A DAY IN THE LIFE OF AFRICAN AMERICAN AND EUROPEAN AMERICAN
COLLEGE STUDENTS:
DAILY AFFECTIVE EXPERIENCE AND PERCEPTIONS OF CLIMATE AT A
PREDOMINANTLY WHITE INSTITUTION

by

Nancy Adair Birk

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education)
in the University of Michigan
2009

Doctoral Committee:

      Professor Patricia M. King, Chair
      Professor Norbert Schwarz
      Associate Professor Deborah F. Carter
      Associate Professor Kai Schnabel Cortina

DEDICATION

This is for the remarkable women whose love and strength nourished me:

Katherine Green Naylor

Nancy Jester Calvin

Kathryn Ann Calvin

things weren't going so well. Co-workers were similarly supportive, understanding when I arrived at work deeply exhausted from late nights spent analyzing data. A special thanks goes to Judy Birk, who was very supportive of my need to attend to the business of completing a dissertation, and to Chuck Kowalski, who patiently talked me through various methodological issues.

I want to offer a very special note of thanks to Lingling Zhang, statistical guru at CSCAR, who served as a patient mentor, teacher, and ultimately, friend. I absolutely could not have managed to complete this study without her. I looked forward not only to our discussions about the study, but also our other conversations about our families and our lives. Lingling is a remarkable teacher.

To each of you, although I know my words are highly inadequate, thank you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ABSTRACT

A DAY IN THE LIFE OF AFRICAN AMERICAN AND EUROPEAN AMERICAN
COLLEGE STUDENTS:
DAILY AFFECTIVE EXPERIENCE AND PERCEPTIONS OF CLIMATE AT A
PREDOMINANTLY WHITE INSTITUTION

by

Nancy Adair Birk

Chair: Patricia M. King

In the context of the under-representation of African Americans in higher
education and the lawsuits targeting affirmative action policies in college admissions, the
purpose of this study was to examine the daily affective experiences of African American
and European American students at a predominantly White institution, exploring the
activities to which they devote their time, the people with whom they interact, and the
emotions accompanying these experiences, contrasting this with their perceptions of
campus racial climate. A sample of 268 students participated in the study, completing the
Day Reconstruction Method (DRM), an episodic measure of daily affective experience

(Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004a), and a global assessment of campus climate.

Several key findings emerged from this research. On the global measure, African Americans expressed unfavorable views of the campus climate, but no race differences emerged regarding their daily affective experiences on the DRM. Women reported positive scores on the global measure, but greater negativity in daily experiences on the DRM. Interactions with others of a different race produced more negativity than when the partner was of the same race. Differences in time allocation were few by race, but more plentiful by gender. Women spent more time than men in academic activities and in goal-oriented activities. Men reported more time than women to different-race interactions and to activities with a tangible benefit.

This study highlighted the importance of careful consideration of measurement in assessing the experiences and attitudes of college students. Because it does not draw upon direct experience, global measurements of climate may introduce bias into data that can lead to errors in interpretation and in policy. The findings from this research are not intended to discourage the use of global measurements per se, but rather to promote greater attention to the potential for bias often found with global instruments and to encourage the combination of episodic and global measures wherever feasible. The results of this study provide a more comprehensive picture of the ways in which college students experience the campus.

CHAPTER 1

AFRICAN AMERICANS IN HIGHER EDUCATION

Educational credentials play a pivotal role in the social and economic mobility of individuals in the United States, affecting access to resources that in turn may be passed on to subsequent generations (Hattery & Smith, 2007). Increasingly, a baccalaureate degree has become a fundamental antecedent to this mobility (Transitions to College Project, 2005). The rewards of higher education are both tangible and intangible, and benefit not only the individual but society as a whole (Baum & Ma, 2007). For example, some of the advantages associated with higher education include increased income (Baum & Ma, 2007; Leslie & Brinkman, 1988; Perna, 2007), enhanced moral reasoning (Bowen, 1997), improved health (Baum & Ma, 2007), and even greater longevity (Baum & Ma, 2007).

Although rising college enrollments in the U.S. reflect a growing acceptance of the importance of postsecondary education in social and economic self-determination, contemporary American higher education continues to be characterized by nearly ubiquitous under-representation of African American students both in terms of enrollment and graduation rates, relative to their overall representation in the eligible population (Carter, 2006; Nettles, 1990; Perna, 2005; Perna, Milem, Gerald, Baum, Rowen, & Hutchins, 2006; Solorzano, 1992; Swail & Perna, 2002; Thomas, 1992; Tierney, 1992; Turner, Myers, & Creswell, 1999). Although students of color have made

significant gains in college enrollment in the last 50 years, a recent report released by the

American Council on Education (ACE) found that enrollments of African American

students continue to lag significantly behind their European American counterparts (ACE

Annual Status Report, 2006). During the period 1997-2007, a time frame that

encompasses the Supreme Court rulings on the use of affirmative action in college

admissions and the passage of Proposition 2 in Michigan banning consideration of race in

admissions, seven of the highest-ranked universities posted decreases in African

American first-year enrollments, the most significant of which were found at the

University of California system and followed by the University of Michigan. At the

University of Michigan, decreases in African American enrollments had already begun

even before the Supreme Court's decision, but the drop following the 2003 rulings was

considerable, from 9 percent in 2001 to 5.6 percent in 2007 ("A Ten-Year Review of

Black Freshman Enrollments," 2007/2008; Perry, 2007).

An educational pipeline has been advanced as a metaphor to describe this under-

representation, with "leakage" points at which large numbers of minority students are lost

(Astin, 1982; Perna, 2007; Solorzano, 1992). To illustrate, in the mid-1990s the

percentage of African Americans in the U.S. population aged 18-24 was approximately

14.3%, yet fewer than 8% of all bachelor's degree recipients during that period were

African American (Swail & Perna, 2002). This trend shows little sign of abatement, with

the percentage of African Americans receiving bachelor's degrees in 2004-05 at 8.7% of

the total, according to the *ACE 22nd Annual Status Report* (2007). The disparity in

enrollment is even more pronounced for graduate and professional programs, particularly

in the wake of the Supreme Court rulings regarding affirmative action in 2003 and the

passage of laws such as Proposition 2 in Michigan (Rothstein & Yoon, 2006; Sander, 2004). This under-representation may ultimately affect the meaningful participation of minority groups in all sectors of American society, supporting the ongoing social and economic stratification of American society by race and ethnicity (Astin, 1982; Hattery & Smith, 2007; Perna, 2007; Rhodes, 2001; Thomas, 1992).

Scholars have generated copious explanations for the under-representation of African Americans in higher education (Gurin, Miller, & Gurin, 1980; Herrnstein & Murray, 1994; Hochschild, 1995; Jensen, 1969; Ogbu, 1994; Orr, 2003; Steele, 1997; Wilson, 1979). Classes of theories focusing on issues of identity, socioeconomic status, and biological differences between racial and ethnic groups have been advanced in explanation, reflecting the beliefs of the eras in which they were crafted. Whatever the causes, the climate of American higher education as a whole reflects a legacy of exclusion (Chang, Witt, Jones, & Hakuta, 2003). Historically, although the civil rights movement and subsequent legislation (for example, Title VI of the Civil Rights Act of 1964) opened doors that had previously been firmly closed to many, the ongoing under-representation of African Americans in higher education is an indicator of unresolved issues around race (Hurtado, 1996).

Climate is reflected in the observable policies, practices, routines, and behaviors on college campuses that have historically served students of the majority and is most keenly felt at the intersection of student and institutional characteristics (Chavous, 2005; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998). Hurtado et al. (1998) conceptualize climate as contexts shaped by external forces (such as government policies, programs, and initiatives) and internal forces (including social and historical influences), focusing

3

on the institutional legacy of inclusion or exclusion of groups, the numerical

representation of various groups within the campus population (structural diversity),

relationships among different campus groups, and perceptions of attitudes between and

among groups as critical forces in creating climate. For African American college

students, especially men, racial discrimination is an oft-reported element of the climate of

higher education (Banks & Kohn-Wood, 2007; Biasco, Goodwin, & Vitale, 2001;

D'Augelli & Herschberger, 1993; Davis, 2004; Sellers & Shelton, 2003; Sidanius, Levin,

van Laar, & Sears, 2008), while European American students tend to view relationships

among different groups on campus in a more positive light (Chavous, 2005). An

institutional commitment to an environment that supports diversity may serve to reduce

tensions among students of differing racial and ethnic backgrounds, however (Hurtado,

1996).

Leaders of American institutions of higher learning and policymakers have made

earnest attempts to overcome educational inequities through interventions such as efforts

to reduce the financial barriers associated with college attendance (Perna, 2007). And yet

climate concerns persist because the strategies commonly employed (e.g., enrolling

higher numbers of minority students while maintaining Eurocentric values, practices, and

policies) have in some cases actually contributed to increased discord on campus (Feagin,

1992; Feagin, Vera, & Imani, 1996; Hurtado, 1996; Hurtado, Carter, & Kardia, 1998;

Schwartz & Washington, 1999). Ineffective efforts to correct educational inequities may

create frustration on the part of educators and a sense of alienation on the part of students,

conditions that are hardly conducive to higher learning. In spite of these efforts, Foster

(2005) argues that institutions of higher education are inherently racist, and that race

continues to play an important role in American life and culture. He speaks of institutional racism, defining it as the "collective effect of acts, policies, unwitting prejudice, and the invocation of stereotypes that sustain an atmosphere which is hostile to the full participation and success of racial minorities" (Foster, 2005, p. 494). Perceptions of a hostile climate as described by Foster may serve as disincentive to investment in campus life and academic pursuits, in negative student development outcomes, and potentially in early departure (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999).

Climate, Well-being, and Time Use

The climate in which students live and work may be related to their well-being (Diener, 2000; Kahneman, Diener, & Schwarz, 1999; Kim-Prieto, Diener, Tamir, Scollon, & Diener, 2005; Schimmack, 2003), in turn affecting the quality of their participation in higher education and subsequent academic achievement. A long line of researchers has argued that individuals who feel a sense of congruence between their personal values and the climate of the environment in which they are immersed are more likely to demonstrate greater commitment and perseverance, even in the face of challenge (Diener & Lucas, 1999; Diener, Sandvik, Pavot, & Fujita, 1992; Holland, 1966; Lewin, 1936; Lydon & Zanna, 1990; Pervin, 1968; Stern, 1970; Strange, 1991; Strange & Banning, 2001; Suh, 1999).

Well-being is a composite of people's evaluations of their lives, including affective and cognitive judgments (Diener, Suh, Lucas, & Smith, 1999). It is subjective in the sense that individuals make judgments about quality of life that are likely to be independent of more objective or quantifiable measures such as income. The notion of adaptation is a key element in subjective well-being (SWB) (Diener & Oishi, 2005). For

example, the happiness of lottery winners was found to be roughly equivalent to that of a control group after a period of adjustment, and not much greater than that of a group of paraplegics (Brickman, Coates, & Janoff-Bulman, 1978). Recent research found the effect of income on happiness to be fleeting, becoming insignificant at a certain level (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2006); in fact, a materialistic orientation tends to result in diminished subjective well-being (Kasser, 2002). Brickman and Campbell (1971) refer to this adaption as a *hedonic treadmill.* This notion has received extensive empirical support (Brickman et al., 1978; Duncan, 1975; Easterlin, 1974; Inglehart & Klingemann, 2000; Kahneman, 1999). The example of a lottery winner whose level of happiness is sharply increased at receiving the funds but returns to previous levels of happiness within a year of the winnings illustrates the hedonic treadmill hypothesis.

How people allocate their time is closely connected to subjective well-being (SWB). For instance, college students with little money may be forced to spend much of their time working to meet basic needs, with little time left over for academics or social engagements, while those with more disposable income can spend more of their time engaged in academics or other activities that are personally satisfying. This time allocation may be driven by physiological, psychological and cultural demands, contributing to overall evaluations of well-being (Gershuny & Halpin, 1996; Hyun, 1986). Crocker, Luhtanen, Cooper, and Bouvrette (2003) argued that time use can be predicted by life domains in which self-worth is particularly vested, such as the student who spends many hours studying because her self-construals hinge in large measure upon her academic performance. Dow and Juster (1985) argued that every activity in which we

engage has the potential to evoke pleasant or unpleasant sensations, leading to *process well-being* or the affective consequences of spending time in particular ways. The affect associated with the allocation of time may vary considerably across individuals. For example, some college students may devote a significant portion of time to academic pursuits, while others may commit large amounts of time to social pursuits; both may experience SWB in equal measure. The duration of various episodes can be an important characteristic of the outcome of interest (Kahneman, 1999), such as perceptions of campus climate.

Climate and Diversity Press

Diversity in a college environment has received a great deal of attention in recent years, as the nation's highest courts have debated the use of race-conscious admissions policies in higher education. The aspect of diversity that has been of primary focus by many is *structural diversity*, or the numerical representation of groups of people from diverse backgrounds (Gurin, Dey, Gurin, & Hurtado, 2003), also termed *compositional diversity* (Milem, Chang, & Antonio, 2005). Proponents of structural or compositional diversity argue that students cannot receive an education that prepares them to live in a diverse society if the student body and faculty of their institutions are themselves not diverse (Chang et al., 2003). Jayakumar (2008) highlighted the positive influence structural diversity can have on students, noting the positive relationship with a positive racial climate and increased intergroup communications, especially for European American students from segregated pre-college backgrounds. There is more to diversity than simply counting the numbers, however. Chang (1996) found the benefits of structural diversity to be limited without a concomitant commitment to fostering positive

7

intergroup relationships. Similarly, Sidanius et al. (2008) argued that increased exposure to diverse groups must occur in tandem with an enhanced appreciation for groups' histories and cultures, leading to improved intergroup relationships.

Kuh and Umbach (2005) defined diversity as the "probability that a student will interact with a student of another race" (p. 16). This view acknowledges the numerical representation of groups as a given, focusing on the relationships among people and taking into account the institution as well. Kuh and Umbach (2005) concentrate on the institutional climate for diversity, which includes students' perceptions that people with different backgrounds are valued, finding that a positive institutional climate for diversity – or *diversity press* – is related to student engagement measures and student outcomes. Engberg (2004) advanced a concept that could be considered an outcome of diversity press, *pluralistic orientation*, in which individuals are able to take on the perspectives of others, remaining open to different beliefs, and able to negotiate difficult or sensitive issues.

According to the Association of American Colleges and Universities (AAC&U) in its report, *Greater Expectations* (2002), exposure to others holding diverse beliefs, values, and customs contributes to a larger purpose of college education, namely, expanding the mind and opening it to new possibilities. A study of mission statements of selected liberal arts colleges demonstrated an overwhelming commitment to academic excellence through an understanding of diverse perspectives (Gudeman, 2000). This commitment to diversity is predicated on the idea that the existence of a diverse student body (structural or compositional diversity) expands the range of perspectives collectively held by those students, subsequently creating an atmosphere that is

conducive to the intellectual exploration intrinsic to higher education (Chang, 2005). This "diversity rationale," articulated by Supreme Court Justice Powell in the landmark case, *Regents of the University of California v. Bakke* (1978), has served as the cornerstone of race-conscious admissions practices at selective universities for over 25 years and was reaffirmed by Justice O'Connor in the University of Michigan's case regarding law school admissions policies (*Grutter,* 2003).

Focusing on student outcomes, Gurin, Dey, Hurtado, and Gurin (2002) noted the considerable role student diversity can play in the overall psychosocial and intellectual development in young adults. Interaction with diverse peers may prompt students to reexamine personal beliefs and values in light of exposure to alternative perspectives. King and Shuford (1996) argued that a multicultural view requires greater cognitive complexity. Similarly, other scholars have identified a linkage between diverse learning environments and enhanced critical thinking (Antonio, Chang, Hakuta, Kenny, Levin, & Milem, 2004; Chang, 1996; Gurin, 1999; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996; Pascarella, Palmer, Moye, & Pierson, 2001; Pascarella, Whitt, Nora, Edison, Hagedorn, & Terenzini, 1996). More recently, researchers found that diversity within college housing had a positive impact on racial attitudes, while membership in groups defined by race tended to produce negative racial attitudes and increases in feelings of victimization for both African American and European American students (Sidanius et al., 2008). Similarly, Jayakumar (2008) found the structural diversity of a college campus had a strong indirect effect on cross-racial interaction in college and post-college cross-cultural workforce competencies, particularly if the campus racial climate was perceived in a positive light.

We can therefore see how the diversity press of a college campus – the positive institutional climate for diversity - might shape student perceptions of that environment, taking into account the complex interaction of student experiences and background and institutional features (Cabrera et al., 1999). The presence of a diverse student population, in tandem with an institutional ethos that actively promotes positive intergroup interactions, may contribute to positive student outcomes (Gurin, Dey, Hurtado, & Gurin, 2002). Moreover, it appears that exposure to diverse experiences and viewpoints can influence the ease with which individuals manage change in general (Chang, 2001; Sidanius et al., 2008). Such positive outcomes, in turn, are assumed to contribute to academic success and, ultimately, student persistence (Bean & Eaton, 2000).

The Influence of Methodology in the Study of Campus Climate

Studies examining the perceptions of climate by college students tend to rely almost exclusively on measures that assess global attitudes and experiences, with little attention to the underlying cognitive operations required to respond to such instruments. Global measures tend to ask sweeping questions regarding overall attitudes and behaviors, which may lead to inaccuracy or distortions in responses, as well as overgeneralizations (Belli, 1998). For example, Gilliard (1996) examined factors affecting the success of African American students at predominantly White institutions based on a survey utilizing broad questions such as, "How do you think the racial climate on this campus compares to that at other predominantly White colleges and universities you have heard about?" (p. 212). Measures of life satisfaction often ask questions such as the following: "Taking all things together, how would you say things are these days?" (Schwarz & Strack, 1999, p. 63). Questions such as these require mental heuristics that

may render findings questionable, eliciting responses based on idealized beliefs or some idiosyncratic standard of comparison. Accuracy in reporting depends upon a complex interaction of variables that Belli (1998) identified to include "frequency, similarity, and regularity of events, the length of the retention interval, the use of closed or open-ended questions, and whether respondents engage in enumeration or estimation processes" (p. 384), an assertion supported by other scholars (Menon, 1994; Schwarz, Hippler, & Noelle-Neumann, 1994).

