (ethnic) culture, (b) moving towards or internalizing the metaculture, (c) rejection of both the ethnic culture and the metaculture, and (d) moving towards or internalizing both cultures (i.e., biculturality). Thus, these conceptualizations attempt to describe differential levels of connectedness with one's ethnic group as well as the metaculture. The basic measurement task with respect to these models is to differentiate among the proposed styles.

Ethnic Group Affiliation. According to Bernal et al. (1990), ethnic identity consists of the following five components: (a) ethnic self-

identification, defined as involving self-categorization and labeling of oneself as a member of the ethnic group based on "appropriate [ingroup] cues"; (b) ethnic constancy, awareness that "one's ethnic characteristics are unchanging and permanent" (p. 5); (c) performance of ethnic role behaviors, not necessarily knowledgeable use of a wide range of ethnic behaviors, values, customs, and so forth; (d) ethnic knowledge, awareness of the content (e.g., customs, behaviors, etc.) of the relevant ethnic culture; and (e) ethnic preferences and feelings, attraction toward one's ethnic group and the culture that defines the group.

This perspective does not propose specific interrelationships among the various components. Nor does it specify an ordering or sequencing of components as does racial identity developmental theory. However, Bernal et al. (1990) do speculate that children become more adept at each of the components as they age, presumably because ethnic identification is based on conceptual cues that are more subtle and, therefore, more difficult to recognize than is true of racial identity. Consequently, for measurement purposes, it does not appear that it is necessary for any single measure to evaluate all of the proposed components, although for pragmatic purposes, presumably each of them should be capable of being measured or assessed in some manner.

MEASUREMENT OF ETHNIC AND RACIAL IDENTITY

In the measurement literature, race and ethnicity generally are used interchangeably. Thus, it is often difficult to determine which construct researchers intend to quantify. Nevertheless, in general, it appears that both ethnic identity and racial identity have been measured most frequently by means of various kinds of paper-and-pencil rating scales. However, several researchers have advised that measurement of racial or ethnic identity would be improved by focusing upon the respondents' subjective experiences of race or culture, but not both in a single measure (e.g., Alba, 1990; Landrine & Klonoff, 1994). Such a differential focus would make it easier to identify measurement dilemmas that are peculiar to one form of collective identity rather than the other.

Measures of Ethnic Identity

In the identity conceptual and measurement literature, sometimes ethnic identity measures are called ethnic identity measures, and sometimes they are called acculturation measures. For the purposes of this paper, the mitigating factors that define a measure as an ethnic identity measure are that it (a) addresses some aspect of culture as defined by adaptation to a group's culture or self-reported kinship with a cultural group, (b) includes the person's subjective experience of culture or acculturation in some manner, and (c) that one's specific cultural rather than socioracial group be a central aspect of the measurement process.

Three categories of ethnic identity measures were gleaned from Atkinson and Thompson's (1992) review of racial and cultural variables in counseling. They are unidimensional, componential, and bicultural. Unidimensional scales measure the person's acquisition of the metaculture (e.g., Cuellar, Harris, & Jasso, 1980); componential scales measure the extent to which a person expresses various components (e.g., language, kinship) of her or his traditional culture (e.g., Bernal et al., 1990; Padilla, 1980); and bicultural scales measure the person's level of acclimation to the metaculture and her or his traditional culture (Szapocznik et al., 1978).

The theoretical model underlying most of these measures is either cultural adaptation or a combination of kinship and cultural adaptation. An example of a unidimensional combination scale is Cuellar et al.'s (1980) Acculturation Rating Scale for Mexican Americans (ARSMA). Respondents use 20 multiple-choice items to describe themselves with respect to (a) Spanish language facility, (b) owngroup interaction, (c) ethnic self-designation, and (d) competence in Anglo culture. Cutoff scores are used to assign respondents to one of three to five categories (very Mexican, Mexican-oriented bicultural, true bicultural, etc.). Several measures for other ethnic groups have been adapted from the ARSMA (e.g., Suinn, Rickard-Figueroa, Lew, & Vigil, 1987).

As Phinney (1990) noted, often investigators have not described the psychometric characteristics of their measures or they have relied on the measure originator's psychometric descriptions. Nevertheless, Kunkel (1990) reported a Cronbach's alpha of .92 for the ARSMA, and Suinn et al. (1987) reported an alpha coefficient of .88 for their Asian adaptation, the SL-ASIA. Such results suggest that measures of ethnic identity can be constructed in which items are highly interrelated and, perhaps, are homogeneous.

Measures of Racial Identity

In their review of measures of racial identity, Burlew and Smith (1991) classified such measures as follows: (a) developmental, focus on intrapsychic and/or psychosocial adaptations to social and environmental forces of race and racism; (b) Africentric, examine manifes-

tations of African-oriented personality characteristics; (c) group based, emphasize level of affiliation or kinship with a racial group; and (d) racial stereotyping, evaluate the extent to which societal racial stereotypes have been internalized. Most of the racial identity measures have had Black people as their focus. The racial identity measures developed by Helms and her associates (e.g., Helms & Parham, 1985; Helms & Carter, 1990) are direct descendants of the developmental approaches of measuring racial identity (e.g., Cross, 1971).

Description. Both the Black and White racial identity measures have similar measurement dilemmas to be resolved because they are based on analogous theoretical frameworks (see Tables 2 and 3). Consequently, the subsequent observations about the psychometric properties of such measures and recommendations for resolving some of the measurement and assessment concerns generally pertain to both the Black (BRIAS) and White (WRIAS) racial identity scales, although the WRIAS will generally be used to illustrate relevant points.

Both identity scales are rationally constructed personality measures intended to quantify the level of implementation (that is, expression) of the relevant racial identity ego statuses. Because the subscales of the measures are intended to reflect the constructs of racial identity theory, they are intended to be multidimensional in nature. That is, each subscale in its entirety is intended to quantify the manner in which the respondent reacts to racial information about self relative to his or her own racial group as well as the relevant contrast group as previously discussed. Respondents use 5-point Likert scales (1=Strongly Disagree to 5=Strongly Agree) to respond to items similar to those shown in Tables 2 and 3. Primacy or strengths of schema usage are inferred from a person's racial identity subscale scores (i.e., higher scores imply stronger or more dominant schema).

The racial identity measures have face validity as attitudinal measures and were originally conceived as such. However, some evidence supports the conclusion that the items comprising the measure elicit individual interpretations of racial stimuli rather than objectively reportable attitudes or opinions. The evidence includes (a) respondents' unsolicited written interpretations of and perhaps reactions to WRIAS items (Remy, 1993), (b) the lack of substantial relationships between racial identity subscale scores and measures of social desirability (e.g., Meijer, 1993), and (c) the fluidity of racial identity subscale scores under conditions of racial stimulation (Corbett, 1994; Meijer, 1993).

Remy (1993) summarized her respondents' unsolicited written responses to WRIAS items. She noted that most of her sample either agreed or disagreed with the Contact item, "I wish I had a Black friend,"

as intended. However, a small (unspecified) percentage of her sample responded by reporting that they had a Black friend and chastising the researcher for accusing them of racism. Hacker (1992) contends that such testifying is typical for most White "liberals" because having a Black friend is evidence to themselves and others that they are not racists. Additionally, Remy found a variety of idiosyncratic responses to other items including drawn swastikas, musings about how Blacks might respond to the items, explanations of why the person answered as he or she did, and so forth. Interestingly, individualistic interpretations of items were even more evident on scales in which Remy replaced "Blacks" with "Asian Americans" in item stems.