Survey methodologists utilize the understandings of cognitive science, which focus on the way people learn, remember, and report information, all of which may significantly affect survey data (Kahneman, 1999; Schwarz & Sudman, 1994). The structure and function of autobiographical memory are topics of considerable debate, but most scholars agree that distortions of memory can compromise survey data (Brewer, 1994). For example, the nature of survey questions as well as the length of time available to survey respondents in the recall effort may affect the choice of strategies for memory retrieval. Surveys may induce individuals to retrieve both *episodic* memories (direct memories of an experience) and *semantic* memories (generic knowledge about an experience), both of which are qualitatively different forms of self-knowledge (Klein, German, Cosmides, & Gabriel, 2004; Robinson & Clore, 2002; Tulving, 1972). In addition, respondents typically base their answers on information that is most accessible in memory at the time they are surveyed, rather than on the entire range of information needed to accurately respond (Schwarz & Strack, 1999). In spite of considerable evidence to the contrary, most respondents express confidence in their ability to accurately recall

and report their attitudes and experiences (Gorin & Stone, 2001; Schwarz & Oyserman, 2001; Tourangeau, Conrad, Arens, Fricker, Lee, & Smith, 2006).

In addition to concerns about memory distortion, other issues may strongly color responses to survey questions (Sudman & Bradburn, 1982). Global assessments require individuals to make evaluative judgments constructed upon standards that may be strongly influenced by social desirability concerns. In other words, individuals may compare their own responses to some standard they feel is typical or desirable, thus introducing bias (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004a). Formatting of the survey also plays a significant role, as seemingly trivial changes in question wording and response format can induce major changes in responses (Schwarz, 1999). For example, *assimilation effects* are said to occur when preceding questions bring information to mind that respondents would normally not consider (Schwarz & Strack, 1999). Schwarz, Strack, and Mai (1991) found that varying the order in which questions were asked created stronger correlations between marital and life satisfaction. The manner in which researchers approach the task of gathering information therefore can play a strong role in the data that are gathered.

Researchers have expressed an interest in refining such measures through episodic assessments, also referred to as experience sampling (Gorin & Stone, 2001; Stone, Shiffman, & DeVries, 1999). This is a method in which participants going about their daily lives are prompted at various points to record their experiences and feelings on some characteristic of interest. Episodic assessment has its foundation in the study of well-being (Kahneman et al.,1999; Schimmack, 2003). Kahneman et al. (2004a) compared global assessments of life in general to actual daily experiences, and have

found the relationship between global and episodic judgments to be modest (r=0.38). Episodic assessment attempts to examine attitudes and behavior in "real time," as they are experienced, in order to limit the "noise" or distortions of memory that commonly occur with global measures. Such noise may include the tendency for respondents to rely on their affective state or current mood when presented with complex questions of general life satisfaction (Schwarz & Strack, 1991). Moreover, measures of emotion occurring in real time maximize validity and accuracy (Larsen & Fredrickson, 1999). These experiences can then be aggregated across time for individuals, and frequently across individuals in order to help researchers better understand the attitude or experience of interest.

Drawing upon event history calendars and time-budget methodology (Axinn, Pearce, & Ghimire, 1999), the Day Reconstruction Method (DRM) was developed by researchers who wanted to reap the benefits of episodic assessment without the associated respondent burden (Kahneman et al., 2004a). It assumes that participants are able to reliably reconstruct events of the previous day with relative accuracy and little of the associated distortion that tends to accompany global measures of attitudes and experience. The DRM allows for measurement of both positive and negative affect across people and situations, taking the situation of interest (e.g., interactions with peers, interactions in the classroom) as the unit of analysis (Kahneman, 1999; Kahneman et al., 2004a). In this way, distortions and bias are considerably reduced. The DRM is not a measure of campus climate per se, but can be used to understand the emotions connected to daily student experiences on a college campus.

Purpose of the Study

The purpose of this study is to examine the daily affective experiences of African American and European American students at a predominantly White institution (PWI[1]), exploring the activities to which they devote their time, the people with whom they interact, and the emotions accompanying these experiences, contrasting this with their perceptions of campus racial climate. Because nearly 85% of African American college students in this country are enrolled at PWIs (Feagin et al., 1996; Fleming, 1984; Lang, 1992), this type of institution provides an appropriate context for the study. The examination of data gleaned from an episodic measure provides a deeper understanding of the experiences of African American college students that is unhampered by the memory distortions and "noise" accompanying global evaluations.

Scope and Significance of the Study

This study is important because higher education research focusing on the attitudes and experiences of college students relies almost exclusively on global assessments. Such an approach examines general attitudes and knowledge about broad concepts or themes. While it can be useful to acquire a sense of such general perceptions, reliance upon a global approach may be problematic from a methodological standpoint, and it also tells us little of the day-to-day reality of college student life. As we will see in the next chapter, global assessments can produce data that may be biased or otherwise less reliable than is desired. Given the prevalence of global measurement in higher

---

[1] The term "White" is used here to describe colleges and universities so designated in the literature as those at which European American students are the primary student population. "European American" refers to Americans of European descent. The term "Black" describes colleges and universities so designated in the literature as those at which African American students are or have historically been the primary student population. In addition, the term "Black" refers to an ideology and/or set of cultural beliefs held by individuals. "African American" refers to Americans of African descent.

education research, the consistent finding of divergence of attitudes and perceptions of African American and European American college students at PWIs, with African American students frequently expressing more negative evaluations of the campus climate than their European American counterparts (Astin, 1982), a different approach is called for in order to corroborate and extend those findings.

The DRM is not a measure of campus climate. It provides a snapshot of a day in the life of a college student, capturing the daily affective experience students report, and provides a portrait of how they spend their time. As such, the DRM can help us understand how students experience a college campus environment at a micro or episodic level, which is a more fine-grained view of student experiences and emotions in the moment. Contrasting the two measurements therefore provides a more comprehensive understanding of European American and African American college students. In this study, I investigated the following question: In what ways do African American and European American college students perceive and evaluate the campus racial climate of a predominantly White institution, and how do their daily lives differ with regard to what they do and how they feel?

CHAPTER 2

REVIEW OF LITERATURE

> In order to cultivate a set of leaders with legitimacy in the eyes of the citizenry, it is necessary that the path to leadership be visibly open to talented and qualified individuals of every race and ethnicity. All members of our heterogeneous society must have confidence in the openness and integrity of the educational institutions that provide this training… Just as growing up in a particular region or having particular professional experiences is likely to affect an individual's views, so too is one's own, unique experience of being a racial minority in a society, like our own, in which race unfortunately still matters.
> *Grutter v. Bollinger*, 539 U.S. 306 (2003), pp. 20-21.

In advancing the notion of diversity as a compelling state interest while reaffirming the earlier *Bakke* decision (Douglass, 2007), Supreme Court Justice Sandra Day O'Connor speaks plainly to the experience of many African American students enrolled at PWIs, succinctly characterizing the climate of a society in which a large portion of its members are stigmatized based on their skin color. This review will address key constructs as they relate to the perceptions of climate on college campuses. Literature on the importance of fit between student experience and the collegiate environment sets the stage for this discussion. Literature on methodological implications will complete the review.

Person-Environment Fit and Perceptions of Climate

Theories of the significance of person-environment fit are long-standing. Kurt Lewin (1936) proposed that behavior is the result of the interaction between an individual and the environment, offering a mathematical formula $B = f(P \times E)$, where behavior *(B)* is

the function *(f)* of the person *(P)* interacting with the environment *(E)*. Person-environment fit was also the concern of John Holland (1966), who posited that career decisions were a function of the interaction between people and their environments. Holland (1966) defined environments in terms of the characteristics of members and behavior as the interaction of personality and environment, arguing that people search for environments that "permit them to exercise their skills and abilities, to express their attitudes and values, to take on agreeable problems and roles, and to avoid disagreeable ones" (p. 11). Characterizing individuals by personality type, Holland asserted that environments contain features that attract people of particular temperaments because the features are congruent with the interests and values of those personality types. This congruence of environment type and individual interest is essential in promoting vocational satisfaction, stability, and achievement. Holland (1966) viewed the fit between person and environment as a continuum, with great incongruence between personality and environment leading to *environment strain*, or destructive interactions that impede development, at one end of the spectrum and congruence at the other end.

Ecological theories of student development, popularized in the 1960s and 1970s, built upon Holland's (1966) work and centered on the relationship between students and the campus environment (Banning, 1989). Sanford (1966), along with Chickering and Reisser (1993), explored the ways in which students develop and grow as a result of encounters with specific college environments, arguing that development depends on the ecological fit between the challenge present in the environment and the capacities of the individual to respond to such challenges. A subset of these theories includes perceptual approaches that attempt to explain how the perceptions of college values may be

17

congruent with the individual values of students, placing particular emphasis on the individual and her relationship with that environment (Hamrick, Evans, & Schuh, 2002; Kuh & Hall, 1993; Moos, 1976; Pace & Stern, 1958; Strange, 1991; Strange & Banning 2001).

Strange and Banning (2001) argued that "whether individuals are attracted to a particular environment, or satisfied and stable within that environment, is a function of how they perceive, evaluate, and construct the environment" (p. 86). Such constructions, according to Strange and Banning (2001) are functions of both individual experience and culture. Pervin (1968) developed a model focusing on the importance of individual goals in understanding an individual's perception of and response to an environment, asserting that high performance results when discrepancies between individual and environmental values are minimized. Stern's (1970) *need press theory* argued that the relationship is defined in terms of the needs of the individuals and the degree of congruence with the function or *press* of the environment, ultimately determining outcomes. Bronfenbrenner (1979) promoted the notion of *ecological transition*; here, if a person's position in the environment is altered in some fashion, such as a change in role or setting, growth and development can be expected to occur if the change is a positive one.

Person-environment fit is manifest in the correspondence between institutional and student values – sometimes termed *cultural congruence* (Gloria, Kurpius, Hamilton, & Wilson, 1999). Similarly, researchers who study the influence of culture on subjective well-being (SWB) speak of *cultural estrangement*, or the experience of individual and cultural values being at odds (Ratzlaff, Matsumoto, Kouznetsova, Raroque, & Ray, 2000; Triandis, 2000). When individuals navigate through environments they perceive to be

compatible with their own interests and values, they find more opportunities to engage in activities they deem pleasurable, using their capacities to the fullest extent, and view themselves in ways that are consistent with their self-construals (Smart, Feldman, & Ethington, 2000). According to Triandis (2000), when "a person's attributes match the attributes of the culture, there is a good person-social environment fit, and that should increase subjective well-being" (p. 30). Conversely, environments that are perceived to be discriminatory are generally viewed negatively and may prompt avoidance behaviors and decreased levels of satisfaction (Fischer, 2007; Prelow, Mosher, & Bowman, 2006). According to Ratzlaff et al. (2000), cultural estrangement leads to the use of coping strategies, which may have negative outcomes, such as academic disidentification.

To illustrate the notion of person-environment fit, Davis (1994) found that African American male students reported greater academic achievement when there was higher congruence between their backgrounds and the higher educational environment with regard to racial composition. Such students may feel a degree of comfort when encountering an environment that appears familiar. Another example of fit is embodied in the notion of "school belonging," drawn from work in K-12 education research and encompassing the notion of a student's sense that she is an important and vital part of a classroom or other academic community. A sense of belonging was found to be particularly important for African American students with regard to their classroom interactions (Booker, 2007), a notion suggested by Tinto (2000), who wrote of classrooms as communities. Arguing that this sense of belonging can serve as a buffer against racism, Davis (2004) highlighted the devastating effects of the incongruence of expectations held by predominantly White institutions and their African American

students in her qualitative examination of perceptions of climate. Drawing upon a cohort of students who had been enrolled in a pre-college summer experience program at Syracuse University, Davis (2004) interviewed a small sample of African American students in their sophomore year and again in their senior year. The students in the sample perceived the institution expected them to be above average academically and athletically, but did not expect them to be intelligent, critical thinkers (Davis, 2004).

Theories of person-environment fit enjoyed widespread popularity in the 1960s and 1970s. Although they appear less frequently in the current higher education literature today, they nevertheless provide a foundation from which to view the ways in which African American students navigate through collegiate environments. The fundamental supposition of such theories is that the exploration of behavior independent of context is futile (Walsh, 1978).

Race and Ethnicity and Perceptions of Climate

Because a biological foundation for race has yet to be identified, some researchers have argued that what we understand to be race or ethnicity is actually a set of beliefs regarding a particular group, constructed such that categories are assumed to be real and tangible (Hattery & Smith, 2007; Hilliard, 2001; Landrine & Klonoff, 1996). The self as a social product – or the social construction of identity – is a long-standing concept (Cooley, 1902; Mead, 1934). Historically, the social construction of race and ethnicity, built on a foundation of oppression, frequently acts as a demarcation between European Americans and African Americans, carrying powerful social and political meanings (Battalora, 2002; Ortiz & Rhoads, 2000; Thompson & Carter, 1997). In fact, sociologists Hattery and Smith (2007) argue that categories of race and ethnicity represent a system of

apartheid that separates people into groups that are either awarded or denied privilege, and that racial categories themselves are only meaningful in relationship to one another. Given the politics of race in this country, intergroup boundaries are often highly salient for many African American youth because their identities are constructed, to varying degrees, around the experience of being African American in a culture that exalts whiteness (Battalora, 2002; Oyserman, Gant, & Ager, 1995; Oyserman & Harrison, 1999; White & Burke, 1987).

In the late 1960s and early 1970s, sparked by the civil rights movement and sweeping changes in American society, psychologists devised theories of *reference group orientation*, or the groups to which individuals look in constructing ethnic or racial self-image (Cross, 1971; Cross, Parham, & Helms, 1998; Jackson, 1976; Milliones, 1973; Phinney, 1990; Smith, 1991; Thomas, 1971; White & Burke, 1987). Undergirding the models was the assumption that an over-identification with European American culture was psychologically unhealthy for African Americans (Constantine, Richardson, Benjamin, & Wilson, 1998). Within the context of higher education, some studies demonstrated that the lower stages of the Cross model have been correlated with reduced academic achievement for college students (Greenberg, 1997; Sandoval, Gutkin, & Naumann, 1997), although the evidence is mixed (Botts, 2001; Shadrick, 1995). Generally, it appears that a strong sense of racial and ethnic identity as it is conceptualized by Cross is related to greater academic achievement by college students (Botts, 2001; Greenberg, 1997; Sandoval et al., 1997; Shadrick, 1995), although Awad (2007) found academic self-concept (the beliefs and attitudes about one's academic skill

sets and performance) to be a better predictor of grade point average than racial identity in a sample of African American students attending an HBCU.

The Multidimensional Model of Racial Identity (MMRI) has been proposed as a complex way of thinking about racial or ethnic identity development. It assumes that individuals have multiple identities and that race and ethnicity is but one facet of the overall self-concept, not necessarily the most salient element (Rowley, Sellers, Chavous, & Smith, 1998; Sellers, Chavous, & Cook, 1998; Sellers, Rowley, Chavous, Shelton, & Smith, 1997), an argument advanced by a number of other scholars (Jones, 1997; Jones & McEwen, 2000; McEwen, 2003; Reynolds & Pope, 1991). The MMRI centers on African Americans' beliefs about the significance of ethnicity on two levels: how individuals define themselves as African Americans and the salience they ascribe to that definition (Sellers et al., 1997). Research shows that high regard (or group pride) is related to having positive feelings about school and academics (Chavous, Bernat, Schmeelk-Cone, Caldwell, Kohn-Wood, & Zimmerman, 2003). Like the Cross model, a strong self-definition as an African American is positively related to grade point average (Sellers et al., 1998).

In addition to racial identity, another way to think about race is to consider worldview, which is the distinctive way individuals and groups interpret reality and their guiding beliefs about life. The worldview of African Americans and European Americans is found by some scholars to differ in some respects (Johnson, 2003; Nobles, 1972, 1973). Like Triandis (1989a; 1989b) and Markus and Kitayama (1991), Johnson (2003) asserted that the European American worldview values competition, individuality, and separateness, while the African American worldview focuses on harmony with nature,

cooperation, and collective responsibility. Nobles (1973) contended that the African worldview attaches strong significance to the collective, and suggested that notions of self-concept that discount the sense of "we" are inappropriate for African Americans, a concept echoed by Parham, White and Ajamu (1999) and Cheatham (1991). In spite of wide acceptance of African American collectivism, a meta-analysis by Oyserman, Coon, and Kemmelmeier (2002) did not find European Americans to be more individualistic than African Americans in within-U.S. samples, but noted that little empirical work has identified or defined the societal structures that support individualist/collectivist differences.

Understanding racial identity and worldview is an important step in appreciating the experiences of African Americans in higher education. In addition, the experiences of African American college students can also be affected by the institutions they attend. Carter (1999) found that students' aspirations result from a number of factors, among them institutional characteristics. Specifically, the degree to which institutions enroll African American students appears to affect the degree expectations held by those students (Carter, 1999). Carter (2002) proposed a theoretical model in which pre-college characteristics influence students' initial aspirations and career goals, which in turn affect institutional experiences and involvement; initial aspirations and institutional experiences next affect academic achievement, and these three factors influence later degree aspirations. Gilliard (1996), focusing on institutional support characteristics, found that African American college students who frequently engaged in informal conversations with faculty tended to express higher educational aspirations.

A substantial body of research indicates that African American students at predominantly White institutions exhibit a host of negative outcomes, including lower grade point averages, higher attrition, and reduced enrollment in graduate programs compared to their peers at historically Black colleges and universities (HBCUs) (Allen, 1985, 1992; Davis, 1994; DeSousa & Kuh, 1996; Feagin et al., 1996; Gilliard, 1996; Harris & Nettles, 1991; Nettles, 1991; Watkins, Green, Goodson, Guidry, & Stanley, 2007). Fleming (1996) found that African American women enrolled at HBCUs exhibited greater passivity than African American women enrolled at PWIs, suggesting that the climate at PWIs may require African American women to feel they must display greater vigilance in obtaining educational benefits. Allen (1992) and others (Jackson & Swan, 1991; Loo & Rolison, 1986; Patterson-Stewart, Ritchie, & Sanders, 1997) documented that a sense of isolation and alienation is pervasive for African American students at PWIs, both at the undergraduate and graduate levels, although Nasim, Roberts, Harrell, and Young (2005) discovered that the ability to understand and deal with racism can be beneficial for African Americans enrolled at PWIs. These students are coping with the transition to an environment that may differ culturally while offering little in the way of social support (Allen & Haniff, 1991; D'Augelli & Herschberger, 1993). Inequity at PWIs remains embedded in European American values, norms, and traditions that prevail, while activities geared toward African Americans are often viewed as peripheral (Davis, 2004; Feagin, 1992; Feagin et al., 1996; Schwartz & Washington, 1999).

Perceptions of campus climate have been found to differ by race by a number of researchers. Examining data from the 1999 National Longitudinal Survey of Freshman, Fischer (2007) found that African Americans in particular report stronger perceptions of

negative campus climate than do other under-represented groups and felt less overall satisfaction with college than other groups (B=-.122, $p \le .001$). In their analysis of data from the National Study of Student Learning, Cabrera et al. (1999) found the social experiences of African American students were negatively affected by perceptions of discrimination on campus. In a multi-institutional study of perceptions of campus climate, Gilliard (1996) found that African Americans were less likely than European American students to perceive that the institution promoted acceptance of racial differences, with a moderate to large effect of $d=.7$. Even more striking is the race difference Gilliard (1996) found for the perception of racial discrimination by administration by African American students, with an unusually large effect size of $d=1.2$, and a related diminished sense of belonging when the administration was perceived in this way (B=-.12, $p \le .001$). Students who are more sensitized to perceived discrimination on the basis of race demonstrate negative academic and social outcomes in studies of the emotional consequences of prejudice (Kaiser, Major, & McCoy, 2004; Mendoza-Denton, Downey, Davis, Purdie, & Pietrzak, 2002). Prelow et al. (2006) found that perceptions of discrimination in the environment are also related to diminished perceptions of social support and increases in depressive symptoms. Examining data from the National Survey of African Life, Seaton, Caldwell, Sellers, and Jackson (2008) discovered that 87% of adolescents in the sample reported at least one incident of discrimination in the past year, and that the perception of discrimination was linked with depressive symptoms and low self-esteem.

Exposure to diversity and cross-race interactions in the college environment can be beneficial, but institutions must be thoughtful in creating opportunities to promote a

positive racial campus climate. Jayakumar (2008) found positive long-term effects of structural diversity on college campuses analyzing nationally representative data from the Cooperative Institutional Research Program (CIRP) study. She discovered a relationship between structural diversity and a positive racial climate, leading to increased intergroup communications, particularly for European American students from segregated pre-college neighborhoods (β=.32, $p \leq .001$). Student groups can provide opportunities for enhanced intergroup communication, but these organizations can also contribute to less desirable outcomes. Focusing on the effects of membership in campus groups based on specific group characteristics such as race, Sidanius et al. (2008) noted that membership in such organizations can lead to increased levels of in-group bias for European American members in Greek organizations (β=.24, $p<.01$) and for minority students in ethnic organizations, (β=.34, $p<.01$), a finding echoed by Gurin, Gurin, Matlock, and Wade-Golden (2008).

Where a high level of community among African American students exists at PWIs (particularly on-campus relationships), outcomes are generally enhanced (Cheatham, 1991; Fischer, 2007), although racial encapsulation may lead to negative outcomes, as noted above (Bennett, 1984; Sidanius et al., 2008). In addition, quality of contact with both European American and African American faculty appears to contribute to success in such environments (Davis, 1998; Loo & Rolison, 1986; Mallinckrodt, 1988; Schwitzer, Griffin, Ancis, & Thomas, 1999). Booker (2007) found that college students who were encouraged to contribute and collaborate in class reported more enjoyable academic experiences than those who did not have such opportunities.

Academic performance may be affected by subtle forces. Steele and his associates (Aronson, 2002; Steele, 1997; Steele & Aronson, 1995) have proposed the notion of *stereotype threat*, which may negatively affect the academic performance of African American college students. According to the theory, stereotype threat occurs when individuals are in situations for which a negative stereotype exists about one's group. When the domain in question is particularly salient to the individual (such as test performance for African American college students), the fear of being reduced to the stereotype may inhibit effective performance (Steele, 1997). The salience of race that can lead to such stereotype threat may imply that some members of historically stigmatized groups anticipate rejection by institutions that have marginalized them in the past by disidentifying with academics, discrediting its significance.

Crocker (2002) and associates (Crocker, Karpinski, Quinn, & Chase, 2003; Crocker et al., 2003; Crocker & Park, 2004) advanced a related theory, *contingencies of self-worth,* which asserts that social identity is forged by the domains on which self-worth is placed. According to this notion, people seek success and avoid failure in areas that are personally relevant. For example, assuming that college students, in general, place value on their academic performance, perceived failures in this domain could have negative consequences in the way they view themselves. Concerns about self-worth are activated and coping strategies may be utilized that discount or minimize the domain in question (Crocker & Park, 2004). In the case of academics, this disidentification can interfere with learning and achievement. Staking one's worth on domains that are largely external (meaning those requiring regular validation from others), however, can come at a high

cost to the individual when failures outweigh gains, in terms of relationships, self-regulation, and physical health, for example (Crocker & Park, 2004).

In this section, I have reported theoretical and empirical work covering the social construction of race, theories of racial identity, worldview, academic and social outcomes of African American students at PWIs, and perceptions of campus climate by African American college students. Concluding this broad discussion, I touched upon the potential for stereotype threat and academic disidentification that has been an issue for African American college students.

Gender and Perceptions of Climate

Men and women in American society tend to be socialized in different ways and hold different expectations of their environments (Hackett, Betz, Casas, & Rocha-Singh, 1992). Like race and ethnicity, gender is a social construction created by culture, encompassing attitudes and behaviors considered suitable for one's sex, the biological status of being male or female. Some researchers assert that gendered beliefs about the appropriateness of particular behaviors and attitudes are well-established early in life, frequently determining later life choices (Hackett et al., 1992). Children learn gendered behaviors by observing their families, and these behaviors are in turn perpetuated and reinforced by social structures and interactions (Hill, 2002; Peters, 1994). For example, Crocker et al. (2003) found that women scored higher than men in domains such as the approval of others and concern with appearance.

Some scholars have argued that gender stereotypes appear to influence the emotional behaviors and attitudes for both men and women in the U.S., with women being encouraged to engage in greater emotionality and intensity of feelings, both

28

positive and negative (Lucas & Gohm, 2000). This theory was posited as a result of

disparate findings of studies of emotion in women and men, with some studies reporting

more negative affect in women and others finding more negative affect in men (Lucas &

Gohm, 2000). Gender differences in subjective well-being (SWB) research are similarly

mixed. Some researchers have found that women experience higher levels of negative

affect and self-evaluations than do men (Brody & Hall, 1993; Lucas & Gohm, 2000;

Manstead, 1992; Nolen-Hoeksema & Rusting, 1999; Turner & Turner, 1982).

Conversely, others have found that women report higher levels of SWB (Wood, Rhodes,

& Whelan, 1989). Looking at happiness across the life span, Easterlin (2000) reported no

consistent difference by gender in overall happiness, but over time the happiness of

women relative to men has declined. When intensity of emotion is considered, however,

findings consistently demonstrate that women report higher levels of emotional intensity

(whether positive or negative) than men (Allen & Haccoun, 1976; Diener, Sandvik, &

Larsen, 1985; Fujita, Diener, & Sandvik, 1991; Lucas & Gohm, 2000). Some researchers

have found that differences in reports of SWB by sex evaporate when using momentary

mood assessments (Feldman Barrett, Robin, Pietromonaco, & Eyssell, 1998; Robinson,

Johnson, & Shields, 1998).

Historically, the roles of African Americans have been shaped both by ideology

around race and by gender role expectations within the African American community

(Henry, 2001). Because many African American families have experienced different

gender socialization norms than European American families based on their history of

oppression as well as their African cultural heritage, many African American women

have been raised to value individual strength and independence, typically more so than

European American women (Hill, 2002). For example, Solorzano (1992) found that African American mothers have higher educational aspirations for their daughters than for sons. Hill (2002) found that African American parents desire equal opportunities for their children, regardless of their sex, but that this desire was mediated by social class and religious beliefs. The salience of gender has not been widely recognized in much of the research on African Americans in higher education (Davis, 1998).

In addition to differences in socialization, distinct differences between African American men and women have been observed with regard to their experiences and behaviors in academic settings. Pascarella, Smart, Ethington, and Nettles (1987) found differences in relation to academic self-concept (comprised of academic ability, mathematics ability, and intellectual self-confidence relative to peers) in male and female college students, namely, that a sense of academic integration in college was significantly more important for African American females than for males. African American women on college campuses are also more academically successful than their male peers (Hood, 1992; Shadrick, 1995) and demonstrate greater motivation in academic work (Cokley, 2001). More recent research has discovered that African American men are more likely to devalue academic success and have lower academic self-concepts than do their female counterparts (Cokley & Moore, (2007). Schwartz and Washington (1999) found academic and social adjustment, as well as adequate support, to be a significant predictor of success for African American women. Ting and Robinson (1998) found that positive adjustment to college for African American women was associated with issues of campus climate, race- and gender-role identity, in addition to on-campus residence. Negative relationships between a "chilly climate" and cognitive gains have been found for women

in general (Whitt, Nora, Edison, Terenzini, & Pascarella, 1999). Crocker et al. (2003) found gender differences in the way men and women college students responded to receiving poor grades, with the effect on women being greater, particularly for women in traditionally male-dominated disciplinary areas such as engineering.

One potential explanation for such gender differences among African American men and women is the "cool-pose culture" theory in which African American males derive respect and self-esteem from activities unrelated to education (Cokley & Moore, 2007; Majors & Billson, 1992). Another possible explanation is the lack of role models for African American men in the classroom (Cokley & Moore, 2007). Bonner and Bailey (2006) advocate the promotion of a climate of success for African American men in college, focusing on the importance of peers, family, faculty relationships, as well as the institutional environment.

The participation of African American males and females in higher education is lopsided, with women far more likely than men to be enrolled in some form of postsecondary education (Slater, 1994). For all undergraduate students, disparity in enrollment by gender became evident in 1980 when the percentage of female undergraduates surpassed the percentage of male undergraduates, and by 2004 this gap was largest for African American college students (KewelRamani, Gilbertson, Fox & Provasnik, 2007). Cuyjet (2006) noted that African American women are currently enrolled in higher education at a rate of almost double that of African American men (64% women, 36% men), the most skewed female-male ratio of any racial or ethnic group. Not only does this imbalance create difficulties for African American women who wish to date African American men, but it also deprives other students of opportunities to

interact with African American men. On some campuses, some African American men are athletes, making them particularly visible, and this can reinforce commonly held stereotypes (Cuyjet, 2006).

For college students as a whole, more baccalaureate degrees are awarded to women than men (Knapp, Kelly, Whitmore, Wu, & Gallego, 2003; Perna, 2005), and this is especially true for African American college students. Looking for a possible explanation for this phenomenon, Perna (2005) analyzed the National Educational Longitudinal Study (NELS) dataset and found that women in general receive a greater income benefit for educational attainment than do men. Although men earn higher salaries than women at every level, educated women earn more than their less-educated peers (Perna, 2005).

In this section, I provided an overview of literature on gender socialization and stereotypes, the different experiences of men and women in higher education, especially African American men and women, and the academic benefits of college attendance for women. The salience of one's gender is well documented in the context of education, particularly for African American females (Houston & Davis, 2002; Martinez & Dukes, 1991).

Prior Experiences with Racial Diversity

Students come to college with a variety of experiences in their backgrounds that contribute to the ways in which they perceive and respond to the college environment. Many students live in communities that are racially segregated before coming to college. Conversely, some students are reared in environments containing a blend of cultures, customs, and experience. According to Gurin, Dey, Gurin and Hurtado (2004), a college

environment that mirrors the home surroundings, including its social life and expectations, "does not encourage the personal struggle and consciousness of thought that are so important for student development" (p. 101). This assumption is founded on the fundamental premise of developmental psychology that asserts that individuals must grapple with and resolve important psychological issues in order to mature (Erikson, 1946, 1956). Drawing upon theories of developmental maturity, King and Baxter Magolda (2005) proposed a model of intercultural maturity that takes as its premise the notion that cognitive complexity is required in to interact comfortably with others who are different without feeling a sense of threat to one's own identity. This notion of complexity is derived from the previous work of developmental theorists (Baxter Magolda, 1992; King & Kitchener, 1994; Perry, 1968), in which "earlier, more simplistic stages of cognitive development involve concrete thinking and a belief in absolute knowledge, whereas later, more complex levels reflect an ability to consider knowledge grounded in context, using judgment derived from personal experiences, evidence, from other sources, and from the perspectives of others" (King & Baxter Magolda, 2001, p. 15). Intercultural maturity is defined as the "developmental capacity that undergirds the way learners come to make meaning, that is, the way they approach, understand, and act on their concerns….in intercultural situations" (King & Baxter Magolda, 2002, p. 6). The demonstration of intercultural maturity requires growth and mastery in multiple domains, including cognitive development, interpersonal relationships, and intrapersonal complexity (King & Baxter Magolda, 2002). Exposure to diversity in experience and worldview contributes to cognitive complexity (King & Shuford, 1996; Ortiz, 1995). It is conceivable that individuals who grow up in racially diverse communities have already

33

begun to work through issues related to intercultural difference and are able to effectively traverse such distances in college (Gurin, Lehman, Lewis, Dey, Hurtado, & Gurin, 2004).

Related to the earlier discussion of person-environment fit, congruence between secondary school and college environments can play a role in the successful transition to college (Allen, 1994; Smith & Moore, 2002). For example, researchers Smith and Moore (2002) found that students whose high school population was heterogeneous in terms of racial and ethnic diversity experience greater ease in adjusting to a collegiate environment that is similarly diverse. They speculated that variations in exposure to predominantly White settings may shape the expectations African American students hold of interracial social interactions, a claim echoed by others (Chavous, 2005; D'Augelli & Hershberger, 1993; Davis, 1994). Adan and Felner (1995) noted that the "college freshman 'fits' best if he or she has been part of similar environments in the past and has had similar previous experiences" (p. 267), a statement echoed by Bean and Eaton (2000), who asserted that past experiences lead to the development of a repertoire of coping strategies that may be used in the new college environment.

In addition to the transition to college, research has demonstrated that academic achievement can be affected by prior experience with diversity. Davis (1994) found that congruence between background experience and the college environment is related to positive academic achievement and feelings of belonging. Specifically, using data on African American college students' academic and social experiences collected by Nettles (1988), Davis (1994) found positive gains in academic achievement in males whose home communities closely matched the racial composition of the college environment.

Where a disjuncture exists between experience and the college environment, adjustment to college may be more problematic (Smith & Moore, 2002). This finding extends previous work by Astin (1982), who found that African American college students at PWIs who attended predominantly Black high schools displayed evidence of more negative outcomes (such as lower grade point average, dissatisfaction with college life, and reduced persistence) than those who attended integrated secondary schools. These findings are consistent with the research of Bennett (1984), Chavous, Green, Helaire, and Rivas (2002), and Davis (1994). Smith and Moore (2002) reported that African American college students at PWIs coming from a homogeneous high school background commonly believed they were treated differently by professors, were viewed as having significant socioeconomic disadvantages, and were regarded as exceptions to the rule when they performed well academically.

Some scholars have attempted to tease apart the specific background experiences that might account for such findings. Chavous (2005) found that prior experience with diversity plays out differently depending on socioeconomic status, with students from more affluent backgrounds (both African American and European American) more likely to come from backgrounds that are predominantly white. Affluent African American students have more experience in settings that mirror the predominantly white college campus and reported increased perceptions of possibilities for intergroup relationships. European American students who had some previous relationships with African Americans were more likely to initiate or be receptive to intergroup interactions. Highlighting the ability of the structural diversity of a campus to offset the lack of racial diversity in the pre-college environment, Jayakumar (2008) examined data from the

Cooperative Institutional Research Program (CIRP) study, and found that for European American college students coming from a segregated pre-college neighborhood, structural diversity in the college environment was related to higher levels of post-college pluralistic orientations (β=.007, $p\leq$.001).

Regardless of background experience and race, however, student perceptions of intergroup norms and the institutional support of those norms was strongly related to social adjustment to college (Chavous, 2005). Graham, Baker, and Wapner (1985) found that although the racial and ethnic composition of one's home neighborhood was influential in terms of African American college students' adjustment to life at PWIs, it was not as influential as the diversity of the secondary school environment. Once on campus, African American students who showed "interpersonal accomplishment" – those with expertise in interpersonal relations in general – fared better at PWIs than did African American students who did not exhibit such accomplishments (Allen, 1985; Mendoza-Denton et al., 2002).

I have presented literature in this section highlighting the challenges students can face when the college environment is different than the home environment. Paradoxically, this difference can act as a catalyst in promoting growth, as highlighted in research showing the positive educational and democratic outcomes by Gurin et al (2002). Previous exposure to diverse people and situations may therefore play a significant role in adjustment to college and academic achievement as students navigate new landscapes (Saenz, Ngai, & Hurtado, 2007).

Time Use and Perceptions of Climate

Little empirical work has been conducted in the field of higher education to understand how which college students allocate their time, although it is a long-standing area of interest. A disparity appears to exist between the time faculty expect students to invest in studying and the time students report actually being engaged in such activities, a gap that widens most noticeably in the first year of college and then remains constant (Schilling & Schilling, 1999). Time spent studying, widely extolled as critical to academic achievement, is an area of some debate (Kelly & Johnson, 2005; Stinebrickner & Stinebrickner, 2004). In spite of beliefs to the contrary, time spent studying was not found to be positively related to academic achievement for young adolescents (Smith, 1992). Using an experience sampling technique with a sample of University of Michigan students, Schuman, Walsh, Olson, and Etheridge (1985) found only a slightly significant relationship between time spent studying and grades. Instead, these researchers found a stronger relationship between academic achievement and time spent in class (Schuman et al., 1985). Focusing on life domains for which performance is strongly connected to feelings of self-worth, Crocker et al. (2003) reported increased time spent studying for college students reporting high value on academics and on religious faith. They also reported that those reporting self-worth connected to appearance reported more time spent socializing and partying, and less time studying

In addition to time engaged in academic work, educators may reasonably expect college students to spend time interacting with peers. Developmentally, college is a time when individuals are defining themselves, a task accomplished at least in part through interactions with peers (Erikson, 1978). Researchers Pascarella and Terenzini (2005), in

their meta-analysis of 30 years of research on the impact of college, have presented the results of numerous studies documenting the significant impact of peer relationships on college students, specifically with regard to their influence on attitudes and values. Reflecting the importance of friendships in late adolescence and early adulthood, Jacobs, Vernon, and Eccles (2004) found social self-perception affected the amount of time spent with peers. Specifically, adolescents at both ends of the social confidence spectrum (highly confident or highly anxious) tended to report more time spent with peers than those in the middle, highlighting the important role such relationships play in adolescence (Jacobs et al., 2004). Social ties (both formal and informal) have been found to be of critical importance for African American college students relative to their satisfaction with college life (Fischer, 2007; Harper & Quaye, 2007).