Some evidence suggests that racial identity expressions may not be related to standard measures of social desirability on a group level (Meijer, 1993). The correlations shown in the diagonal of Table 6 indicate negligible correlations between the racial identity subscales and the Marlowe-Crowne Social Desirability Scale (Marlowe & Crowne, 1961), a standard measure of a social desirability response set. The sample on which the correlational analyses were conducted are from Helms and Carter (1991). Meijer also found negligible correlations ranging from -.16 (Disintegration and Reintegration) to .11 (Autonomy) for her sample of 243.

It is at least conceivable that for subscales to have strong social desirability response sets, items would need a recognizable positive direction. However, racial identity theory postulates that the social desirability of items is determined by the status the person uses in processing them.

Meijer (1993) and Corbett (1994) investigated environmental and intrapsychic conditions under which scores on WRIAS subscales vary. Meier investigated changes in psychology students' WRIAS subscale scores over a 12-week interval during which the experimental group was exposed to an introductory psychology course with a multicultural emphasis. She found that none of the racial identity expression subscale scores changed significantly except Pseudo-Independence, which decreased by the end of the interval regardless of whether respondents had participated in the course. Thus, her findings suggest that under normal circumstances, racial identity expressions measured at a group level are quite stable over time.

Corbett (1994) found that those respondents who were exposed to a role-reversal racial fantasy rather than a career fantasy expressed lower levels of Contact and Pseudo-Independence and higher levels of Disintegration, Reintegration, and Immersion/Emersion. Moreover, their racial identity expressions following the race fantasy were

more predictive of dimensions of healthy and defensive narcissism than they were prior to the fantasy in directions consistent with racial identity and narcissism theories. Thus, Corbett's results support Helms's contention that racial identity expressions can be stimulated by external racial catalysts.

Consequently, when used at the group level, racial identity measures at best evaluate common reactions to the racial catalysts contained within items. However, in the absence of information about the particular racial socialization experiences of the respondents, it is not clear what subscale scores mean for or about a person's racial identity expressions at the individual level.

MEASUREMENT ISSUES AT THE GROUP LEVEL

Several explorations of the psychometric properties of the racial identity research scales have appeared in the counseling literature (e.g., Helms & Carter, 1990; Ponterotto & Wise, 1989; Swanson, Tokar, & Davis, 1994; Yanico, Swanson, & Tokar, 1994). Moreover, virtually all of the studies of other personality constructs thought to be related to racial identity schema also have included investigations of the psychometric properties of the measures to some extent (e.g., Watts & Carter, 1991; Ottavi et al., 1994), and investigators have deleted subscales on the basis of the results of these local analyses. Although investigators typically have not said so, "classical" measurement theory apparently has been the conceptual measurement model on which the psychometric explorations of racial identity measures have been based.

In classical measurement theory (i.e., "strong true score" theory), a basic measurement assumption is that every observed score (X) presumably arises from one of two sources, true score (T) or error (E). This relationship is commonly symbolized by the formula X = T + E. Because the value of T (the amount of the construct being measured) cannot be measured or observed directly, it is inferred from relationships among Xs (i.e., items, test scores, etc.). A number of other measurement assumptions follow from the basic true-score premise. DeVellis (1991) summarizes some of the consequent assumptions as follows:

- 1. The amount of error associated with individual items varies randomly. The error associated with individual items has a mean of zero when aggregated across a large number of people. Thus, items' means tend to be unaffected by error when a large number of respondents complete the items.
- 2. One item's error term is not correlated with another item's error term; the only routes linking items pass through the

latent variable [i.e., the true score variance], never through any error term.

3. Error terms are *not* correlated with the true score. (p. 17).

Thus, the assumptions imply that obtained interrelationships (typically expressed as correlations) among items indicate the amount of true score (e.g., racial identity) being measured rather than the amount of error. The use of correlations to indicate the amount of true score manifested in a set of items also assumes that items (or rather the true variance present in such items) are linearly related. However, there are several reasons why these basic tenets of classical measurement theory probably are not directly applicable to measurement of racial identity schema. The groundwork for most of these arguments appeared in prior sections, but it might be necessary to state the reasons more explicitly. They are as follows: (a) Racial identity theory is a description of how people process racial information at an individual level. Although the classical-measurement assumptions may be used effectively to obtain descriptive statistics for an entire group, they cannot be used to determine T and E exactly for any individual. (b) Individual differences in responding to the racial identity items are the essence of the theory, but would be considered error under the general assumptions previously cited (see Lyman, 1978). (c) Individual reactions (e.g., person-environment reactivity) to racial identity items are not proposed to be linear and consequently, relationships among items might be underestimated if one uses unadjusted linear methodologies to evaluate such relationships. These sources of incongruence between racial identity theory and the cited classical measurement assumptions also may bear on other aspects of the psychometric properties of racial identity measures.

Most efforts to evaluate the psychometric properties of racial identity measures have been studies of the reliability and/or internal structure of the measures. In these investigations, researchers have tended to treat racial identity subscales as though they were intended to be linear group-level measures, and have evaluated their psychometric properties on the basis of strict conformance to the principles of classical measurement theory as previously summarized. Consequently, the interpretations of the results obtained from such studies have contributed to the confusion regarding measurement of racial identity constructs.

Reliability

Conceptually, reliability historically has been defined as the correlation between parallel tests (DeVellis, 1991; Graham & Lilly, 1984; Nunnally, 1978). In this case, "tests" can be interpreted to mean items

within subscales that are intended to measure the same process (i.e., racial identity schema). Thus, when measures are developed with classical measurement theory as their underlying measurement model, reliability coefficients describe the degree of linear interrelationship(s) among tests (or items).

In her critique of racial and ethnic identity measures, Phinney (1990) noted that reliability with respect to such measures typically is not reported or "is low enough to raise questions about conclusions based on the measure" (p. 506). Furthermore, she noted that Cronbach's alphas were the reliability coefficients usually reported by the 20% of studies she reviewed in which reliability was reported. For the various measures, she indicated that reported reliabilities have ranged from .35 to .90.

However, Helms's (e.g., Parham & Helms, 1981) Black racial identity inventory was the only measure specifically mentioned, and for this measure, Phinney (1990) cited alphas ranging from .66 to .72. Researchers subsequent to her review have reported alpha reliabilities ranging from .45 to .63 for the BRIAS (Yanico et al., 1994). For the WRIAS, the following ranges have been reported: .55 to .82 (Helms & Carter, 1990); .43 to .85 (Regan, 1992), .18 to .75 (Ottavi et al., 1994), and .61 to .84 (Tokar & Swanson, 1991; Swanson et al., 1994). In Table 4, Cronbach's (1951) coefficient alpha estimates of internal consistency reliability are reported for the WRIAS subscales corresponding to the schema described in Table 3. The range is from .54 to .79.

Table 4. Summary of Psychometric Properties of the WRIAS.

Scale	$r_{\rm XX}$	Mean	SD	Range
Contact	.54	31.03	4.70	13–44
Disintegration	.76	24.38	5.45	10-39
Reintegration	.79	24.33	5.99	11–46
Pseudo Independence	.62	35.38	4.72	13–47
Autonomy	.67	34.94	4.94	16-48
Total	.37	149.35	10.54	106–182

Note. r^{XX} = coefficient alpha estimates.

Ordinarily, in constructing personality measures, internal consistency reliability is a primary issue. Nevertheless, the range of internal consistencies of subscales of well-established general identity inventories is quite variable. For example, in their analysis of the psychometric properties of seven well-known identity measures, Walsh and Betz (1985) reported internal consistency reliabilities in the .50s and .60s for the stages of Rest's (1979) Defining Issues Test (DIT), a measure of moral development; and reliabilities ranging from .45 to .78 for the Student Development Task Inventory-2 (SDTI-2; Winston, Miller, & Prince, 1979), a measure of Chickering's developmental vectors. Of the published identity measures the authors described, the DIT and the SDTI-2 were the only two by which the quality of respondents' psychosocial identity statuses is inferred from objectively scored scales rather than rater-scoring procedures.

Examination of the alpha coefficients shown in Table 4 reveals that they are not great if one uses cognitive ability tests as the standard, but that they are not bad in comparison to psychosocial identity inventories. Typically, low racial identity alpha coefficients have been interpreted to mean a lack of homogeneity among items or the presence of heterogeneity (e.g., Yanico et al., 1994). Yet at least a couple of other explanations are possible, particularly when one considers the variability of reported alphas across studies and (presumably) research sites.

An obvious explanation is that researchers may not have sampled adequately. In order to obtain high coefficient alphas, one needs to have some people who have high scores relative to some people who have low scores. If the distributions of racial identity statuses within populations are skewed, then one may need to do special sampling to include people who can express the under-represented statuses. Thus, for example, one might need to find White people who are civil rights activists to represent adequately the higher end of the Autonomy subscale. Most researchers to date have used convenience and/or regional samples, but have not selected samples who might reasonably be expected to be capable of expressing the schema under investigation.

Furthermore, under the best of circumstances, Cronbach's (1951) alpha coefficient estimates the degree of interrelationship among a set of items rather than the degree of homogeneity of scales or subscales (Green, Lissitz, & Mulaik, 1977). However, Green et al. note that alpha coefficients may underestimate the interrelatedness of items under the following conditions: (a) if items' true scores are related to one another in nonlinear ways that cannot be revealed by a correlation

matrix and/or (b) items are negatively related to one another. Also, if situational variables interact with the characteristics of the person rather than being a form of random variance, then coefficient alpha might also underestimate the reliability of measures.

Ordinarily, the recommended techniques for analyzing the reliability of multifactorial scales have been split-half, alternate forms, or immediate test-retest (Cureton, 1967; Dawis, 1987). However, most of these approaches are not entirely workable for establishing the reliability of racial identity measures for a variety of reasons. Alternate form reliability will not function as a reliability-estimating approach because none of the racial identity measures has an alternate form. Immediate test-retest reliability should reveal that subscale responses are stable over short periods of time given Meijer's (1993) and Corbett's (1994) findings of stability over extended periods of time. However, although test-retest would reveal whether the processes were stable over short periods of time, it is not apparent that such procedures would reveal much about the structure of items within subscales, which presumably is the question that motivates researchers who use coefficient alpha.

Of the recommended alternative reliability procedures, split-half potentially can be adapted for assessing item structure by means of linear analysis. However, one would need to use what DeVellis (1991) calls "balanced" halves rather than the customary splitting (e.g., random, odd-even) procedures. When using a balancing procedure, halves are chosen so that items indicative of relevant item characteristics or principles are present in both halves. Thus, for example, in the present case, one might select halves according to the information-processing strategies being tapped by items, so that the strategies are equivalently represented in both halves. To date, balanced split-halves have not been used to evaluate the reliability of the racial identity subscales.

Be that as it may, due to low alpha coefficients, editors have forced researchers (e.g., Watts & Carter, 1991) to eliminate certain scales from their research as a condition for publication (Carter, personal communication). The editors contend that it is impossible to know what a scale is measuring if its coefficient alpha is low. However, given the virtual dearth of racial identity measures with a substantial history of psychometric exploration, reliance on coefficient alpha as the sole indicator of the interrelatedness of items is probably premature when the possible limitations of this approach for evaluating the reliability of racial identity measures is considered.

In addition, although sample size does generally affect the size of reliability coefficients, smaller reliability coefficients can be used to describe accurately the responses of large groups relative to small groups or individuals. Thus, for example, Thorndike and Hagen (1969) can be used to illustrate this point. They compared changes over two occasions in the rank ordering of two people's, small groups' (N=25), and large groups' (N=100) scores, when the initial scores placed one person or group at the 50th percentile and the other's score placed the person or group at the 75th percentile. They calculated that a reliability coefficient of .50 would result in inconsistent descriptions (i.e., a reversal in rank order) about 36.8% of the time for two people, whereas the same size coefficient would result in inconsistent descriptions of 100-person groups 1 in 2,500 (.04%) times.

It seems reasonable to infer from Thorndike and Hagen's discourse that if one uses the criteria of state-of-the-art and sample size, then even the racial identity subscale with the lowest internal consistency reliability coefficient (Contact= .54) shown in Table 4 should be suitable for describing the rank order of groups of 100 or more most of the time and smaller samples almost two-thirds of the time. Thus, for virtually all of the racial identity studies intended to examine the reliability or validity of the racial identity measures (e.g., Tokar & Swanson, 1991; Ottavi & Pope-Davis, 1994; Swanson et al., 1994), the reported internal consistency reliabilities have been adequate for describing groups according to Thorndike and Hagen's criteria, researchers' admonitions notwithstanding.

Thus, in the construct-validity literature pertaining to racial identity measures (e.g., Ottavi et al., 1994; Tokar & Swanson, 1991; Watts & Carter, 1991), alpha coefficients were used primarily to describe the subscale responses of samples of at least 100 persons. For example, even Tokar and Swanson (1991; Swanson et al., 1994), who contend that their studies demonstrate the inadequate psychometric properties of racial identity measures, used a sample consisting of 309 college students. The alpha coefficients that they obtained were adequate for the group-level statistics that they performed (multiple regressions) according to Thorndike and Hagen's criteria despite Tokar and Swanson's protestations to the contrary.

Of course, one should attempt to construct highly reliable measures, but the procedures for determining reliability should be consistent with the conceptual model on which the measure is based. Moreover, reliability should not replace validity as the indicator of a measure's psychometric merits (Ebel, 1961; Thorndike & Hagen, 1969). In those instances in which researchers obtain low alpha reliability coefficients, they should perhaps use their findings as a catalyst for considering alternative measurement models, or reconsid-

ering the manner in which their data were collected. Moreover, low subscale coefficient alphas combined with evidence of subscale validity (e.g., significant correlations between the subscales and measures external to the identity measures) should serve as an additional catalyst for considering the applicability of one's measurement model and/or sampling procedures.

Scale Correlations

Various researchers have also used subscale intercorrelations to investigate the internal structure of racial identity measures (Ottavi et al., 1994; Swanson et al., 1994; Yanico et al., 1994). In general, subscales developmentally contiguous to one another should be correlated without being completely overlapping. Investigators of the construct validity of the subscales who use multiple regression to predict other personality variables from racial identity have been particularly concerned when moderately to highly correlated scales do not each predict the variables of interest as expected.

In this regard, Tokar and Swanson (1991) found a correlation of .66 between the Pseudo Independence (alpha=.65) and Autonomy (alpha = .71) subscales of the WRIAS. In regression analyses, they found that when Pseudo Independence was used as one of five predictors, it did not uniquely predict any of their criterion measures, but Autonomy significantly predicted inner-directedness or self-acceptance. From such findings, they concluded that "some of the [racial identity] subscale intercorrelations were so high as to suggest redundancy" (p. 299).