Time-budget studies have a long-standing history, emerging in Europe in the early years of the twentieth century, and expanding to the United States shortly thereafter (Bevans, 1913; Harvey & Pentland, 1999; Kneeland, 1929; Pember-Reeves, 1913; Szalai, 1966, 1972). Early studies focused on the living conditions of the working class in response to social changes connected to the rise of industrialization (Robinson, 1999). *Time-budget* refers to the ways in which individuals allocate time to specified activities, the frequency and types of such activities, as well as patterns and persons associated with such activities (Hyun, 1986). Such research is intended to provide information for a wide range of purposes (Harvey & Pentland, 1999). Time-budget research has been employed in labor force analysis, social change, women's issues, quality of life, leisure activities, and travel behavior, to name just a few areas (Frazis & Stewart, 2004; Harvey & Pentland, 1999; Juster, 1985; Stafford, 1980; Szalai, 1966, 1972). A variety of

methodologies in time-budget research have been developed, including experience sampling, direct observation, electronic trackers, and time diaries (Harvey & Pentland, 1999; Robinson & Godbey, 1997).

The American Time Use Survey (ATUS) is a study that provides nationally representative data regarding how Americans spend their time, managed by the Bureau of Labor Statistics. The data are used in a variety of areas, including research on economics, health and safety, family and work-life balance, and international comparisons. A subset of the ATUS data focuses on college students and their activities. For example, on an average weekday, college students enrolled full-time spent 3.2 hours in educational activities, 3.0 hours working for pay, 3.9 hours in leisure and sports, 1.0 hour eating and drinking, and just under an hour on grooming (data averaged over 2003-2007). For diurnal activity patterns, involvement in educational activities peaked at mid-day for college students, and dropped throughout the remainder of the day (American Time Use Survey, 2003-2007).

A more recent approach to time-budget studies is to connect them with well-being, looking at the sorts of activities in which individuals engage and how much time is spent in those activities (Kahneman et al., 2004a). The rationale for this approach is that activities vary in the intensity of accompanying emotions; simply asking participants to retrospectively evaluate an activity requires a respondent to construct a representative moment for the evaluation, thus losing the variations inherent in the way people feel about their experiences. Kahneman et al. (2004a) have developed a hybrid approach that combines time-use study with the exploration of affective experiences. This approach will be described in more detail in a later section, but it examines the impact of life

circumstances on affective experience by reconstruction of the previous day's activities. According to Kahneman (1999), people evaluate their experiences in a relatively automatic fashion on an affective dimension of good to bad. These evaluations (assumed to be almost subconscious mechanisms of the brain) result in behavioral outcomes, such as avoidance (Kahneman, 1999).

Subjective evaluations of experience and their resulting behavioral outcomes are sometimes called *instant utility*, or the "strength of the disposition to continue or to interrupt the current experience" (Kahneman, 1999, p. 4). An experience that is perceived to be pleasant is presumed to have an instant utility that is positive; in other words, it is an experience we want to continue or repeat. This is sometimes referred to as *decision utility* (Kahneman & Sugden, 2005) because it reflects a judgment based upon individual priorities or desires (Kimball & Willis, 2006). *Experienced utility* is another, related line of thinking about subjective well-being that omits the judgment, arguing that examination of records of feelings can be examined over a defined period of time to paint a portrait of experience, an approach dating to the 19th century with the creation of a "hedonimeter" (Edgeworth, 1881/1967; Kahneman, 1999; Kahneman & Sugden, 2005). *Remembered utility* is the global evaluation individuals assign to experience in the past, a compilation or profile of momentary or instant utility of an episode.

From a methodological perspective, time-budget studies have consistently found that when estimating the time spent in various activities, respondents routinely give figures totaling more than 24 hours per day (Robinson, 1999; Robinson & Godbey, 1997). Because time estimates seem to be problematic, time diaries and experience sampling methods are encouraging alternatives, with both methods demonstrating high

reliability (Harvey & Pentland, 1999; Juster, 1985; Robinson, 1985, 1999; Robinson & Godbey, 1997). Juster (1985) argued that because memory for events deteriorates so rapidly, time diaries should only attempt to capture information occurring in the very recent past to ensure greater accuracy.

Memory of specific aspects of experiences is similarly problematic. When people think about an episode, they are constructing a representation derived from a compilation of these momentary experiences, which are probably not aggregated equally in computing a judgment. In fact, when asked to provide a global evaluation of an unpleasant experience (such as holding one's hand in icy water or enduring a lengthy, uncomfortable colonoscopy), respondents appear to construct a representative moment as a proxy for the entire episode and eliminate the variations of emotion experienced over the time spent in the experience from consideration, even when unpleasant experiences are extended. This phenomenon is known as *duration neglect* and has been well documented (Fredrickson & Kahneman, 1993; Kahneman, 1999; Kahneman, Fredrickson, Schreiber, & Redelmeier, 1993).

Perhaps most germane to this discussion, the study of time allocation may reveal the types of activities in which students engage (as well as the individuals with whom they interact) that may be related to their perceptions of campus climate. The instant utility of time spent in campus experiences will be reflected in the views of the environment. For example, students who demonstrate a high level of engagement with the campus by their commitment of time to their studies and to social interactions with their peers may report more positive perceptions of the campus climate.

Survey Methodology and Perceptions of Climate

Issues surrounding the measurement of perceptions, attitudes, and behaviors have been explored in depth by those interested in survey methodology. This research was spurred, at least in part, by studies that revealed gross under-reporting of events that would seem to be memorable (Cannell, Fisher, & Bakker, 1965; Mathiowetz, 1986). For example, Cannell et al. (1965) found that respondents exhibited a great deal of difficulty in accurately dating hospitalizations, often reporting them as having occurred either earlier in one's past or more recently than was actually the case, a phenomenon known as *telescoping*. The development of the field of cognitive science served as the impetus for survey methodologists to research the application of the principles of learning and memory to the design of surveys (Sudman, Bradburn, & Schwarz, 1996).

Before beginning a discussion of the ways in which survey data can be affected by bias, it is important to first understand the process of survey response. The survey tasks are represented in Figure 2.1 (Sudman et al., 1996). Each step in the process is subject to bias derived from multiple sources, including faulty memory, the design of the survey instrument, and a desire to present oneself in the best possible light.
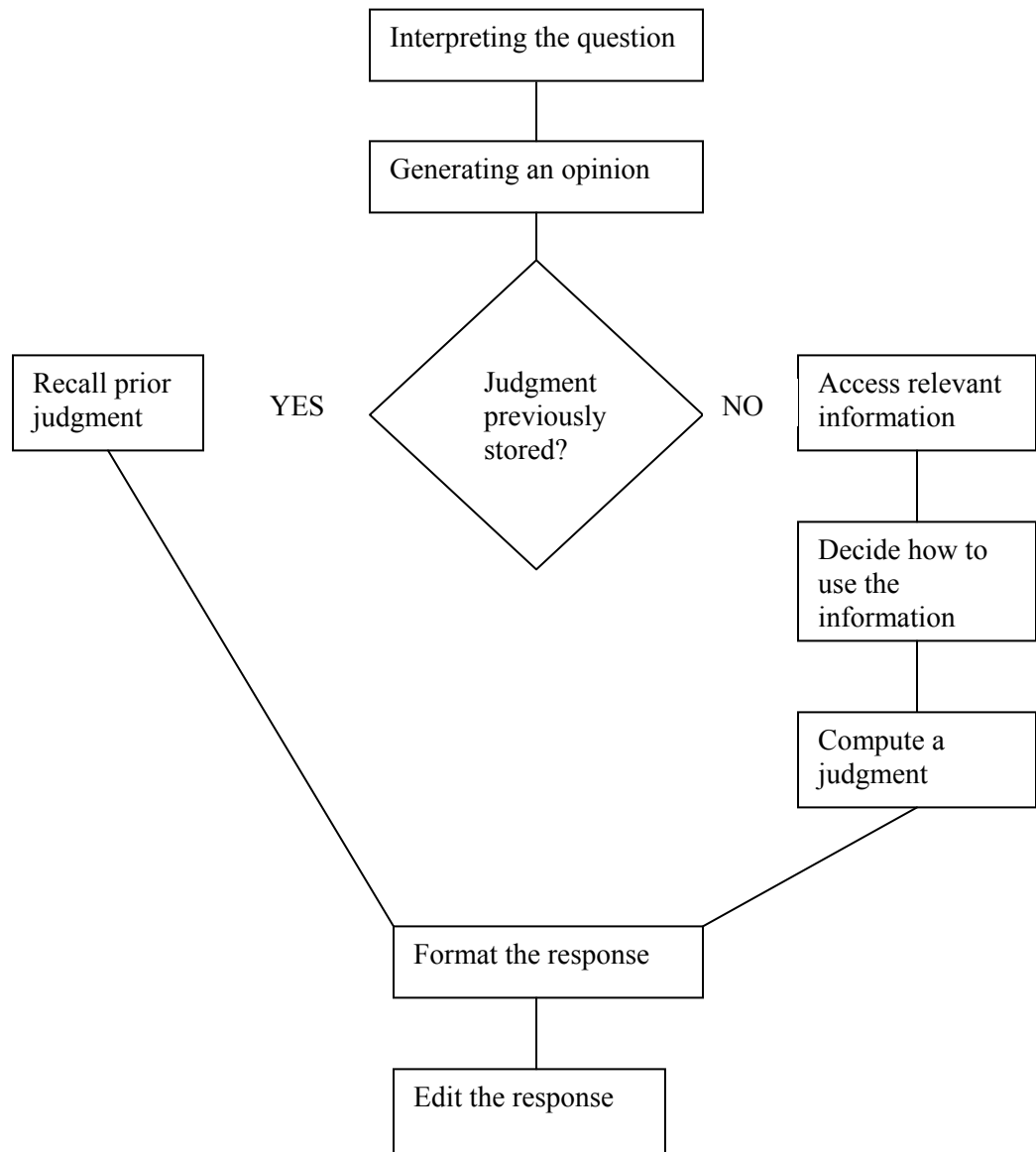
Figure 2.1 Model of Information Processing in a Survey Situation

In a survey, the salient features of experience are those most likely to be recalled (Ariely & Loewenstein, 2000). Researchers conceptualize several retrieval mechanisms in survey response, one of which is *top-down*, where thematic and temporal cues are activated to obtain general knowledge (Belli, 1998). Because this mechanism may not activate the triggers that make all relevant information available, it can result in missing or inaccurate data. Other retrieval processes such as *sequencing* or *parallel retrieval* focus on direct experience and may reduce response bias (Belli, 1998). Global measures tend to focus only on top-down approaches of retrieval by asking questions that focus only on semantic knowledge. When this top-down type of retrieval is imposed upon respondents, it creates a complicated cognitive task, frequently leading to subsequent measurement error.

Additional problems exist in the retrieval process. Respondents tend to be cognitive misers who "satisfice," or simply truncate the search process when they have gathered just enough information to address the question, regardless of whether such information is accurate or complete (Sudman & Bradburn, 1982). With top-down retrieval described previously, "satisficing" is especially problematic, as relevant information may be even less available when the search is truncated prematurely. In examining reports of behavior frequencies, researchers have discovered that respondents often use estimation strategies to arrive at their responses rather than providing specific responses, particularly when the memories in question focus on events or behaviors that occur regularly (Menon, 1994), likely an artifact of top-down retrieval strategies.

Perhaps most problematic is that global assessments lead respondents to overemphasize experiences that either occurred recently or that are extreme examples of

the attitude or experience in question (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004b). Recently termed the "focusing illusion," Kahneman et al. (2006) argued that undue consideration in the recall of any single influence on well-being leads to the exaggeration of its importance, thus setting the stage for distortion and bias. For example, focusing on material well-being in global measures of life satisfaction tends to draw attention to one's relative economic standing (Gilbert, 2006), which may contribute to response bias. To illustrate the focusing illusion in higher education research, making race salient prior to taking a test has been demonstrated to produce diminished results for African Americans, or stereotype threat (Steele & Aronson, 1995).

In attempting to conceptualize the path of survey response that can lead to bias and missing data, Beatty and Herrmann (2002) created a model that distinguishes four levels of cognitive states of information needed to respond to a survey question: available information, accessible information, generatable information, and inestimable information. This model provides a compelling visual representation of the errors that can occur in the retrieval and reporting of information from memory. This model is depicted in Figure 2.2. Double lines represent cognitive states that, when true, lead to item response that is very likely to be accurate. Single lines represent cognitive states that, when not true, lead to item nonresponse or bias. The single dashed line indicates that even when true, potential error might result. Ideally, surveys should tap into domains that are available, accessible, or easy to generate.

Available
Information can be retrieved with minimal effort

Accessible
Information can be retrieved with efforts or prompts

Generatable
Information is not exactly known but can be estimated

Inestimable
Information is not known/no basis for estimating

Substantive Response

Item Nonresponse
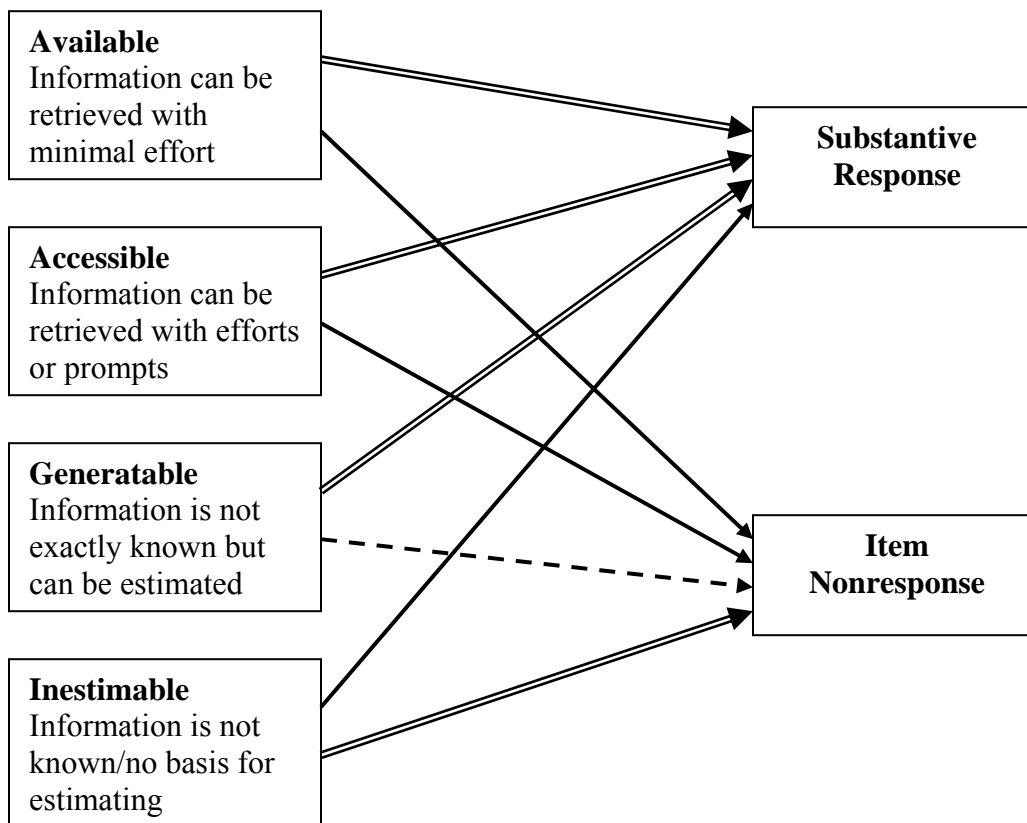
Figure 2.2 Beatty-Herrmann Model of Response Process for Item-missing Data

Recall issues notwithstanding, features of the survey instrument may also lead to measurement error. For example, changes in question order may have a profound impact on the results. Reaching the conclusion that marital satisfaction is a significant element of general life satisfaction depends on the order in which questions are asked (Schwarz, Strack, & Mai, 1991). In addition, respondents may infer meaning from the response alternatives provided on a survey. For example, when asked what they believe to be the most important thing children need to prepare them for life, respondents overwhelmingly

chose "to think for themselves" when this option was included in a list. Only a very small number gave this answer when no list of alternatives was provided, however (Schuman & Presser, 1981). Other contextual features of a survey that can affect response include the numeric values of the response scale, the graphic display of questions and scales, the nature of response options, and the reference period used (Igou, Bless, & Schwarz, 2002; Schwarz, 1996). The context of the survey setting can also contribute to social desirability bias, or the modification of responses under certain circumstances in an attempt to present oneself in the best possible light, a sort of impression management. This editing can depend on the presence of the interviewer, the topic of the survey, and a variety of other contextual circumstances. The source of the bias is a matter of some debate, with psychologists attributing it to personality characteristics and survey methodologists focusing on the survey setting (Tourangeau, Rips, & Rasinski, 2000). Mentioned earlier, Crocker et al. (2003) found that women scored higher than men in domains such as the approval of others; Bernardi (2006) found strong evidence of social desirability bias in women.

Survey methods attempting to address these issues include the *event history calendar* and *experience sampling*, tools designed to minimize memory bias (Clark, Collins, & Henry, 1994). Making use of multiple cues available in autobiographical memory, respondents using the event history calendar are prompted to consider occurrences in their personal histories within the broader thematic streams of experience (Belli, 1998). The use of multiple cues can facilitate the process of remembering by drawing upon additional memory pathways, thereby improving the quality of responses. Experience sampling is a method in which real-time measurements of attitudes and

behaviors are taken, in an effort to reduce distortions in memory and recall that frequently plague traditional surveys. Respondents are asked to record the current feeling or behavior of interest when prompted. Such an approach takes the episode as the unit of analysis, seeking to obtain a record of instant utility over a defined period – a bottom-up approach that utilizes information that is readily accessible (Kahneman, 1999).