Although conclusions concerning redundancy of the subscales are at least debatable, it is also the case that in the absence of correlations of 1.00, correlations may not reveal much about how individuals within the sample respond. In Table 7, the subscales with the correlation between them closest to Tokar and Swanson's "redundant" correlation are Autonomy and Pseudo Independence (r = .66). Table 6 shows that most of the sample (93.5%) uses both of the two schema in statistically equivalent levels, but that approximately 4% uses Autonomy more and approximately 3% uses Pseudo Independence more. Of the two statuses, Autonomy is the more complex cognitively and affectively. Thus, at best a high intersubscale correlation can suggest the extent to which a sample uses two schemata, but it cannot reveal the ordering of the expressions within the sample.

Factor Analyses

In addition to Cronbach's alpha, exploratory factor analyses have also been used to examine the internal structure of the racial identity measures at an item level (Ponterotto & Wise, 1989; Swanson et al., 1994; Yanico et al., 1994). However, three reasons why standard factor analysis may not be the best analytic strategy for investigating Helms and her associates' (Helms & Parham, 1985; Helms & Carter, 1990) subscale items are as follows: (a) Neither racial identity subscales nor racial identity measures in their entirety are intended to be homogeneous or unidimensional; (b) the assumption of linear relationships between variables in factor analysis frequently results in a large number of dimensions (Schiffman, Reynolds, & Young, 1981); and (c) standard factor analysis cannot reveal the ordering (that is, the increasing complexity) of subscales or items within subscales.

In addition, most of the aforementioned problems have been exaggerated because contemporary researchers have performed their analyses on the entire scales rather than the individual subscales. With respect to linear relationships, researchers (e.g., Ponterotto & Wise, 1987) have reported that items reflective of transitional processes (e.g., Dissonance/Encounter) load on the same factors as the items of one or the other adjacent subscales. The general aim of such items is to pull the person in opposing directions. However, in factor analysis, items tend to be "attracted" to the subscale items with which they share the strongest linear relationships, even if those relationships are not very strong. However, such findings do not necessarily mean that nonlinear dimensions could not account for more variance, particularly if the items were analyzed within the context of their separate subscale.

Prochaska, DiClemente, and Norcross (1992) encountered the same problem with respect to continuous items intended to measure a transitional or preparatory stage of mastering addictive disorders. That is, the transitional items disappeared as a separate subscale when principal components analyses were used to examine the construct validity of their measure. They noted that abandonment of their preparatory stage in compliance with the factor analyses led them to disregard an important aspect of their population's behavior. Consequently they recommended that cluster analyses be used to find the transitional stage because such analytic procedures did consistently reveal individuals who could be classified as transitional. Cluster analytic approaches might be more appropriate than standard factor analysis for racial identity measures as well.

Also, the concept of ordering as it is used in racial identity theory may be inadequately assessed by standard factor analysis. Some of the various racial identity information-processing strategies are superficially similar in content, but not in function. For example, the

denial of Contact is similar to the rationalization of Pseudo Independence. Consequently, it would not be surprising to find denial and rationalization items loading on the same factors. Yet clinicians generally consider rationalization to be a more complex mode of reacting than denial. Standard factor analysis cannot reveal this type of differential complexity.

Implications. Much of the existing literature supports the need for alternative strategies for examining the psychometric properties of racial identity scales that purport to be measures involving human judgment or perceptual processes (i.e., process measures). One set of approaches that has not received much attention in the relevant literature, but might be useful in managing the problems of nonlinearity and ordering of items within subscales is multidimensional scaling (e.g., Schiffman et al., 1981). Basically, multidimensional scaling is a statistical approach that allows one to discover the configurations among items as subjects perceive them.

Helms (1990) tried group-level multidimensional scaling to study the psychometric properties of the first 30 items of the BRIAS. She abandoned such efforts for pragmatic reasons (i.e., it was not clear that such approaches could be easily used by practitioners to assess individuals). Nevertheless, she found that four theoretically consistent dimensions accounted for 89% of the variance among items, whereas with four factors, Yanico et al. (1994) could only account for about 20% of the variance among the same items using factor analysis. Thus, this technique seems worthy of further investigation. Moreover, computer programs are now more widely available for performing multidimensional scaling on a person level than they were when Helms first tried the technique for studying racial identity rating-scale measures.

Assessment Issues

Neither the racial identity nor the ethnic identity measurement perspectives has focused much on the issue of assessing relevant constructs for practical as opposed to research (e.g., construct validity) purposes. In the absence of measures of the more psychologically complex aspects of race and culture alluded to earlier, practitioners as well as researchers have had to rely on simplistic indicators of intrapsychic and interpersonal racial and/or cultural dynamics. Thus, the most commonly used "predictor" or "measure" of racial or ethnic identity has been racial or ethnic categories as determined by surnames, self-designation, researcher categorization, and other similarly ambiguous criteria.

In general, researchers and practitioners have noted the sterility of such categorical information for describing racially or culturally related behaviors. Even when researchers (e.g., Hauser, 1972; Phinney, 1990) have used racial or ethnic group categories to compare groups' responses on general identity measures derived from Erikson's psychosocial model, the results have been less than illuminating. Categorical ascriptions per se do not reveal much about a person's intrapsychic processes, cannot discriminate among individuals within groups, and consequently, do not constitute assessment even in the narrow sense that Aftanas (1994) defines the term.

Social cognitive theorists (e.g., Gardner et al., 1988) often use the term "individual differences" to refer to assessment or measurement that occurs on an individual or person level as opposed to a "consensual" or group level. Constructs measured consensually require groups of people to respond in the same directions, whereas individualistic measurement requires description of separate persons. Most of the available racial identity measures have been investigated and interpreted by means of consensual models, which may or may not yield the same kinds of information as would individual-difference models. Nevertheless, it is possible to adapt some principles from consensual models to make racial identity measures more amenable to individual-difference interpretations.

Researchers and practitioners intending to use racial identity measures for diagnostic purposes are generally interested in discovering the extent to which individuals can be differentially described by racial identity schema. For racial identity measures to be useful, especially to practitioners, for understanding and/or communicating with their clientele about racial dynamics, practitioners need to be able to determine which schemas are dominant or recessive for each client.

Profile Error Bands

Helms (1989) recommended that when researchers are using racial identity scores whose psychometric properties have been determined by means of consensual measurement models, racial identity profiles rather than single scores should be used to describe the individual. According to previously discussed theoretical formulations, racial identity statuses (and consequently, schemas) are interrelated. Consequently, reliance on single scores risks discarding important information. Nevertheless, subscales differ in internal consistency and response variability on a consensual level (see Table 4). Therefore, subscale scores of the same numerical value might not be of the same importance in the person's overall profile.

A common adaptation of a consensual approach that is used in personality measurement to evaluate the differential significance of intra-individual subscale scores involves use of the standard error of the difference between two scores (SE_{dif}). The SE_{dif} allows one to consider variations in measurement error (i.e., reliability) between pairs of scores when interpreting intra-individual subscale score differences. It can also be used to determine whether a person's subscale scores, which appear to be different, are significantly different. By using the SE_{dif} profile error bands or ranges can be developed to visually represent significantly different racial identity subscale scores for people on an individual level.

The ranges shown in Table 5 were calculated at the .05 level of significance using the following formula from Anastasi (1982, p. 129):

$$SE_{\text{dif}} = SD\sqrt{2 - r_{xx} - r_{yy}} \times 1.96$$

In this usage, SD is the average standard deviation of the two subscales being compared and r_{xx} and r_{yy} are the respective subscale reliabilities.