Experience sampling typically utilizes hand-held electronic devices that are programmed to prompt respondents to enter information at predetermined times and has been widely used, particularly in the evaluation of subjective well-being but also in studies of pain, smoking cessation, psychiatric symptoms, mood, coping, and the like (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Charles & Pasupathi, 2003; Diener, 2000; Frable, Platt, & Hoey, 1998; Langston, 1990; Oishi, Diener, Scollon, & Biswas-Diener, 2004; Stone et al., 1999; Swendsen, 1998; Updegraff, Gable, & Taylor, 2004). In general, comparative studies have found minimal correspondence on characteristics of interest using experience sampling and retrospective reports (Stone, Schwartz, Neale, Shiffman, Marco, Hickcox, Paty, Porter, & Cruise, 1998; Stone et al., 1999). In comparisons of experience sampling and retrospective reports, for example, respondents tended to over-report the use of coping strategies in retrospective or global reports, suggestive of bias (Smith, Leffingwell, & Ptacek, 1999). Some researchers have argued that traditional global self-report measurements of well-being reflect the influence of circumstances, aspirations, comparisons with peers, and disposition (Blanchflower & Oswald, 2004; Chen & Spector, 1991; Warr, 1990).

In addition to eliminating issues related to memory retrieval, proponents of experience sampling cite the advantages of collecting data in a natural setting, as opposed

to the artificial conditions of a laboratory (Diener, 2000; Kahneman et al., 2004a; Oishi et al., 2004; Updegraff et al., 2004). Use of a natural setting allows researchers to assess respondents' perceptions and affect at random moments, in "real time" (Diener, 2000). Data collected using global measures may be confounded by momentary moods, ordering of items (or assimilation effects), and concerns about social desirability bias in responding (Schwarz, 1992; Schwarz & Strack, 1999). Experience sampling permits a more finely-grained view of attitude and experience as it occurs (Diener, 2000) and has been found to accurately capture time use (Reed, 1989).

This method of episodic data collection is not without its limitations, however. The standard methodology involves providing participants with personal digital assistants (PDA), which represents a significant expense for researchers. Additionally, the burden to participants can be onerous, depending on the duration and scope of the study (Stone et al., 1999). To reduce cost and burden, Kahneman et al. (2004a) devised the Day Reconstruction Method (DRM). The DRM provides a rich portrait of experience by asking respondents to craft a detailed diary of the events of the previous day (or portions of the previous day in a modified format) that is used as the basis for reporting on the experience of interest. Participants are permitted to retain this diary, using it as a reference tool in responding to specific questions about episodes that occurred during the previous day. Because respondents frequently exhibit a desire to present themselves in a positive light to researchers (Sudman & Bradburn, 1982), concerns regarding the social desirability of responses are reduced, as only the respondent knows the particulars of the events. The DRM provides two types of data, time-use information and affect related to specific experience. The DRM supports both between-subject comparisons (such as

African American and European American students) as well as within-subject comparisons (such as affect associated with different situations), making it eminently useful in the study of college students (Kahneman et al., 2004a). The DRM works to overcome bias by representing experiences as directly as possible, taking duration of experience into account, and minimizing context and comparison effects (Kahneman et al., 2004a).

In the initial study of the DRM with a sample of 909 women in Texas, Kahneman et al. (2004a) grouped reported events into positive and negative clusters, which were then examined to create a proportion of time for which positive and negative affect was experienced, or a *net affect* score. Results were examined with an attempt to establish diurnal rhythms of affect. Researchers also attempted to separate affect that was person- or situation-bound, finding the local features of an environment to be more influential than general life circumstances in determining affect. Overall, they found affective states vary considerably over the course of a day, depending on activities and interaction partners and that some aspects of experience had a strong influence on affect, such as time pressure at work. Moreover, they compared their results with traditional global questions of life satisfaction, finding them to be correlated with reports of daily affect, but such reports were nowhere near identical (Kahneman et al., 2004a; Kahneman & Riis, 2005).

Subsequent to the 2004 publication of the results of the Texas DRM study, the creators of the DRM have suggested replacing the net affect score with the *U index*, or unhappiness index (Kahneman & Krueger, 2006). Based on the psychometric properties of affect, it appears that positive emotions tend to be highly intercorrelated, making it

quite difficult to untangle them (Watson & Clark, 1997). For example, when an individual feels happy she might also feel hopeful, excited, and content in equal measure. Conversely, negative emotions tend to be only weakly intercorrelated, so that an emotion such as anger tends to be experienced quite distinctly from other negative emotions (Watson & Clark, 1997). The U index, as it is conceptualized, represents the percentage of time over the course of a day in which the predominant emotion is a negative one. An episode is deemed unpleasant if the most intense emotion is negative, that is, if the maximum negative affect rating is greater than the maximum positive affect rating. As an ordinal measure at the level of feelings, the U index is duration-weighted in that it accounts for time spent in various activities. Advantages of the U index include the following: (1) most people report predominantly positive emotional states, so intensively negative emotions are significant occurrences; (2) because negative feelings are fairly rare, the identification of an episode as a negative is likely a deliberate decision; and (3) one dominant negative emotion likely colors the entire episode (Kahneman & Krueger, 2006). The U index can be interpreted as the average flow of well-being, or *process benefits*, a notion advanced by Dow and Juster (1985) that refers to the affect that results from involvement in some activities to the exclusion of others; a related concept was advanced by Kahneman (1999) called *experienced utility*, described in Chapter 2.

In a paper currently in press, Krueger, Kahneman, Schkade, Schwarz, and Stone present the results of additional research involving the DRM. A study that focused on a group of 810 women in Columbus, Ohio and a group of 820 women in Rennes, France was conducted in 2005, locations selected because they represented middle America and France. The researchers found that the Americans reported higher overall life satisfaction

than the French, but that the French reported spending their time in a more positive mood and engaging in activities that yielded more pleasure than did Americans, represented by a lower U index. Interestingly, the French reported taking an average of 21 more vacation days than did Americans and the French were more likely to report eating as a primary activity than were Americans. Subjects in both samples who identified themselves as students reported a higher U index than those who did not identify themselves as such, and those who were unemployed reported a higher U index than those who were employed (Krueger et al., in press).

Also reported in the Krueger et al. paper (in press), the researchers modified the DRM for telephone mode, conducting a study called the Princeton Affect and Time Survey (PATS). Data were collected from a nationally representative sample of 3,982 adult men and women across the U.S. using a random digit dial process in 2006. In this mode, individuals were asked to report the activities of the preceding day and three 15-minute episodes or intervals were randomly selected; for those three episodes, participants were asked to describe the range of emotions that were present. The PATS data showed a decrease in the U index with age and a slight decrease in the U index with income. Women reported a higher U index than men (19.6 compared to 17.6), and African Americans reported a higher U index at 23.8 than did European Americans (17.5) and Hispanics (21.9). In looking at marital status, the individuals reporting the highest U index were those who were divorced or separated. Episodes in which individuals were alone resulted in a significantly higher U index for women (21.9) than for men (18.3) ($p=.03$), and for both men and women, interactions with one's co-workers and supervisors produced a U index that was surprisingly high, well above 25%. In particular,

men reported a U index of 46.9 in episodes involving a boss or supervisor. For women, interactions with parents produced a significantly higher U index than men at 27.1 (p=.02). Similarly, episodes involving children resulted in a higher U index for women at 17.7 (p=.03).

Researchers have found that multiple-item measures of subjective well-being demonstrate more satisfactory reliabilities than do single-item measures (Andrews & Whithey, 1976; Diener, Emmons, Larson, & Griffin, 1985; Kammann & Flett, 1983; Steptoe, Wardle & Marmot, 2005). Overall, these measures are particularly sensitive to transient mood effects, thus accounting for the generally modest reliabilities they demonstrate. An examination of the test-retest reliability of the DRM was conducted with a sample of 229 subjects two weeks apart (Krueger & Schkade, 2007). Krueger and Schkade (2007) found the DRM exhibited test-retest reliabilities in the range of .50-.70. Krueger et al. (in press) examined correlations between the PATS data and global life satisfaction reports, finding it to be r=.70. Comparing the correlations between pairs of reported emotions in the PATS data with the Texas DRM data and the Columbus DRM data, these researchers found the correlations in the PATS data to be somewhat weaker than in the other two datasets, but they point in the same direction. For example, the correlation between feeling happy and stressed is r=-.29 for women in PATS, and r=-.44 in the Columbus DRM. The researchers also examined the average rating of *happy* across common activities in PATS data and in the Texas DRM data, finding the correlation between the two measures to be r=.78. In further evaluating PATS data, the researchers examined whether the order of affect descriptors affected the reported intensity, finding that when positive emotions were listed first, their ratings tended to be higher; the

investigators interpret this finding to mean that the first emotion serves as an "anchor" for subsequent affective descriptors. The ordering did not have an effect on the U index, however, which appears to be robust to order effects (Krueger et al., in press).

Gaps in the Research Literature Base

The most glaring gap in the literature reviewed in this chapter is the prodigious gulf that exists between higher education research that overwhelmingly relies on global measures and the understandings of survey methodology. Specifically, scholars in higher education research have focused on measuring student experience and attitude with a near-exclusive reliance on global measurements, in spite of a voluminous body of literature in survey methodology demonstrating the pitfalls of such an approach. As a whole, these literatures do not inform one another, and as a result, the validity of research that is otherwise very fine is called into question.

In addition, empirical research tracking the activities to which college students devote their time and attention is lacking. Plenty of writings exist on how college students *should* spend their time, with an emphasis on how much time ought to be devoted to studying, but I found little time-budget literature in this area. Moreover, I found no research linking time allocation with perceptions of college climate, and this is a particularly fertile area of study, providing data for scholars as well as useful information for practitioners.

Chapter Summary

Measurement matters. Because scholars conducting research in higher education tend to employ global measures of attitude and experience, results may be subject to bias. Attention must be devoted to questions of bias and measurement error in order to make

informed assumptions about validity. As we have seen, when individuals are asked to respond to global survey questions, they use a complex combination of recall, current beliefs, and inferential rules in order to make a judgment (Winkielman & Schwarz, 2001), all of which are subject to distortion and bias. Context effects related to question order, response options, and ease of recall may also play a role in measurement error. Data collected using experience sampling is less likely to be affected by issues of memory retrieval and at least some of the context effects that plague global assessment, a method frequently employed in research in higher education (Kahneman et al., 2004a).

Not only is it important to think about measurement, but issues related to time use may be influential as well. Educators hold particular expectations regarding the way they expect college students to allocate their time, but no clear understanding exists as to whether students conform to such standards. Moreover, differences may exist between African American and European American college students with regard to time use, differences that may be related to perceptions of campus climate.

Issues such as these play a prominent role as scholars endeavor to understand the experiences and perceptions of African American and European American college students. The normative experience of African American college students at PWIs can be characterized as challenging on a number of levels. Because the leaky educational pipeline described earlier has been particularly problematic for African Americans (which in turn presents a host of negative implications), employing an episodic measure of climate represents an alternative approach to better understanding – and perhaps rectifying – the educational inequities that exist in American higher education.

Conceptual Framework for this Study

Based on the review of literature, the following diagram serves as the conceptual framework for this study. I used this framework to guide the development of the research design which aims to understand the daily experience of African American and European American college students at a predominantly White institution. The perceptions of climate reported by African American and European American college students and their daily affective experience at a predominantly White institution are posited to be influenced by race, gender, prior experience with racial diversity, the order of completion of the measures, and by the way they allocate their time. The context for the study is a predominantly White institution, typical of many such American universities. Figure 2.3 provides a visual representation of the proposed variables and outcomes.

```
┌──────────────────────────────────────────────────────────────┐
│   ┌──────────────────────────────────────┐   ┌──────────────┐ │
│   │  Student characteristics & experiences│   │   Order of   │ │
│   │                                       │   │ instruments  │ │
│   │     ┌──────────────────────┐          │   │              │ │
│   │     │        Race          │          │   │              │ │
│   │     │  (African American or│          │   │              │ │
│   │     │  European American)  │          │   │              │ │
│   │     │                      │          │   └──────────────┘ │
│   │     └──────────────────────┘          │                    │
│   │     ┌──────────────────────┐          │                    │
│   │     │       Gender         │          │   ┌──────────────┐ │
│   │     │                      │          │   │ Allocation of│ │
│   │     └──────────────────────┘          │   │     time     │ │
│   │     ┌──────────────────────┐          │   │              │ │
│   │     │  Prior experiences   │          │   │              │ │
│   │     │    with racial       │          │   └──────────────┘ │
│   │     │     diversity        │          │                    │
│   │     └──────────────────────┘          │                    │
│   └──────────────────────────────────────┘                    │
│                                                                │
│         ════════════════════════════════                      │
│                                                                │
│   ┌──────────────────────────────────────────────────┐        │
│   │ Daily affective experience as reported on episodic│        │
│   │                    measure                         │        │
│   │                                                    │        │
│   │               **************                       │        │
│   │                                                    │        │
│   │  Perception of campus racial climate as reported   │        │
│   │              on global measure                     │        │
│   └──────────────────────────────────────────────────┘        │
└──────────────────────────────────────────────────────────────┘
```
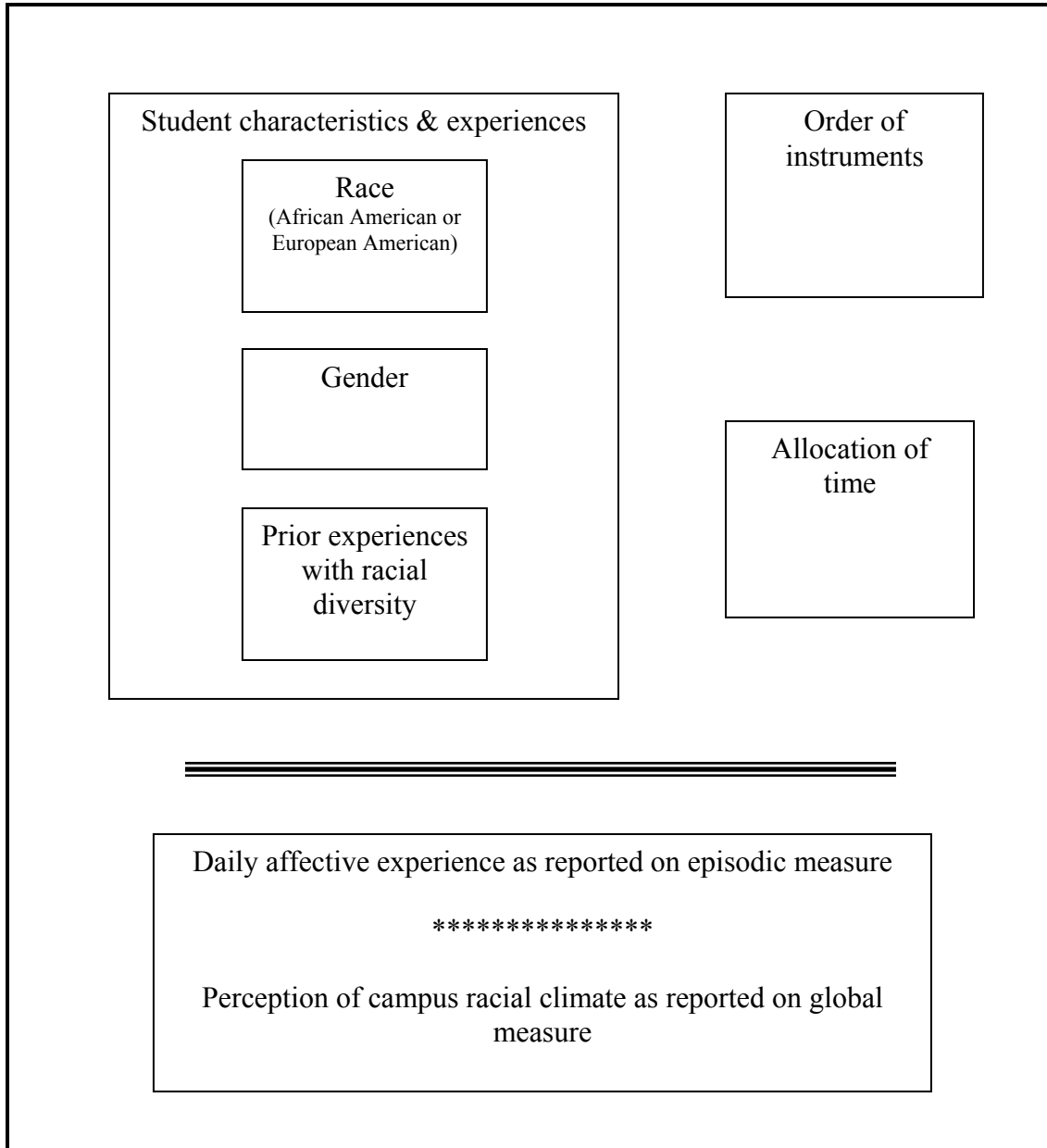
Figure 2.3 Factors Influencing Daily Affective Experience and Perceptions of Climate by African American and European American College Students at a PWI

57

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine the daily affective experiences of African American and European American students at a predominantly White institution (PWI), exploring the activities to which they devote their time, the people with whom they interact, and the emotions accompanying these experiences, contrasting this with their perceptions of campus racial climate. To that end, two different types of instruments were employed, one a traditional global measure of campus climate containing general questions about attitudes and relationships on campus, and the other an episodic measure exploring the details of how students spent one day and the feelings accompanying various activities. By contrasting the findings from each measure, the study aimed to discover whether the distortions of memory and cognition that afflict global measures of climate were minimized with the episodic measurement approach, and to explore the stories that each measure could tell about students. The use of an episodic measurement in assessing college climate was novel, representing an approach that is as yet untested in the context of higher education. In this chapter, I describe the design of the study, detailing the research questions and hypotheses of the study. I discuss institutional selection and student sampling strategy, describe the instrumentation, review the procedures and analyses, and conclude with limitations of the study.

Research Question and Sub-questions

In the previous chapter, I highlighted relevant findings that led to the identification of specific variables that may influence the perception of climate, sketched in Figure 2.3. Based on that investigation, I formulated a central research question, sub-questions, and hypotheses. The study's central question is: In what ways do African American and European American college students perceive and evaluate the campus racial climate of a predominantly White institution, and how do their daily lives differ with regard to what they do and how they feel? In order to consider this question, I investigated the following sub-questions, organized topically as follows:

Global versus Episodic Measures

1. What attitudes and experiences are reported by African American and European American college students at a PWI on global and episodic measures?

2. Are there differences in attitudes and experiences reported by African American and European American college students by type of measure (i.e., global or episodic)? If so, how can those differences be characterized?

3. Does the respondent's gender or prior exposure to diversity influence scores on each type of measure?

Order of Instruments

4. Does the order of surveys (first global then episodic/first episodic then global) affect the Unhappiness Index (hereafter, U index) on the episodic measure?

5. Are order effects more pronounced for African American or for European American students?

6. Are order effects more pronounced for women or for men?

7. Are order effects more pronounced for those with more or less prior exposure to diversity?

Allocation of Time

8. How do African American and European American college students allocate their time?

9. In what ways is the allocation of time related to the attitudes and experiences students report of their college experiences?

10. Does allocation of time differ for African American and European American students, and if so, how?

11. Does allocation of time differ by gender and by prior exposure to diversity?

Hypotheses

Global versus Episodic Measures

- *Hypothesis 1*. Reports of attitudes and experiences from the global measure will be more negative in comparison to data gleaned from the episodic measure.

    ✧ *Hypothesis 1a*. African American students' scores on the global measure will be more negative than European American students' scores on the global measure.

    ✧ *Hypothesis 1b*. Among African American students, women's scores on the global measure will be more negative than men's scores on the global measure. The same relationship is hypothesized for European American men and women, but to a lesser extent than for their African American counterparts.

◈ *Hypothesis 1c*. Differences by gender for both African American and European American students will not be as pronounced on the DRM as on the global measure.

◈ *Hypothesis 1d*. Among both African American and European American students, those indicating prior experiences with diversity (that is, reporting scores above the mean level of experience) will report more positive scores on the global measure.

Order of Instruments

• *Hypothesis 2*. Order of instrumentation will produce marked effects on the U index, with the "global-first" condition resulting in more negative affect reports on the episodic instrument than the "DRM-first" condition.

◈ *Hypothesis 2a*. Within the "global-first" condition, African American students will report more negative affect reports on the DRM than European American students.

◈ *Hypothesis 2b*. Within the "global-first" condition, among African American students, women will report more negative affect reports on the DRM than African American men. The same relationship is hypothesized for European American men and women, but to a lesser extent than for their African American counterparts.

◈ *Hypothesis 2c*. Within the "global-first" condition, both African American and European American students indicating prior experience with diversity (that is, reporting scores above the mean level of experience) will report more positive affect reports on the DRM.

<u>Allocation of Time</u>

- *Hypothesis 3*. Differences in time use will be found between African American and European American students. Time use will be related to the attitudes and emotions students report, with students spending more time in activities deemed pleasant than in activities regarded as unpleasant.
  - ✧ *Hypothesis 3a*. Both African American and European American women will report more time spent in academic activities than African American and European American men.
  - ✧ *Hypothesis 3b*. African American students will report more time spent interacting with individuals from a variety of racial/ethnic backgrounds than will European American students.

Choice of Institution

Predominantly White institutions (PWIs) were defined in this study as those colleges and universities for which at least 50% or more of its undergraduate population is identified as European American, or White. Because considerable variation exists among colleges and universities designated as predominantly White institutions, there is no "typical" PWI. I selected one PWI for this study based on the following criteria: it met the above definition of a PWI, it attracted students with a range of academic experiences, it contained an adequate number of African American students from which to draw a sample, and it was within driving distance of the researcher; hereafter, I will refer to this institution as Regional State University, or RSU. Table 3.1 outlines enrollment data at RSU for Fall 2006, and includes gender detail for European American and African American undergraduate students, the two groups of interest in this analysis.

Table 3.1 Fall 2006 Enrollment Data, RSU	
Total undergraduate enrollment*	18,245
Undergraduate enrollment by gender	Male 7,457
	Female 10,755
	Unknown 33
Undergraduate enrollment by race/ethnicity:	
European American	12,569
Men	5,121
Women	7,433
Unknown	15
African American	3,207
Men	1,248
Women	1,958
Unknown	1
Hispanic	426
Asian/Pacific Islander	421
American Indian/Alaska Native	104
Unknown	1,240
Non-resident alien	278
Average age of undergraduates	23.7
Average ACT score of undergraduates	20.93

Source: Institutional Research and Information Management, RSU, Fall 2006.

Sample and Sampling Procedures

The sample was drawn from undergraduate students enrolled at RSU over the

2006-07 and 2007-08 academic years. Although data were collected from undergraduates

from a range of race/ethnicity subgroups, this study examined only data gathered from

African American and European American students. Subsequent studies will analyze data

from the other student subgroups, including students who recorded more than one race

(n=29) and students who recorded a race other than African American or European

American (n=14), and will examine additional variables, such as academic major and

class size. The projected sample is outlined in Table 3.2. Rather than attempting to obtain

a sample that was representative of the population, males and African American students

were over-sampled in order to yield adequate subsamples of each.

63

Table 3.2 Projected Sample Size by Race	
Total in sampling frame	15,776
	12,569 European American undergraduate students
	3,207 African American undergraduate students
Desired sample size	250 total
	125 African American undergraduate students
	125 European American undergraduate students

Originally, the desired sample size was estimated to be 500 subjects. The intent was to yield a sample sufficiently large to detect a moderate effect size and permit detailed analyses, looking at differences by race, gender, and prior experience with diversity. Having collected roughly half the proposed sample by Winter, 2008, I opted to treat the existing dataset as a pilot study to determine whether differences between groups could be detected using a dataset of this size. Preliminary analysis on the global measure of climate indicated that the sample size of n=268 was sufficiently large to detect differences relative to gender and to race. By contrast, because the episodic measure (the Day Reconstruction Method or DRM) takes the episode as the unit of analysis and there are over 3,000 episodes, this dataset is sufficiently large to detect differences relative to gender and race and investigate the other questions of this study.

In addition to considerations of race and gender in sampling, the sample included only undergraduate students enrolled full-time (12 credit hours or more), as I felt the inclusion of students enrolled in fewer hours (and therefore perhaps less connected to the campus) might confound results. In addition, I employed recruitment strategies that encouraged enrollment of subjects from all undergraduate class levels so as to have a broad range of experience represented in the data. As data were collected, I monitored the sampling distribution relative to race and gender. Table 3.3 provides details of the distribution of the sample.

Table 3.3 Sample Distribution by Race and Gender

	Men	Women	Total
African American	62	76	138
European American	66	64	130
Total	128	140	268

An important background characteristic in this study was prior experience with racial diversity (PERD), a composite variable consisting of the mean of two questions regarding the racial diversity in students' home neighborhoods and in their high schools. These questions were taken from Gilliard's (1996) questionnaire, where the focus was on the experience of African Americans relative to European American students. Thus, the response scale for the questions ground the experience of racial diversity in one's background in terms of whiteness on a scale of one to five. I recoded this scale into a three-point index keyed to the race of the respondent, with one meaning a similar background or low PERD value, two a mixed PERD background, and three a dissimilar background or high PERD value. That is, for European Americans, *all white* or *mostly white* became a score of one or *similar* PERD*, half white* or *half non-white* became a score of two or *mixed* PERD, and *all non-white* or *mostly non-white* became a score of three, or dissimilar PERD. For African Americans, *all non-white or mostly non-*white became a score of one or *similar* PERD, *half white* or *half non-white* became a score of two or *mixed* PERD, and *all white* or *mostly white* became a score of three or *dissimilar* PERD. African Americans had a significantly higher PERD score than European Americans ($p=.001$), indicating greater racial heterogeneity in their backgrounds; there were no gender differences. The distribution shows a positive skew, with over three-fourths of the sample falling into the lowest PERD group, a background with little racial

heterogeneity for both African American and European American students. Table 3.4

provides details of the distribution of PERD.

Table 3.4 Sample Distribution, Mean, SD of Prior Experience with Racial Diversity (PERD)

	Similar PERD	Mixed PERD	Dissimilar PERD	Mean PERD Value	SD
Total sample	203	51	12	1.28	0.54
African American	92	34	12	1.42	0.65
European American	111	17	0	1.13	0.34
Men	97	26	5	1.28	0.53
Women	106	25	7	1.28	0.55

Subject Recruitment

Students were recruited in a variety of ways. Recruitment materials were carefully

constructed so as not to focus exclusively on race and racial issues, thereby introducing

bias prior to data collection. Although administrators at RSU were enthusiastic about the

study, the death of a student in December 2006 created an extremely tense atmosphere on

campus and it was difficult to obtain much tangible cooperation from the institution while

they were preoccupied with the investigation. Below is a comprehensive list of

recruitment efforts.

1) The dean of the graduate school assisted me in identifying faculty teaching first-year

   experience courses and general education courses. With the dean's support, I

   contacted these faculty members to request that they distribute flyers to their students

   and encourage them to participate. In this way, I was able to reach a wide number of

   freshman and sophomore students.

2) I also contacted the dean of each college and school to request that flyers be

   distributed to departments, and that a targeted email be sent to students, for which I

   provided the text. The emails were sent out by the units with the signature of the

66

dean. This recruitment strategy provided access to a broad range of students across disciplines. I also targeted larger departments within the colleges, requesting that an email be sent and permission to post flyers.

3) The Vice President for Student Affairs forwarded information about the study to units in the division, asking that unit directors forward the message to students on email group lists. Contacts were made with specific student services offices on campus to request assistance with recruitment activities; of particular interest were the Center for Multicultural Affairs, the Housing office, the Career Services Center, and the Student Recreation Center. I initiated contact with each of these offices to request permission to provide flyers and to solicit their suggestions as to how to reach students most effectively. This strategy was employed to reach large numbers of junior and senior students, and students of color.

4) Flyers were posted in areas heavily frequented by students. This strategy was designed to attract students who were otherwise missed.

5) I contacted all the organized student groups on campus, requesting that information about the study be forwarded via email to their membership lists.

6) I posted ads about the study on Facebook, a social networking website. Over the course of the recruitment period, I listed three ads targeting RSU students. Ads were also posted on Craig's List, another social networking site.

7) I ran two large ads in the student newspaper. In addition, a reporter from the paper interviewed me for a feature story on the project.

8) I presented information about the research to students in the graduate program in educational leadership, inviting their thoughts and ideas. I also made several

presentations to undergraduate classes to promote the study at the invitation of interested faculty.

9) Using personal funds, I hired a recent UM graduate to assist with recruiting for a brief period. This individual had many personal contacts at RSU, and was able to promote the study to several student organizations.

10) I contracted two UROP students to assist with the recruiting process. Both women were very outgoing and personable, and had personal connections at RSU. During their involvement with the study, the UROP students approached potential respondents while I obtained informed consent and administered the surveys.

Initially, students who participated in the study and completed all sections received a $10 gift card to the campus bookstore. It became evident very quickly during the data collection phase that this gift card was not a popular incentive, with students indicating the bookstore was an expensive retail outlet they did not often frequent. Beginning in Winter 2008, I instead offered $10 in cash as an incentive for their participation, which was well received. This is consistent with empirical findings documenting that cash is a compelling incentive (Church, 1993; Singer, Van Hoewyk, Gebler, Raghunathan, & McGonagle, 1999). Participants were informed they were free to withdraw at any time, and would still receive a token gift, a pen, as a gesture of appreciation. In addition, all students were provided with snacks while they completed the measures.

Data collection was scheduled to occur regularly in order to maximize the response rate, focusing on Tuesdays, Wednesdays, Thursdays, and Fridays. Because the DRM focuses on the previous day and it was important that the previous day include

68

academic activities such as attending class, the days noted above were most suitable for data collection. Afternoon and evening data collection sessions yielded the largest numbers of participants and morning sessions the least. Complying with the wishes of RSU administrators, data collection occurred primarily at the student center on campus, although I also recruited participants at a residence hall on several occasions, with the permission of the Housing director. Data collection generally occurred in a group administration, with participants given as much time as they needed to complete all measures. All instruments were completed on-site and students were provided with compensation upon their departure.

Instrumentation

A global measure of campus climate (GMC) (see Appendix A) was employed that was originally developed as part of a multi-institutional study of college racial climate specifically focusing on the experiences and perceptions of African American college students (Gilliard, 1996). Using this 66-item measure, Gilliard (1996) conducted a factor analysis, finding twelve factors that defined four general constructs. I modified the measure considerably for this study, eliminating some questions deemed extraneous and rephrasing others. The measure was reduced to 40 items and utilized only those questions that were germane to my research. The data I collected did not demonstrate the robust reliability Gilliard found for the four factors listed above; exploratory factor analysis (described in a later section) proved to be a better tool.

In addition to the GMC, the Day Reconstruction Method (DRM; Appendix B) was utilized as an assessment of episodic experience. The DRM asks participants to complete a detailed diary of the previous day, using it as a reference tool to answer

structured questions about activities of the day. For each episode, participants record the time each episode began an ended over the course of the day. Respondents indicate how they were feeling during each episode of the day by responding to affect descriptors (0=not at all, 6=very much). These affect descriptors include: *competent/capable*, *respected*, *smart*, *warm/friendly*, *happy*, *powerless*, *accepted*, *frustrated/annoyed*, *hassled/pushed around*, *angry/hostile*, *worried/anxious*, and *criticized/put down*.

A score called a *U index* (or unhappiness index) was calculated to show the percentage of time over the course of the day in which the predominant emotion is a negative one. As I pointed out in the literature review, the psychometric properties of positive affect tend to be intercorrelated, whereas negative emotions tend to be experienced uniquely, making the U index (rather than a "happiness index") the appropriate measurement. Allocation of time was clustered into general categories of activities.

Finally, demographic information was collected from respondents (Appendix C). This included background information such as race, gender, SES, class level, enrollment status, self-reported grade point average, degree aspirations, and the structural diversity of students' secondary schools and home environments.

Procedure

Applications to the Institutional Review Boards (IRB) of both the University of Michigan and RSU were submitted and each issued an exempt determination. Permission was obtained to collect data at RSU and contacts were made with various offices at that institution, as described previously. A room in a central campus building was reserved for data collection, which took place on numerous occasions, including sessions scheduled

during the afternoon and evening to accommodate a variety of schedules. The recruitment flyer can be found in Appendix D and the informed consent document in Appendix E.

After obtaining informed consent, students were assigned a study number and were asked to complete three packets of materials (described below). They were given one packet at a time, submitting one completed packet before moving on to the next. Based on information from the original Texas DRM study conducted by Kahneman et al. (2004a), I anticipated that students might require 45-75 minutes to complete all sections, but gave them as much time as needed. I found that participants finished all sections in about an hour. In Condition A, students completed the GMC before the DRM; in Condition B, students completed the DRM before the GMC. Participants were randomly assigned to these treatment conditions, with respondents receiving an even-numbered study number assigned to Condition A and respondents with an odd-numbered study number assigned to Condition B. For both conditions, the demographic questionnaire was completed last.

Condition A:

1) Packet 1. Respondents completed the GMC.

2) Packet 2. Respondents completed the DRM. This began with respondents creating a diary (to be viewed only by the respondent) consisting of sequences of episodes from the previous weekday, spending approximately 30-60 minutes on this task. The diary was a description of everything the participant did during the previous day. The purpose of the diary was to reinstantiate or make immediate the previous day into working memory. Students retained this portion of the materials, using it to complete the DRM. It was never seen by the researcher. Participants used the

diary as the tool to respond to a series of questions to ascertain what they were

doing, where they were, with whom they were interacting, and how they felt

during these episodes.

3) Packet 3. Respondents provided demographic information.

Condition B:

1) Packet 1. Respondents completed the DRM.

2) Packet 2. Respondents completed the GMC.

3) Packet 3. Respondents provided demographic information.

Those who fully completed all portions of the study received an incentive,

described previously. In addition, if any students found the survey questions distressing, a

list of local counseling resources was available. Moreover, I hold a master's degree in

guidance and counseling, and was well-equipped to address any concerns that might have

arisen, if any. There were no adverse events related to human subject participation in the

research.

<p align="center">Variables</p>

<p align="center">Dependent Variables</p>

There were two dependent variables, the factor scores on the global measure and

the U index score on the episodic measure. In the next section, I describe the details of

the factor analysis on the data from the global measure; six factors emerged from this

procedure. The U index on the episodic measure is a duration-weighted score

representing the percentage of time in which the predominant emotion is a negative one

across all episodes during one day.

Independent Variables

Independent variables in this study included type of measure (global or episodic), race/ethnicity (African American or European American), order of completion of instruments, time allocation, gender, and prior experience with racial diversity. These variables were selected based on the literature presented in Chapter 2, which demonstrated that race/ethnicity, gender, and prior experience with racial diversity appeared to be salient when thinking about campus climate. Because the two measures are so different, I felt it important to explore whether completion of the global measure first influenced the way a participant might complete the episodic measure. The order of instrument variable thus explores this possibility. Finally, the time allocation variable is utilized in two ways: first, to gain a better picture of how students spend their time in a descriptive sense, and second, to calculate the duration-weighted U index score on the DRM, described in a later section.

The list of all items on each instrument, including the coding and recoding schemes, may be found in Appendix F. The dependent and independent variables are presented in Table 3.5.

Table 3.5 Variables in the Study	

Dependent variables	Scores reported on:
	   Global measure of climate (GMC), reported by factors
	   Episodic measure (DRM), reported by duration-weighted U
	      index assigned to each individual

Independent variables	Race
	Gender
	Prior experience with racial diversity (composite variable based on
	   neighborhood of origin and high school, keyed to race of
	   respondent)
	Order of instrument effect (Conditions A and B)
	Time allocation

Analyses

The analytic strategy involved multiple steps, beginning with an examination of

the data from each measure, and then contrasting and interpreting the differences between

them. On the global measure (GMC), a factor analysis procedure identified six factors

within the data; regression scores were created for each of the factors, and blocked

hierarchical linear regression was employed, examining the effect of race, gender, and

prior experience with diversity on factor scores. For the episodic measure (DRM), a U

index score was created, which then served as the basis for blocked linear regression,

exploring the effects of race, gender, and prior experience with diversity. Last, findings

for each measure were interpreted and contrasted. Table 3.6 details the analytic

techniques employed in the study.