Thus, Table 5 shows the minimum number of points by which each pair of scales must differ at the .05 level of significance. The numbers in the diagonals are the number of points by which a subscale score would have to differ from itself, as for example, in a Time 1-Time 2 testing paradigm. In case one does not have Table 5 at hand, if one uses a point spread of 9 points, then one should obtain

Table 5. Point Values For Determining Whether Subscale Scores Differ Significantly

Scale	С	D	R	P	Α
Contact (C)	8.84				
Disintegration (D)	8.33	7.41			
Reintegration (R)	8.57	7.52	7.60		
Pseudo Independence (P)	8.46	7.85	7.10	8.06	
Autonomy (A)	8.40	7.69	7.87	7.97	7.86

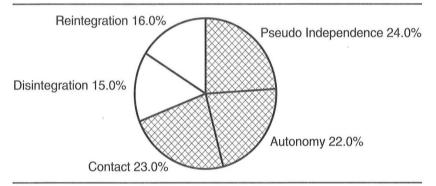
Note. Numbers in diagonal are the minimum amount of points by which scores must differ from themselves to be significant at the .05 alpha level.

a somewhat conservative estimate of whether a person's subscale scores differ from one another at the .05 level of significance.

The reader might wish to use the SE_{dif} point-values shown in Table 5 to estimate the differential strength of individuals' responses, particularly if he or she does not have access to large samples. However, if one does have large samples (e.g., at least 100), then one might wish to calculate local values for comparative purposes.

Figure 1 uses a circular diagram to represent the schema profile bands for a person ("Sam"). The circle is used to emphasize the point

Figure 1. Sam's configuration of scores, C = P = +, is not an uncommon pattern (see Table 8). Moreover, in single-scale comparisons (see Table 6), approximately 36% of respondents had high Contact scores and approximately 34% had high Pseudo-Independence scores.



Scale	Raw Score	Strength	% ile	Comment
Contact	36	High	85	Contact is higher than Disintegration
Disintegration	1 23	Equal	40	Disintegration is lower than Contact and equals Reintegration
Reintegration	25	Low	60	Reintegration equals Disintegration and is lower than Pseudo Independence
Pseudo Independence	38	Equal	80	Pseudo Independence is higher than Reintegration and equals Autonomy
Autonomy	35	Equal	35	Autonomy equals Pseudo Independence and Contact
Total	157			

that although racial identity statuses may be hierarchical in the sense of reflecting ascendingly complex information-processing strategies, they are not hierarchical in the sense that the use of one necessarily precludes use of another. That is, schemas are not mutually exclusive. Proceeding clockwise around the circumference of the circle, beginning with Contact minus Disintegration, successive pairs of subscales were compared to obtain the frequencies shown in Table 6.

Table 6. Differential Frequencies of Strength of Endorsement of Pairs of Contiguous Subscales

Subscale	Strength of Endorsement						
Comparison	Very		High		Equal		
Direction		High					
	f	%	f	%	f	%	
C > D	38	8.6	161	36.3	232	52.4	
D > C	4	.9	8	1.8			
D > R	1	.2	15	3.4	408	92.1	
R > D	3	.7	16	3.6			
R > P	6	1.4	9	2.0	132	29.8	
P > R	147	33.2	149	33.6			
P > A			12	2.7	414	93.5	
A > P			17	3.8			
A > C	6	1.4	77	17.4	355	80.1	
C > A			5	1.1			

Note. Very high scores differ by two or more standard errors; high scores differ by as much as one standard error; equal scores are within one standard error of each other. Scale abbreviations are C=Contact, D=Disintegration, R=Reintegration, P=Pseudo Independence, A=Autonomy.

N=443.

For this sample of 443 respondents, Table 6 shows the frequency distributions of respondents whose hypothesized developmentally adjacent (e.g., Contact versus Disintegration) subscale scores differed by one ("High"), two ("Very High"), or zero ("Equal") standard-error-difference scores. So, for example, each individual's Disintegration score was subtracted from his or her Contact scores to determine which exceeded the point spread shown in Table 5. Thus, if a person's Contact score is between 8.33 and 16.66 points higher than his or her Disintegration score, then the Contact score is "High"; a Contact score at least 16.66 higher is considered "Very High" (see Figure 1). Obviously, in this example, positive scores suggest stronger Contact reactions whereas negative scores suggest stronger Disintegration reactions.

Table 6 shows that for about half of the respondents (52.4%), Contact and Disintegration were expressed equivalently strongly (i.e., within one standard error); for about 44.9%, Contact was expressed one standard error ("High") or at least two standard errors (i.e., "Very High") more strongly than Disintegration, whereas Disintegration was expressed more or much more strongly than Contact for only 2.7% of the respondents.

A general theme evident in Table 6 for this sample is that for four of the five comparisons (Contact vs. Disintegration, Disintegration vs. Reintegration, Autonomy vs. Pseudo Independence, and Autonomy vs. Contact), more than half of the respondents' subscale scores were equivalent (range = 52.4% to 93.5%). In the remaining comparison (Pseudo Independence vs. Reintegration), Pseudo Independence was much higher (33.2%) or higher (33.6%) than Reintegration for almost as many respondents as it was equivalent (29.8%). An implication of these observations for interpreting respondents' scores is that reliance on untransformed raw score comparisons may contribute to misleading conclusions.

It is possible to obtain an individual profile by analyzing the person's five transformed (paired comparisons) scores for clusters, profiles, or patterns. Loglinear analysis was used to obtain the profiles summarized in Table 8. Of course, other clustering techniques could be used to accomplish similar effects. However, in this case, because the high versus very high categories are nominal, loglinear analysis was used to determine the number of combinations of the five (positive very high to negative very high) possible transformations per (pair of) subscale comparisons.

Although 61 (of a possible 5⁵) patterns or combinations of the five transformed-comparison scores occurred, of these, only 13 were de-

Scale	С	D	R	Р	Α	
Contact (C)	-01	-19	-39	53	39	
Disintegration (D)		-08	69	-47	-59	
Reintegration (R)			-03	-45	-51	
Pseudo Independence (P)				-02	66	
Autonomy (A)					-00	

Table 7. Racial Identity Subscale Correlations

Note. Decimals omitted to conserve space. Correlations above the diagonal are intercorrelations among raw subscales. Diagonals are correlations between racial identity subscales and Marlowe-Crowne social desirability scores (M = 5.48, SD = 7.21). All values above the diagonal are significant beyond the .01 alpha level.

scriptive of as many as 10 respondents. Most respondents had comparatively high scores on at least one subscale. However, the most frequently occurring configuration (19.6%) was undifferentiated responding, meaning that none of the scales differed significantly from its neighbors.

In Table 8, the first letter of a subscale is used to indicate that it was the higher of the adjacent-scale comparisons; letters with asterisks equal very high statuses, and equal signs indicate scores were within one standard error of one another. The most frequently occurring configurations with at least 10 respondents are shown in Table 8.

Not shown in Table 8 are 28 singletons (response patterns characteristic of one person) and 11 doublets (response patterns characteristic of two persons). Naturally, scale score differences that occur infrequently in Table 6 also occur infrequently in combinations in Table 8. For example, Autonomy is only very much (two standard errors) higher than Contact for six persons (see Table 6), and four of these people were singletons when their configurations were examined.