Table 3.6 Analytic Strategy by Hypothesis	
Global Measure-GMC	Analytic Strategy
Hypothesis 1a: differences by race	Linear regression
Hypothesis 1b: differences by gender	
Hypothesis 1d: differences by PERD	
Episodic Measure-DRM	
Hypothesis 2: order effects	Linear regression
Hypothesis 2a: order effects by race	
Hypothesis 2b: order effects by gender	
Hypothesis 2c: order effects by PERD	
Hypothesis 3: time use by race	
Hypothesis 3a: time use by gender	
Hypothesis 3b: time use by race	
Comparison of GMC and DRM	
Hypothesis 1: differences by instrument	Correlation,
Hypothesis 1c: differences by race, gender	Interpretation of findings

Global Measure of Climate (GMC)

Once data were entered, it was necessary to recode some of the variables in order

to insure that the response sets were consistent (with negative responses at the lower end

74

of the response scale and positive responses at the upper end of the response scale).
Details of the coding and recoding may be found in Appendix F. I examined the data for the presence of outliers, checking any unusual numbers against the paper surveys.

I then explored whether the data I collected fit the factor structure Gilliard (1996) identified, given the modifications I made to the measure. Gilliard's overall aim closely mirrored my own in terms of what she hoped to learn about the perceptions of campus climate by African American college students; I therefore felt it was important to use her factor structure, if possible. Gilliard identified twelve factors representing four general constructs in her data. She termed the first construct *in-college student characteristics*, which included class level, transfer status, dating, perception of positive social self-concept, and satisfaction with academic performance. Construct two was *general student experiences*, and included residence, involvement in social activities, satisfaction with social life, and informal student-faculty interaction. *Race-related experiences* made up construct three, which included racial composition of friends, intergroup respect and interaction, feeling of discrimination, perceptions of fair treatment by faculty and administration, and overall campus racial climate. Finally, the fourth construct was *general institutional support services*, and included use of academic support services, career services, financial aid, and health services.

In my study, I utilized questions representing three of these four constructs. The fourth construct focused on support services for students, which was not relevant to this study. Mapping the data I collected onto Gilliard's factor solution, I compared the alpha levels (representing eight of Gilliard's twelve factors) with Gilliard's alpha levels. This comparison is presented in Table 3.7.

Table 3.7 Comparison of Cronbach's Alpha by Race

	Gilliard Sample		Birk Sample	
	AA[a]	EA[b]	AA	EA
Construct I: In-college student characteristics				
Factor 1 Positive social self-concept	.750	.700	n/a	n/a
Factor 2 Satisfaction with academic performance	.750	.770	.866	.890
Construct II: General student experiences				
Factor 1 Involvement in social activities	.800	.790	n/a	n/a
Factor 2 Informal student-faculty interaction	.830	.800	.569	.558
Factor 3 Satisfaction with social life	.700	.690	.546	.570
Construct III: Race-related experiences				
Factor 1 Faculty treat AA/ EA students same	.790	.700	.578	.890
Factor 2 Positive relations with EAs	.770	.700	.597	.779
Factor 3 Positive relations with AAs	.700	.700	.487	.588
Factor 4 EA students respect AA students	.750	.760	.652	.819
Factor 5 Institution promotes acceptance of racial difference	.600	.610	n/a	n/a
Factor 6 Poor campus racial climate	.600	.640	.141	.029
Construct IV: General institutional support services				
Factor 1 Institutional support services	.760	n/a	n/a	n/a

[a]=African American
[b]=European American

Exploring the model developed by Gilliard further, I ran a 2-way ANOVA for each of the factors she identified on which my items loaded to examine whether there were any differences by race or by gender in the data I collected. Of the eight factors, only three demonstrated significant main effects for either race or gender and no significant interaction for race and gender emerged for any factors, as follows:

- Satisfaction with academic performance during college (Construct I, Factor 2)

  o A significant main effect was found for gender, $[F(1,266)=9.86, p=.002]$, with females scoring higher than males. In addition, a significant main effect was found for race, $[F(1,266)=26.66, p=.001]$, with European Americans scoring higher than African Americans.

- Faculty treat AA students same as EA students (Construct III, Factor 1)

  o A significant main effect was found for race only, $[F(1,265)=23.93, p=.001]$, with European Americans scoring higher than African Americans.

- Positive relations with EAs (Construct III, Factor 2)

  o A significant main effect was found for race only, $[F(1,266)=24.18, p=.001]$, with European Americans scoring higher than African Americans.

Rather than trying to use a factor structure that did not reflect the structure of these data, I determined that exploratory factor analysis was the more appropriate analytical technique. I employed principal components analysis (PCA) with varimax rotation. Like factor analysis, the purpose of PCA is to reduce a larger data set to a smaller number of elements that account for variance within the data (Field, 2005; Suhr, 2005). It differs from factor analysis in that PCA examines linear components within the data and explores how variables contribute to those components, while factor analysis estimates underlying constructs within the data, based on a set of assumptions (Field, 2005). Ultimately, PCA solutions may not differ much from factor analysis solutions. In determining whether to use traditional factor analysis or PCA, Stevens (1992) concluded

that with at least 30 variables demonstrating communalities greater than .4, solutions derived using traditional factor analysis and PCA should not differ. Data from the GMC contain 39 variables and there are no communalities under .4, and thus the choice of PCA as a technique for this study is defensible. Varimax rotation is a form of orthogonal rotation, which assumes that factors are independent of one another. With varimax rotation, a smaller number of variables are loaded highly onto each factor (Rennie, 1997).

In determining how many factors to retain, I began by following Kaiser's (1960) recommendation to include all factors with an eigenvalue of 1 or above. This strategy resulted in 11 factors that did not converge in the rotation step. Using Cattell's (1966) advice to examine the scree plot, retaining factors above the "elbow," I identified six factors. This six-factor solution accounted for 45% of the variance, with factors that were conceptually unique. These factors are described below.

(1) General Perceptions of Campus Racial Climate

This factor contains questions that addressed general perceptions of comfort and respect in relationships between individuals of different racial backgrounds on campus, as well as the assessment of the visibility of students of color.

(2) Characterization of One's Own Interracial Relationships

For this factor, students assessed their own interracial relationships with students, staff, and faculty. This group of questions focused on the student's own relationships, rather than asking for overall assessments of such relationships on campus.

(3) Perceptions of Equal Treatment of Students by Faculty

Students indicated their perceptions of equal treatment of students of differing racial backgrounds by faculty in terms of the provision of academic assistance, acknowledging student contributions in class, and grading fairly.

(4) Own Academic Experiences

Questions loading on this factor focused on students' satisfaction with their own individual academic performance, as well as their academic interactions with faculty.

(5) Campus Social Integration

This factor contained questions that centered on student satisfaction with social activities, the feeling of being part of the campus, and the belief that other students hold similar values.

(6) Informal Relationships with Faculty

Questions loading on this factor asked students whether they had ever socialized informally with faculty or interacted outside the classroom, discussing personal issues such as future career or educational plans or other concerns.

Table 3.8 reports Cronbach's alpha for each factor in this structure; rotated factor loadings can be found in Appendix G. The cut point for the alpha was .4.

Table 3.8 Factor Reliabilities

Factor	Cronbach's α	n	Number of Items
F1 General Perceptions of Campus Racial Climate	.805	264	7
F2 Characterization of One's Own Interracial Relationships	.740	267	6
F3 Perception of Equal Treatment of Students by Faculty	.702	262	6
F4 Own Academic Experiences	.734	268	4
F5 Campus Social Integration	.659	266	5
F6 Informal Relationships with Faculty	.565	264	5

Of all 39 items on the measure, the following items did not load on any factors:

3.   Member of extracurricular organizations

6e.   Discussed assignments with faculty

9a.   Perception of administrative support for organizations and programs

geared toward students of color

9b.   Feel a sense of discrimination on campus

10b.   Describe relationships with students of color

12b.   Dating relationships exist across racial/ethnic groups

 Although these items may help to paint a portrait of campus climate, the obtained

factor structure is stronger without them. In addition, the six factors appear to be

independent of one another, demonstrating weak, non-significant correlations, as shown

in Table 3.9.

Table 3.9 Correlations among Factors, 6 Factor Solution, GMC					
	F1	F2	F3	F4	F5	F6
F1	1.00					
F2	-.030	1.00				
F3	.010	.003	1.00			
F4	.004	-.003	-.004	1.00		
F5	.007	.009	.004	0.25	1.00	
F6	.012	.011	.001	-.005	.012	1.00

        This factor structure is the foundation for the linear regression analyses presented

in the next chapter.

Day Reconstruction Method (DRM)

        The first step in examining data from the DRM was to assess the reliability of the

measure. In Chapter 2, I presented the details of several assessments that were undertaken

of the DRM by Krueger and Schkade (2007) and Krueger et al. (in press); these

evaluations demonstrated robust results, both within the individual studies and across

datasets. Examining the data I collected, I ran split-half reliabilities on affect reports by

episode. For each episode, participants had a list of 12 affect descriptors (six positive and

six negative) and were asked to indicate how true each descriptor was for them during

that episode, ranging from "not at all" to "very much." I grouped positive affect

descriptors together and negative affect descriptors together. Like Krueger and Schkade

(2007), I found correlations between each half of the sample to be stronger for positive

than negative affect. The results are presented in Table 3.10.

Table 3.10 Split-half Reliabilities, DRM

| | | Cronbach's Alpha | |
	n Episodes	Part I	Part II
Positive affect	3,218	.848	.863
Smart			
Accepted			
Competent			
Warm/friendly			
Happy			
Respected			
Negative affect	3,236	.679	.665
Powerless			
Frustrated			
Hassled			
Angry/hostile			
Worried			
Criticized			

Next, I examined basic descriptive data, including the mean number of episodes

per person, duration of episodes, and frequency of activity type. Of a total of 3,342

episodes, the average number of episodes was 12.5 (SD = 4.1), and the average episode

duration was 1.22 hours, or about one hour, 15 minutes. This is comparable to the

original DRM study conducted in Texas in which Kahneman et al. (2004a) reported the

average number of episodes was 14.1 and the average episode duration was just over one hour. Participants reported activities for an average of 15.263 hours of the previous day.

The data were collected so that participants would report on a weekday to maximize the possibility that they would have attended class or engaged in some academic endeavor. Most participants reported their activities for a Monday at over 45% of the sample, followed by 22% of the sample reporting on a Thursday's activities. The next most commonly-reported day was Wednesday for 20% of the sample, followed by Tuesday for almost 11% of the sample, and Friday for just over 1% of the sample.

Because the time associated with the activities in which students engaged was key to the study, I calculated the duration of each of the episodes reported on the DRM. I computed the length of each episode by examining the start and end times provided by participants. I then converted the resulting episode duration into decimal time, to the nearest five minutes. Appendix H provides the conversion metric; decimal time equivalents were used. For example, if an episode began at 2:00 pm and concluded at 3:20 pm, the duration of the episode would be 1 hour and 20 minutes. After converting to a decimal clock, the duration value of this episode would be 1.333.

I calculated the U index by examining the scores on the affect descriptors for each episode. Of the 12 affect descriptors, six were positive and six were negative. I created a dichotomous indicator variable for each episode by examining whether the maximum score for any of the negative affect descriptors was greater than the maximum score for any of the positive affect descriptors. If this was true, the episode was deemed to be predominantly negative. Then, the duration of time for all negative episodes within the individual was summed, creating a numerator; this was divided by the total duration

reported by the individual for all episodes over the course of the day. The resulting

product was a duration-weighted U index for each individual that indicated the

percentage of time over the day in which the predominant emotion was negative.

Finally, I examined the frequencies of all activities noted by respondents. Because

the DRM invited participants to indicate *all* activities in which they were engaged in an

episode rather than asking for a *primary* or focal activity, participants frequently reported

more than one activity for an episode. For example, a participant might have indicated

she was eating and watching television, or engaged in academic work and using the

computer during an episode. (Indeed, some students appeared to be very adept at such

multi-tasking!) Consequently, students reported 5,468 activities for 3,342 episodes, or

approximately 1.6 activities per episode.

While it is realistic to assume that people do engage in a multitude of activities

simultaneously, this presented a challenge in interpretation and analysis. This issue arose

in the original Texas DRM study, but because the kinds of activities people engaged in at

the same time were generally of a very similar valence, the investigators found little

impact on affect for the episode (N. Schwarz, personal communication, August 18,

2008). As I considered how to manage the multiple activities, I determined that activities

with a frequency of less than 1% of the total number of activities reported would not be

analyzed further beyond inclusion in the appendices; these activities include intimate

relations, shopping, and prayer/worship/meditation. This strategy will also apply to

activities listed under an *other* option, in which participants could write in activities not

listed. These "write-in" *other* activities included meetings, errands, preparation or

planning, health care, waiting, legal business, animal care, and volunteering. I opted not

to analyze these activities individually because the frequencies were below my predetermined cut point; instead, I grouped them in the *other activity* category. Details of the activities are presented in Chapter 4.

Methodological Limitations of the Study

A number of limitations existed for this project. First, the DRM is a relatively time-consuming measure to complete, requiring at least 45 minutes to report a full day's activities. With the busy schedules of students, participation in this research was a significant gift of their time, for which I am grateful. There was no way to overcome this issue, but I allowed students to take as much time as they needed to complete the measures, and offered snacks and candy in addition to compensation of $10 for their time.

Second, the timing of the administration of measures of campus climate might have affected results; that is, results could be skewed in one direction or another depending on current events. I avoided recruiting during mid-term and final examinations for this reason. The death of a student on campus, occurring almost simultaneously with the initiation of my recruitment activities, clearly had an impact on students and very likely influenced the outcomes. Students talked with me a good deal about their concerns, specifically regarding their personal safety and the administration's management of the investigation.

Third, because the cultures of universities can be quite distinctive, the institution selected for the study may not have been representative of predominantly White institutions with regard to its climate, and thus, the results may not be generalizable to other comparable institutions. I selected this institution because it fit the study's criteria

of a PWI and because of its proximity to UM. This institution has a higher percentage of African American students enrolled than do many similar universities, but this enrollment does not mirror the racial distribution in the population. The intent in this analysis is to explore the findings for this sample of students, and to see what the data suggest with regard to future directions.

Finally, the independent variables in the study were limited to race, gender, PERD, allocation of time, and order effect. An expansion of the model to include variables such as socioeconomic background and religiosity would have added a more nuanced examination of student experience. Students at RSU are drawn from all walks of life and to only focus on one or two key demographic variables may eliminate some very relevant information.

Chapter Summary

Based on the research questions and hypotheses, Figure 3.1 outlines in more detail the potential relationships between the factors influencing perceptions of climate by African American and European American college students. Student characteristics such as race/ethnicity, gender, and prior experience with racial diversity may influence the perception of campus climate as assessed on the traditional global measure, and may also influence how students spend their time, which is reflected in the episodic measure of daily experience and affect. In addition, because the traditional global measure is so heavily focused on race and racial issues, the order in which students complete the measures may affect the overall score on the episodic measure, or the U index.
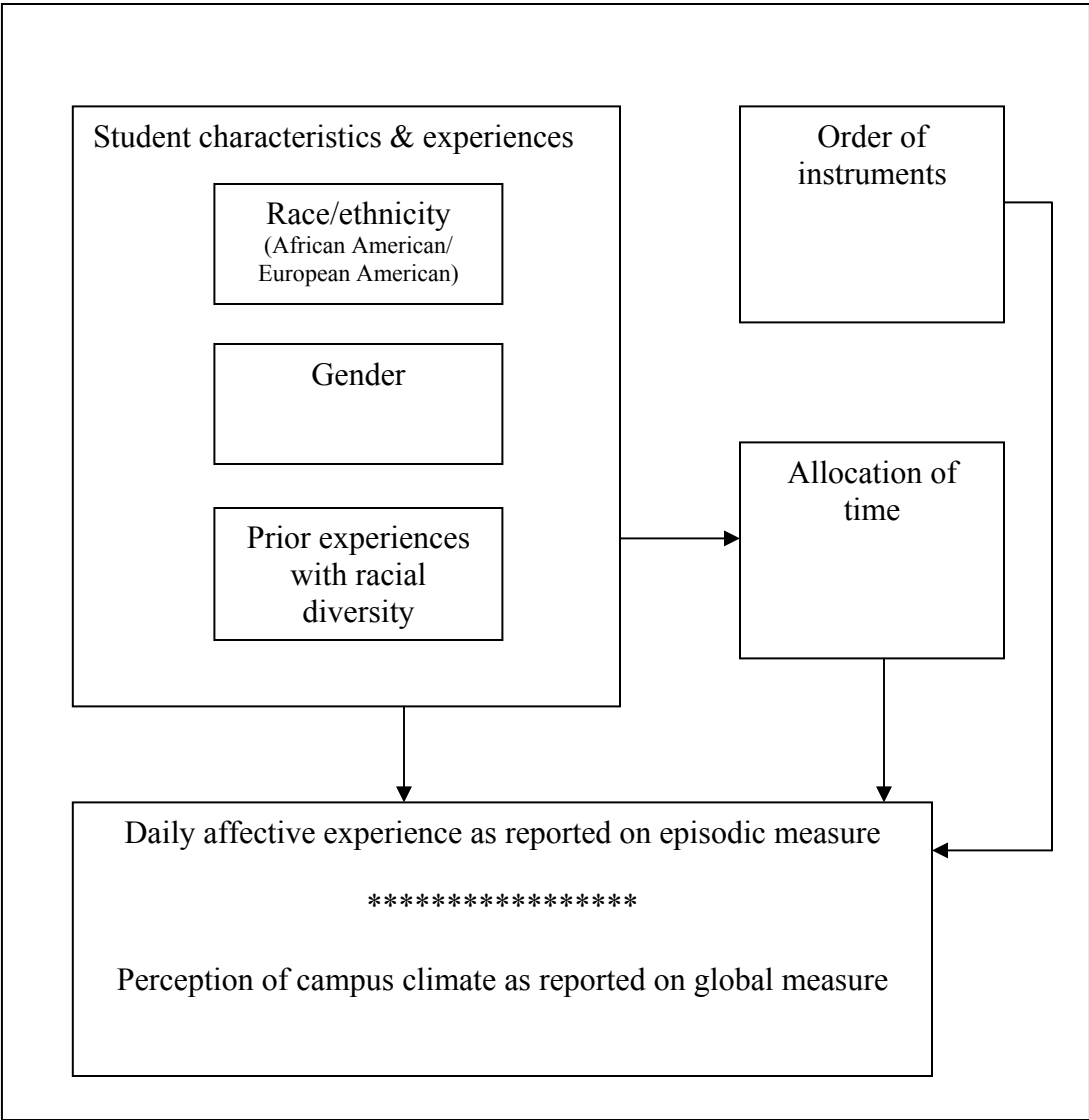
Figure 3.1 Hypothesized Relationships among Factors Influencing Daily Affective Experience and Perceptions of Climate by African American and European American College Students at a PWI

CHAPTER 4

RESULTS

The purpose of this study was to examine the daily affective experiences of

African American and European American students at a predominantly White institution

(PWI), exploring the activities to which they devote their time, the people with whom

they interact, and the emotions accompanying these experiences, contrasting this with

their perceptions of campus racial climate. To accomplish this purpose, a sample (n=268)

of students at a regional state university (RSU) completed two instruments, one a global

measure of climate and the other an episodic measure intended to assess daily affective

experience. In addition, I investigated whether the order of completion of the instruments

produced any differences in the affect students reported on the episodic measure, and I

explored how students reported spending their time. I examined whether race, gender, or

prior experience with racial diversity (comprised of racial diversity in one's secondary

school and home neighborhood) affected these outcomes.