Interpreting Response Patterns

Qualitative interpretation of personality profiles is an enduring tradition in personality psychology. Following in this tradition, qualitative interpretations of profiles presumably can be used to assist clients in exploring their own issues of racial adjustment. Thus, some suggestions as to how to use the racial identity schema profile shown in Figure 1 might be useful. The circle is a heuristic device in that it

C vs D	D vs R	R vs P	P vs A	A vs C	f	%
C*	=	P*	=	=	23	5.2
C	=	P*	=	Α	19	4.3
C	=	P*	=	=	56	12.6
C	=	P	=	=	60	13.5
=	=	P*	=	=	17	3.8
=	=	P	=	Α	19	4.3
=	=	P	=	=	52	11.7
=	=	= ,	=	A	10	2.2
=	=	=	=	=	87	19.6

Table 8. Summary of Frequency of Occurrence of White Identity Profile Error Transformations

Note. Racial identity subscale abbreviations are C=Contact, D= Disintegration, R=Reintegration, P=Pseudo Independence, A=Autonomy; higher subscale scores are indicated by the first letter of subscale names. Symbols are = (within one standard error), * (at least two standard errors difference). Only profiles with frequencies of at least 10 (N = 443) are reported.

symbolizes that portion of the ego that the person hypothetically allots herself or himself for the processing of racial stimuli. Thus, in the case of inventory measures of racial identity (e.g., the WRIAS), the total scores might be assumed to symbolize the total space available to the person for responding to racial stimuli. The wedges in the circle are merely the percentages of the total scale score of each subscale. Standard error scores determine whether or not ostensibly different percentages of endorsement represent significantly different schema usage, and wedges that do not differ significantly have the same shading in the figure. Theoretically, total scores (e.g., ego space) could range from 50 to 250 points (i.e., from strong disagreement with all items to strong agreement). In both the case of strong disagreement with all items and strong agreement with all items, such profiles should be discarded for research or assessment purposes because they indicate that the items did not elicit discriminative responses from the respondent. Table 3 shows that for this sample, raw scores actually ranged from 106 to 182. In Figure 1, Sam's total score (the sum of his subscale scores) of 157 is shown on the bottom row. Sam's total score suggests that his profile is probably interpretable.

Ideally, each person should endorse some items strongly and others not so strongly. However, a person with an overall score of 157 could exhibit the same patterns of subscale responses as someone

with a higher overall score. Presumably, it is primarily the subscale patterns rather than single raw subscale scores per se that reflect racerelated behavior because the patterns suggest which schemas are dominant or recessive for the person.

Sam's overall profile can be described as C = P = (that is, Contact and Pseudo Independence were higher by one standard error than their contiguous neighbor to the right). Approximately 14% of the overall sample exhibited this pattern of responding (see Table 6). In Figure 1, Sam's profile does not reveal any strong highs or lows. In fact, visually his racial identity expressions (schemas) are best described by two clusters, one described by Disintegration and Reintegration schemas, and the other described by the other three subscales (Contact, Pseudo Independence, and Autonomy). The Disintegration-Reintegration cluster appears to be a recessive set of schemas for him, whereas the Contact-Pseudo-Independent-Autonomy cluster appears to be dominant. By using the percentile (%ile) column of Sam's profile, one can get a sense of his level of expression of the schema relative to Carter's (chapter 4, this volume) consensual norms.

It is not clear what to make of Sam's profile on either an intrapsychic or consensual level. However, his high Contact and Pseudo Independence schema relative to his other subscale scores suggest that Sam uses a combination of denial, avoidance, and rationalization to cope with racial information (see Table 3). This intrapsychic interpretation is based on theoretical descriptions of Sam's highest schema. As compared to Carter's normative group, Sam also tends to express Contact (85th percentile) and Pseudo Independence (80th percentile) more strongly than most people. However, even though Reintegration is weakly expressed relative to his other schemas, it is relatively strong (60th percentile) when compared to others' expressions of the schema. Thus, again based on theoretical descriptions of the relevant schema, Sam's (presumed) denial and avoidance might be tinged with some elements of own-group superiority and outgroup inferiority.

Also, in interpreting Sam's scores, findings from consensual construct-validity studies of the racial identity variables might be of assistance in forming hypotheses about the meaning of Sam's scores. For example, Tokar and Swanson (1991) found that Contact expressions (in combination with the other racial identity schemas) were uniquely predictive of a weak inner sense of self and difficulty in developing close meaningful relationships with others. Perhaps these personality characteristics also describe Sam's characteristics with respect to members of his own and/or other racial groups. Such hypotheses would certainly be worth a clinician's exploring with him.

Conclusions and Future Research Directions

The primary theme underlying the various sections of this paper is the proposition that different measurement models—or at least more flexible usage of existing models—may be required to establish the psychometric properties of racial and ethnic identity personality inventories. Especially different models may be needed for measures intended to operationalize process models of race or culture than are needed for content models.

An implicit assumption underlying process measures is that each individual's interpretative and judgmental cognitive-affective processes are the real content of such measures. That is, the person's idiosyncratic reactions to items are a part of the measurement process. Much of what is measured by process measures is intrapsychic, and may or may not be linear in expression.

However, where cultural or racial content measures are concerned, domains of relevant values, customs, traditions, external to the person do exist, and the person may use these external criteria to make construct-relevant self-assessments. Therefore, it ought to be possible to use classical measurement theory to construct homogeneous, psychometrically sound measures of content-specific constructs such as the ethnic identity measures discussed previously. Nevertheless, the domain of behavior or other characteristics on which such measures are based rarely has been specified. Moreover, as Phinney (1990) noted, investigators have been somewhat remiss about investigating the psychometric properties of their measures.

Be that as it may, the measurement problems for racial identity process measures and ethnic identity content measures are different. In the case of ethnic identity measures as defined in this paper, many researchers have simply not provided psychometric information about their measures. Yet presumably this oversight could be easily remedied by using standard methods of exploring reliability (e.g., coefficient alpha, test-retest) and validity of measures.

However, in the case of process measures, the resolution of measurement dilemmas might not be so easily accomplished because researchers may have to become accustomed to interpreting summary test scores and items within such scores differently than they have heretofore. In their discussion of achievement tests, Snow and Lohman (1989) make a distinction between "sign-trait" and "sampling" interpretations of such devices that is seemingly applicable to process measures of racial identity. Accordingly, they suggest that those who interpret test scores have tended to regard them as "signs" of some

underlying "trait" rather than as "samples" of the person's relevant mental structures or organizational processes.

When one entertains sampling as an option for explaining individuals' reactions to racial identity items, then a wide array of methodologies become candidates for developing and interpreting measures. In addition, to the alternate strategies discussed in the present paper (e.g., cluster analysis, multidimensional scaling), Snow and Lohman (1989) suggest that "any other method that sorts cognitive tasks [or racial reactions] into categories of closely related (i.e., similarly sampled) performances provides a map to guide further cognitive [affective] psychological analysis" (p. 317).

Presently, researchers seem to be fixated on coefficient alpha, inter-subscale correlations, and factor analysis as the only methodologies for developing racial identity measures and/or judging their effectiveness. This closed-minded perspective frequently has led them to discount their own findings in support of racial identity theory (e.g., Swanson et al., 1994; Yanico et al., 1994). Perhaps the issues raised in this paper can provide some directions for researchers to assess the extent to which their measurement models fit the racial or ethnic identity conceptual model being investigated.

Finally, some examples of the ways in which the racial identity measures might be used to assess respondents' quality of race-related behavior have been proposed. However, more empirical research specifically focused on patterns, profiles, or clusters of racial identity subscales and their relation to other attitudes, emotions, and behaviors is needed. This type of information would enhance the interpretative process by providing practitioners with the kinds of information that could be used to assist clients in their racial identity adjustment.

REFERENCES

Aboud, F. E. (1987). The development of ethnic self-identification and attitudes. In J. S. Phinney & M. J. Rotheram (Eds.), Children's ethnic socialization (pp. 32–55). Newbury Park, CA: Sage Publications.

Aboud, F. E., & Skerry, S. A. (1984). The development of ethnic attitudes: A cultural review. *Journal of Cross-Cultural Psychology*, 15(1), 3–34.

Aftanas, M. S. (1994). On revitalizing the measurement curriculum. *American Psychologist*, 49(10), 889–890.

Alba, R. D. (1990). *Ethnic identity: The transformation of White America*. New Haven: Yale University Press.

Anastasi, A. (1982). *Psychological testing* (5th ed.). New York: Macmillan Publishing Co., Inc.

Atkinson, D. R., Morten, G., & Sue, D. W. (1989). *Counseling American minoroties: A cross-cultural perspective*. Dubuque, IA: Brown.

Atkinson, D. R., & Thompson, C. E. (1992). Racial, ethnic, and cultural variables in counseling. In S. Brown & S. Lent (Eds.), *Handbook of Counseling Psychology* (pp. 349–382). New York: John Wiley & Sons.

Bernal, M. E., Knight, G. P., Garza, C. A., Ocampo, K. A., & Cota, M. K. (1990). The development of ethnic identity in Mexican-American children. *Hispanic Journal of Behavioral Sciences*, 12(1), 3–24.

Betancourt, H., & Lopez, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist*, 48, 629–637.

Birman, D. (1994). Acculturation and human diversity in a multicultural society. In E. J. Trickett, R. J. Watts, & D. Birman (Eds.), *Human diversity: Perspectives on people in context* (pp. 261–284). San Francisco, CA: Jossey-Bass.

Brown, S. D., & Gore, P. A. (1994). An evaluation of interest congruence indices: Distribution characteristics and measurement properties. *Journal of Vocational Behavior*, 45, 310–327.

Bulhan, H. A. (1980). Dynamics of cultural in-betweenity: An empirical study. *International Journal of Psychology*, 15, 105–112.

Burlew, A. K., & Smith, L. R. (1991). Measures of racial identity: An overview and a proposed framework. *The Journal of Black Psychology*, *17*(2), 53–71.

Casas, J. M. (1984). Policy, training and research in counseling psychology: The racial/ethnic perspective. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (pp. 785–831). New York: Wiley.

Corbett, M. M. (1994). *The relationship between White racial identity and narcissism*. Unpublished doctoral dissertation. College Park, MD: University of Maryland.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.

Cross, W. E., Jr. (1971). The Negro-to-Black conversion experience: Toward a psychology of Black liberation. *Black World*, 20(9), 13–27.

Cuellar, I., Harris, L. C., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavioral Sciences*, 2, 199–207.

Cureton, E. E. (1967). The definition and estimation of test reliability. In W. A. Mehrens & R. L. Ebel (Eds.), *Principles of educational and psychological measurement* (pp. 167–186). Chicago, IL: Rand McNally and Co.

Dawis, R. (1987). Scale construction. *Journal of Counseling Psychology*, 34, 481–489.

DeVellis, R. F. (1991). *Scale development: Theory and Applications*. Newbury Park, CA: Sage Publications.

Ebel, R. L. (1961). Must all tests be valid? *American Psychologist*, 16, 640–647.

Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York: Norton.

Erikson, E. H. (1966/1976). The concept of identity in race relations: Notes and queries. *Daedalus*, 95, 145–171. (Reprinted in A. Dashefsky (Ed.), *Ethnic identity in society* (pp. 59-71). Chicago: Rand McNally College Publishing Company.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton. Erikson, E. H. (1975). *Life History and the historical moment*. New York: Norton.

Feagin, J. R. (1984). *Racial and ethnic relations* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

Freud, S. (1959). Address to the Society of B'nai B'rith. Cited in A. Dashevsky (Ed.), *Ethnic identity in society* (p. 62). Chicago: Rand McNally.

Gardner, R. C., Lalonde, R. N., Nero, A. M., & Young, M. Y. (1988). Ethnic stereotypes: Implications of measurement strategy. *Social Cognition*, *6*, 40–60.

Gordon, M. (1976). The subsociety and the subculture. In A. Dashefsky (Ed.), *Ethnic identity in society* (pp. 25–35). Chicago: Rand McNally College Publishing Company.

Gotunda, N. (1991). A critique of "Our Constitution is colorblind." *Stanford Law Review*, 44, 1–69.

Graham, J. R., & Lilly, R. S. (1984). *Psychological testing*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Green, S. B., Lissitz, R. W., & Mulaik, S. A. (1977). Limitations of coefficient alpha as an index of test unidimensionality. *Education and Psychological Measurement*, 37(4), 827–838.

Hacker, A. (1992). Two nations: Black and White, separate, hostile, unequal. New York: Charles Scribner's Sons.

Hardiman, R. (1982). White identity development: A process oriented model for describing racial consciousness of White Americans. Unpublished doctoral dissertation, University of Massachusetts, Amherst.

Hauser, S. T. (1972). Black and White identity development: Aspects and perspectives. *Journal of Youth and Adolescence*, 1, 113–130.

Helms, J. E. (1984). Toward a theoretical explanation of the effects of race on counseling. *Counseling Psychologist*, 12, 153-165.

Helms, J. E. (1986). Expanding racial identity theory to cover the counseling process. *Journal of Counseling Psychology*, 33, 62–64.

Helms, J. E. (1989). Considering some methodological issues in racial identity counseling research. *The Counseling Psychologist*, 17, 227–252.

Helms, J. E. (1990a). Black and White racial identity: Theory, research, and practice. New York: Greenwood Press.

Helms, J. E. (1990b). Three perspectives on counseling and psychotherapy with visible racial/ethnic group clients. In F. C. Serafica, A. I. Schwebel, R. K. Russell, P. D. Isaac, & L. B. Myers (Eds.), *Mental health of ethnic minoroties* (pp. 171–201). New York: Greenwood Press.

Helms, J. E. (1992). A race is a nice thing to have: A guide to being a White person or understanding the White persons in your life. Topeka, KS: Content Communication.

Helms, J. E. (1994a). How multiculturalism obscures racial factors in the therapy process: Comment on Ridley et al. (1994), Sodowsky et al. (1994), Ottavi et al. (1994), and Thompson et al. (1994). *Journal of Counseling Psychology*, 41, 162–165.

Helms, J. E. (1994b). The conceptualization of racial identity and other "racial" constructs. In E. J. Trickett, R. J. Watts, & D. Birman (Eds.), *Human diversity: Perspectives on people in context* (pp. 285–311). San Francisco, CA: Jossey-Bass.

Helms, J. E. (in press). An update of Helms's racial identity models. In J. Ponterotto, L. Suzuki, & C. Alexander (Eds.), *Handbook of multicultural counseling*. Newbury Park, CA: Sage Publications.

Helms, J. E. & Carter, R. T. (1990). Development of the White Racial Identity Attitude inventory. In J. E. Helms (Ed.), *Black and White racial identity: Theory, research, and practice* (pp. 67-80). Westport, CT: Greenwood Press.

Helms, J. E., & Carter, R. T. (1991). Relationships of White and Black racial identity attitudes and demographic similarity to counselor preferences. *Journal of Counseling Psychology*, *38*, 446-457.

Helms, J. E., & Cook, D. A. (in press). *Using race and culture in counseling and psychotherapy: Theory and process.* Fort Worth, TX: Harcourt-Brace.

Helms, J. E. & Parham, T. A. (1985). *The development of the racial identity attitude scale.* Unpublished paper. [Available from R. Jones, Psychology Department, Hampton University, Hampton, Va.]

Helms, J. E., & Piper, R. E. (1994). Implications of racial identity theory for vocational psychology. *Journal of Vocational Behavior*, 44, 124–138.

Hutnik, N. (1991). Ethnic minority identity: A social psychological perspective. Oxford: Clarendon Press.

Jackson, F. (1992). Race and ethnicity as biological constructs. *Journal of Ethnicity and Disease*, 2(2), 120–125.

Johnson, S. D. (1987). "Knowing that" vs. "knowing how": Toward achieving expertise in multicultural training for counseling. *The Counseling Psychologist*, 15(2), 320–331.

Katz, J. (1985). The sociopolitical nature of counseling. *The Counseling Psychologist*, 13, 615–624.

Kunkel, M. A. (1990). Expectations about counseling in relation to acculturation in Mexican-American and Anglo-American student samples. *Journal of Counseling Psychology*, 37, 286–292.

Landrine, H., & Klonoff, E. (1994). The African American Acculturation Scale. *Journal of Black Psychology*, 20, 104–127.

Lyman, H. B. (1978). *Test scores and what they mean* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Marlowe, D., & Crowne, D. P. (1961). Social desirability and response to situational demands. *Journal of Consulting Psychology*, 25, 109–115.

Meijer, C. E. (1993). White racial identity development and responses to diversity in an introduction to psychology course and curriculum. Unpublished doctoral dissertation. University of Maryland, College Park, MD.

Milliones, J. (1980). Construction of a Black consciousness measure: Psychotherapeutic implications. *Psychotherapy: Theory, Research, and Practice,* 17(2), 175–182.

Morris, W. (1975). American heritage dictionary of the English language. Boston: Houghton Mifflin.

Myers, L. J., Speight, S. L., Highlen, P. S., Cox, C. I., Reynolds, A. L., Adams, E. M., & Hanley, C. P. (1989). Identity development and worldview: Toward an optimal conceptualization. *Journal of Counseling and Development*, 70, 54–63.

Nunnally, J. C. (1978). *Psychometric theory*. St. Louis: McGraw. Ottavi, T. M., Pope-Davis, D. B., & Dings, J. G. (1994). Relationship between White racial identity attitudes and self-reported multicultural competencies. *Journal of Counseling Psychology*, 41, 149–154.

Padilla, A. M. (1980). The role of cultural awareness and ethnic loyalty in acculturation. In A. M. Padilla (Ed.), Acculturation: Theory, models, and some new findings (pp. 47-84). Boulder, CO: Westview.

Parham, T. A., & Helms, J. E. (1981). The influence of Black students' racial identity attitudes on preferences for counselor's race. *Journal of Counseling Psychology*, 28, 250-257.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, 108, 499–514.

Ponterotto, J. G., & Wise, S. L. (1989). Construct validity of the Racial Identity Attitude Scale. *Journal of Counseling Psychology*, 34, 218–223.

Ponterotto, J. G., & Wise, S. L. (1987). A construct validity study of the Racial Identity Attitude Scale. *Journal of Counseling Psychology*, 34, 218-223.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist*, 47(9), 1102–1114.

Regan, A. M. (1992). Search and commitment processes in White racial identity formation. Unpublished doctoral dissertation. University of Maryland, College Park, MD.

Remy, L. A. (1993). White racial identity: White college students' definition of self in relation to African-Americans, Hispanics, and Asian-Americans. Unpublished Masters thesis. University of Maryland, College Park, MD.

Rest, J. R. (1979). *Revised manual for the Defining Issues Test*. Minneapolis: Moral Research Projects, University of Minnesota.

Rowe, W., Bennett, S. K., & Atkinson, D. R. (1994). White racial identity models: A critique and alternative proposal. *Counseling Psychologist*, 22, 129–146.

Ruiz, R. A., & Padilla, A. M. (1977). Counseling Latinos. *Personnel and Guidance Journal*, 55, 401–408.

Sabnani, H. B., Ponterotto, J. G., & Borodovsky, L. G. (1991). White racial identity development and cross-cultural counselor training: A stage model. *Counseling Psychologist*, 19, 76–102.

Scarr, S. (1981). *Race, social class, and individual differences in I.Q.* Hillsdale, NJ: Lawrence Erlbaum.

Schiffman, S. S., Reynolds, M. L., & Young, F. W. (1981). *Introduction to multidimensional scaling*. Orlando: Academic Press.

Shibutani, T., & Kwan, K. M. (1965). *Ethnic stratification*. New York: Macmillan.

Snow, R. E., & Lohman, D. F. (1989). Implications of cognitive psychology for educational measurement. In R. L. Linn (Ed.), *Educational Measurement* (3rd ed.). New York: Macmillan.

Speight, S. L., Myers, L. J., Cox, C. I., & Highlen, P. S. (1991). A redefinition of multicultural counseling. *Journal of Counseling and Development*, 70, 29–36.

Spikard, P. R. (1992). The illogic of American racial categories. In M. P. P. Root (Ed.), *Racially mixed people in America* (pp. 12–23). Newbury Park, CA: Sage Publications.

Stonequist, E. V. (1937). *The marginal man*. New York: Scribner. Sue, S. (1992). Ethnicity and mental health: Research and policy. *Journal of Social Issues*, 48, 187–205.

Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: An initial report. *Educational and Psychological Measurement*, 47, 401–407.

Swanson, J. L., Tokar, D. M., & Davis, L. E. (1994). Content and construct validity of the White Racial Identity Attitude Scale. *Journal of Vocational Behavior*, 44, 198–217.

Szapocznik, J., Scopetta, M. A., Kurtines, W., & Aranalde, M. D. (1978). Theory and measurement of acculturation. *Inter-American Journal of Psychology*, 12, 113–130.

Tajfel, H. (1978). *The social psychology of minorities*. London: Minority Rights Group.

Takaki, R. (1993). *A different mirror: A history of multicultural America*. Boston: Little, Brown and Company.

Thomas, C. (1971). *Boys no more*. Beverly Hills: Glencoe Press. Thorndike, R. L., & Hagen, E. (1969). *Measurement and evaluation in psychology and education*. New York: John Wiley & Sons.

Tokar, D. M., & Swanson, J. L. (1991). An investigation of the validity of Helms's (1984) model of White racial identity development. *Journal of Counseling Psychology*, 38, 296–301.

Triandis, H. C. (1994). *Culture and social behavior*. New York: McGraw-Hill, Inc.

Vontress, C. E. (1971). Racial differences: Impediments to rapport. *Journal of Counseling Psychology*, 18, 7–13.

Walsh, W. B., & Betz, N. (1985). *Tests and assessment*. New Jersey: Prentice-Hall, Inc.

Watts, R. J., & Carter, R. T. (1991). Psychological aspects of racism in organizations. *Groups and Organization Studies*, 16, 328–344.

Winston, R. B., Jr., Miller, T. K., & Prince, J. S. (1979). Assessing student development. Athens, GA: Student Development Associates.

Yanico, B. J., Swanson, J. L., & Tokar, D. M. (1994). A psychometric investigation of the Black Racial Identity Attitude Scale—Form B. *Journal of Vocational Behavior*, 44, 218–234.

Yee, A. H., Fairchild, H. H., Weizmann, F., & Wyatt, G. (1993). Addressing psychology's problems with race. *American Psychologist*, 48, 1132–1140.

Zuckerman, M. (1990). Some dubious premises in research and theory on racial differences. *American Psychologist*, 45(12), 1297–1303.