In this chapter I present the findings from each instrument, beginning with the

Global Measure of Climate (GCM), followed by the Day Reconstruction Method (DRM).

For each measure, I provide an overview of the purpose and nature of the instrument,

followed by the procedures employed in the analysis and the results. I conclude this

chapter by presenting results that contrast these measures.

Global Measure of Climate (GMC)

A global measure of climate (GMC) was employed in this study to assess general student perceptions regarding campus racial climate. This measure is an instrument that requires respondents to employ the top-down retrieval strategies described in Chapter 2, and serves as a contrast to the episodic measure, which triggers a bottom-up cognitive approach by respondents. (A top-down retrieval strategy is utilized when only thematic or temporal information is cued and the focus is on semantic knowledge, a process that can produce distortions in memory; a bottom-up cognitive strategy uses not only thematic and temporal markers, but also accesses information in a parallel fashion by making connections that cross thematic boundaries and can result in greater accuracy and reduced bias [Belli, 1998]). The GMC was developed as part of a multi-institutional study of college racial climate specifically focusing on the experiences and perceptions of African American college students (Gilliard, 1996). I modified the measure, eliminating questions deemed to be extraneous to this study, and rephrasing others for clarity. This resulted in a 40-item measure.

Information provided in the previous chapter outlines the activities I undertook to prepare for the analysis of the GMC data. The data I collected did not closely fit the factor structure employed by Gilliard in her analyses, and thus I opted to conduct exploratory factor analysis. Details of the factor structure I employed, including factor loadings and alpha reliabilities, were also reported in the previous chapter. A six-factor structure was identified; scores from each of these factors serve as dependent variables on the GMC in the results that follow.

Results of the Linear Regression Analysis, GMC

Before conducting the linear regression analysis, it was necessary to first examine whether the assumptions of linear regression were met. Diagnostics in SPSS gave no evidence of multicollinearity among independent variables for any of the six factors, with variance inflation factors (VIFs) less than 10 and tolerances greater than .10. In addition, although a less effective indicator of multicollinearity, I examined bivariate correlations among the independent variables (race, gender, and prior experience with racial diversity [PERD]) to ascertain whether interrelationships existed between them. Race and PERD were significantly correlated (p=.001), and the coefficient revealed a positive relationship of modest strength. In other words, African American students reported more prior experience with racial diversity, or greater racial heterogeneity in their backgrounds, than did European American students. No other significant correlations were found. Table 4.1 provides the Pearson correlations between the independent variables.

Table 4.1 Pearson Correlations, Independent Variables, GMC

Variables	Race	Gender	PERD
Race	1.000		
Gender	.058	1.000	
PERD[a]	.266***	.001	1.000

*p≤.05, **p≤.01, ***p≤.001
[a]=prior experience with racial diversity

Next, I examined the relationships between the independent variables and the six factors identified within the GMC data. Table 4.2 provides the Pearson correlations.

89

Table 4.2 Pearson Correlations, Factors and Independent Variables, GMC

Factors		Race	Gender	Race x Gender Interaction	PERD[a]
F1	General perception of campus racial climate	-.222***	.061	-.176**	-.107
F2	Characterization of own interracial relationships	-.134*	-.026	-.112	.033
F3	Perceptions of equal treatment of students by faculty	-.264***	.021	-.107	-.069
F4	Own academic experiences	-.264***	.139*	-.076	-.100
F5	Campus social integration	.042	.113	.082	-.033
F6	Informal relationships with faculty	-.124*	.065	.112	.044

*$p \leq .05$, **$p \leq .01$, ***$p \leq .001$
For race, 1=African American and 0=European American.
For gender, 1=female and 0=male
For race x gender, AA female is the reference group (1=AA women, 0=all else).
[a]=prior experience with racial diversity

Race was an important variable, significantly related to all factors except F5,

Campus Social Integration. Moreover, the significant negative relationships between race

and the factors indicate that African Americans were more likely than European

Americans to report negative feelings on these topics. Women were significantly more

likely than men to positively evaluate their own academic experiences; gender was

positively related to F4 Own Academic Experiences. The interaction term, *race x gender*,

was significantly correlated with only the first factor, leading me to be alert for this in the

multivariate analysis when I examined differences in the way subgroups viewed the

campus racial climate, relative to one another. Finally, PERD did not demonstrate a

significant relationship with any of the factors. None of the independent variables demonstrated a significant relationship with Factor 5, Campus Social Integration.

Concluding the tests for consistency with assumptions of linear regression, I checked for the presence of outliers and normality in the data for each factor by examining the scatterplots of the observed residuals against the predicted residuals and the normal probability plots of the standardized residuals. For each of the factors, I found no major deviation from normality and there was no suggestion of violation of constant variance, supporting the assumption of homoscedasticity.

Having determined that assumptions of linear regression were met in the data, I then examined the means and standard deviations for each factor, first looking at the total sample and then examining the data by racial subgroups. The data present a pattern of mean scores by race, with African Americans' scores below the mean for Factors 1-4 and European Americans' scores below the mean for Factors 5 and 6. This summary is presented in Table 4.3.

Table 4.3 Descriptive Summary of Factors by Racial Subgroup, GMC

Factors		Total Sample n =252		African Americans n =129		European Americans n=122	
		M	SD	*M*	SD	*M*	SD
F1	General Perceptions of Campus Racial Climate	-.012	.996	-.219	.932	.221	1.007
F2	Characterization of One's Own Interracial Relationships	-.016	1.011	-.145	.891	.125	1.113
F3	Perceptions of Equal Treatment of Students by Faculty	-.011	1.016	-.274	1.220	.262	.646
F4	Own Academic Experiences	-.001	1.002	-.263	.939	.265	.994
F5	Campus Social Integration	.014	.996	.053	.938	-.031	1.060
F6	Informal Relationships with Faculty	.005	1.012	.125	.966	-.126	1.050

I conducted blocked linear regression by examining the effect of adding independent variables singly on the dependent variable, the score for Factors 1 through 6. In this way, it was possible to examine the changes in the dependent variable as additional variables were introduced into the regression. I ordered the blocks by importance in predicting the outcome, considered the empirical evidence supporting each, and inserted new predictors last (Field, 2005). In the first block, I examined the effect of race on the score for each factor, added gender in the second block, and included the interaction term (race by gender) in the third block. Finally, in the fourth block, I added prior experience with racial diversity (PERD). The results of this blocked regression analysis are presented in Table 4.4 for each factor.

Table 4.4 Linear Regression Results, F1-F6, GMC

	F1:General Perception of Campus Racial Climate							F2: Characterization of Own Interracial Relationships						
	B	SE	β	*p* value	R^2	*F*	Sig. of *F*	B	SE	β	*p* value	R^2	*F*	Sig. of *F*
Block 1														
Constant	.198	.088						.138	.091					
Race[a]	-.417	.122	-.213	.001***	.045	11.69	.001***	-.283	.126	-.142	.026*	.020	5.05	.026*
Block 2														
Constant	.138	.105						.149	.109					
Race	-.425	.122	-.217	.001***				-.281	.126	-.141	.027*			
Gender[b]	.126	.122	.064	.303	.049	6.38	.002**	-.024	.126	-.012	.848	.020	2.53	.081
Block 3														
Constant	.000	.120						.105	.125					
Race	-.139	.172	-.071	.420				-.191	.180	-.095	.291			
Gender	.417	.174	.213	.017*				.068	.182	.034	.709			
Race x Gender[c]	-.563	.242	-.258	.021*	.070	6.13	.000***	-.178	.253	-.080	.482	.022	1.85	.139
Block 4														
Constant	.111	.177						-.051	.185					
Race	-.110	.176	-.056	.531				-.231	.184	-.116	.209			
Gender	.417	.174	.213	.017*				.068	.182	.034	.708			
Race x Gender	-.564	.242	-.259	.021*				-.177	.253	-.080	.485			
PERD[d]	-.098	.114	-.055	.390	.073	4.78	.001***	.137	.119	.076	.250	.027	1.72	.146

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$; *n*=249
[a] dummy coded, 1=African American, 0=European American
[b] dummy coded, 1=female, 0=male
[c] African American female is the referent group
[d] prior experience with racial diversity

Table 4.4 Linear Regression Results, F1 – F6, GMC, Continued

	F3: Perceptions of Equal Treatment of Students by Faculty							F4: Own Academic Experiences						
	B	SE	β	p value	R^2	F	Sig. of F	B	SE	β	p value	R^2	F	Sig. of F
Block 1														
Constant	.277	.090						.271	.088					
Race[a]	-.551	.125	-.271	.000***	.073	19.51	.000***	-.534	.122	-.269	.000***	.072	19.22	.000***
Block 2														
Constant	.234	.108						.120	.104					
Race	-.557	.125	-.274	.000***				-.556	.121	-.280	.000***			
Gender[b]	.089	.125	.044	.475	.075	9.99	.000***	.318	.121	.160	.009**	.098	13.31	.000***
Block 3														
Constant	.285	.124						.108	.120					
Race	-.660	.178	-.325	.000***				-.530	.172	-.267	.002**			
Gender	-.016	.180	-.008	.928				.344	.174	.173	.049*			
Race x Gender[c]	.205	.250	.090	.415	.078	6.87	.000***	-.051	.242	-.023	.835	.098	8.85	.000***
Block 4														
Constant	.277	.183						.169	.177					
Race	-.663	.182	-.326	.000***				-.514	.176	-.259	.004**			
Gender	-.016	.180	-.008	.928				.344	.174	.173	.049*			
Race x Gender	.205	.251	.090	.416				-.051	.242	-.023	.833			
PERD[d]	.007	.118	.004	.952	.078	5.13	.001***	-.054	.114	-.030	.637	.099	6.68	.000***

*p≤.05; **p≤.01; ***p≤.001; n=249
[a] dummy coded, 1=African American, 0=European American
[b] dummy coded, 1=female, 0=male
[c] African American female is the referent group
[d] prior experience with racial diversity

Table 4.4 Linear Regression Results, F1 - F6, GMC, Continued

	F5: Campus Social Integration							F6: Informal Relationships with Faculty						
	B	SE	β	p value	R^2	F	Sig. of F	B	SE	β	p value	R^2	F	Sig. of F
Block 1														
Constant	-.030	.091						-.116	.092					
Race[a]	.084	.126	.042	.507	.002	.44	.507	.240	.128	.119	.061	.014	3.54	.061
Block 2														
Constant	-.136	.108						-.177	.110					
Race	.069	.126	.035	.586				.232	.128	.115	.072			
Gender[b]	.223	.126	.112	.077	.014	1.79	.168	.129	.128	.064	.314	.018	2.28	.105
Block 3														
Constant	-.149	.125						-.175	.127					
Race	.095	.180	.048	.597				.228	.183	.113	.213			
Gender	.250	.181	.126	.169				.126	.185	.062	.496			
Race x Gender[c]	-.052	.252	-.024	.836	.015	1.21	.308	.007	.257	.003	.980	.018	1.51	.212
Block 4														
Constant	-.053	.184						-.204	.188					
Race	.120	.183	.061	.513				.221	.187	.109	.238			
Gender	.250	.182	.126	.170				.126	.185	.628	.497			
Race x Gender	-.053	.253	-.024	.834				.007	.257	.003	.979			
PERD[d]	-.084	.118	-.047	.478	.017	1.03	.393	.026	.121	.014	.832	.018	1.14	.338

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$; $n=249$

[a] dummy coded, 1=African American, 0=European American

[b] dummy coded, 1=female, 0=male

[c] African American female is the referent group

[d] prior experience with racial diversity

In examining the findings by block, race was a significant predictor for factors one through four, with African American students significantly more likely than their European American peers to report unfavorable perceptions of the campus racial climate, to describe their personal interracial relationships as unsatisfactory, to perceive that faculty treated students unequally, and to evaluate their own academic experiences unfavorably. Gender was a significant positive predictor for F1 General Perceptions of Campus Racial Climate and for F4 Own Academic Experiences; women were significantly more likely than men to evaluate the campus racial climate and their academic experiences in a favorable light. The interaction term, *race x gender*, was a significant predictor only in the first factor, with race moderating the gender effect (discussed in the next section and presented in Figure 4.1). The composite variable, PERD, added in the fourth block, was consistently not significant as a predictor for any factor, contrary to my prediction in Hypothesis 1d that those reporting greater PERD would similarly report higher scores on the GMC. Results of the regression are discussed next by factor.

Factor 1, General Perceptions of Campus Racial Climate

Race was significantly predictive of the general perception of campus racial climate, with African American students more likely than European American students to respond unfavorably to the questions loading on this factor. In Block 1, race accounted for 4.5% of the variance in general perceptions of campus racial climate. Race significantly predicted how students perceived the campus racial climate, with African American students significantly more likely than European American students to express dissatisfaction ($\beta=-.213$, $p=.001$). In Block 2, race remained significantly predictive of

general perceptions of campus racial climate, with African American students significantly more unfavorable in their views than European American students (β=-.217, p=.001). Race was the strongest predictor for this factor. This finding supports Hypothesis 1a, in which I predicted a racial difference in the perception of campus racial climate, with African Americans significantly more likely to hold an unfavorable perception. This finding is consistent with those of Gilliard (1996), who found that African American students found the campus climate to be inhospitable.

Added in Block 2, gender by itself did not predict how students perceived the campus racial climate, but with the addition of the interaction term in Block 3, gender did achieve significance (β=.213, p=.017), as did the interaction term, *race x gender* (β=-.258, p=.021), with race moderating the gender effect (see Figure 4.1). In other words, European American women held the most favorable views of all race and gender groups and African American women maintained the least favorable perspectives of all race and gender groups; scores on this factor did not differ so dramatically for African American and European American men. The favorable reports of European American women masked the more unfavorable views of African American women when only considering the influence of gender; examination of the interaction term exposed the influence of race on this gender effect. I explored the interaction using both multiple regression and ANOVA, with identical results.

Interaction race x gender, F1
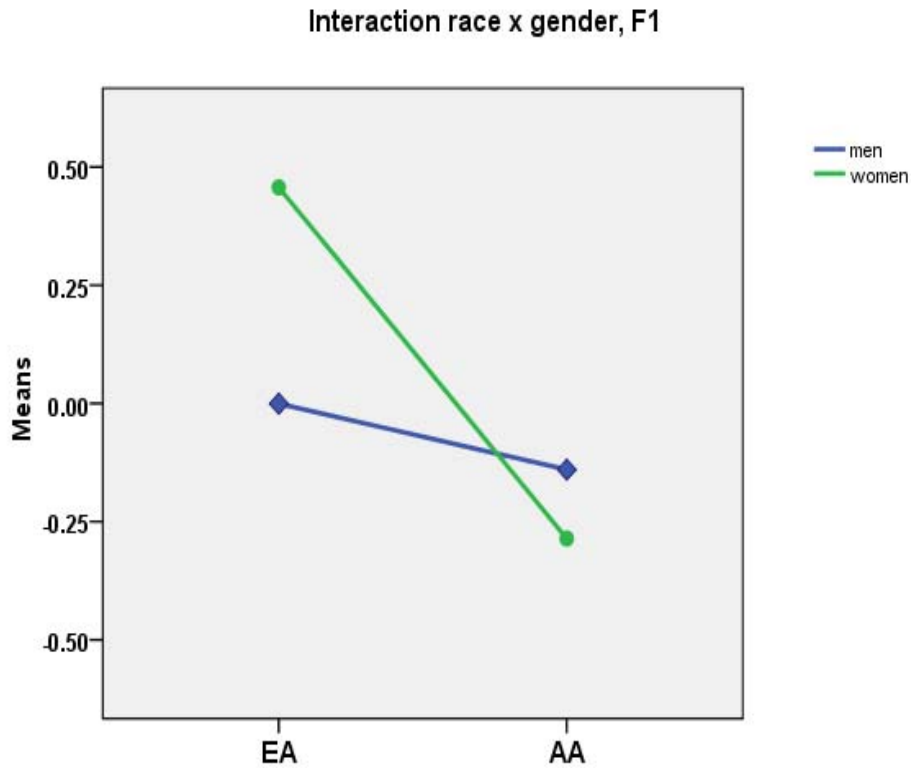
Figure 4.1 Race and Gender Interaction, F1

The direction of the relationship with regard to gender is opposite to that predicted in Hypothesis 1b, in which I expected that both African American and European American women would display more *negative* scores on the global measure than men. The final model accounted for 7.3% of the variance for this factor.

Factor 2, Characterization of Own Interracial Relationships

For this factor, race was a significant predictor in the first two blocks (β=-.281, p=.027), with African Americans significantly more likely than European Americans to characterize their own interracial relationships unfavorably, but with the addition of the interaction term in Block 3 and PERD in Block 4, the impact of race lessened considerably. No other independent variable demonstrated power as a predictor for this

factor. The final model accounted for a very small amount of variance, 2.7%, in the way students characterized their own interracial relationships. The data partially supported Hypothesis 1a, in which I predicted differences by race on the GMC, with African Americans more negative than European Americans.

Factor 3, Perception of Equal Treatment of Students by Faculty

Race was a significant predictor of whether students perceived equal treatment by faculty in the classroom in all blocks. African American students were significantly more likely than European American students to express the view that faculty did not treat students equally ($\beta=-.319$, $p\leq.001$), consistent with the prediction in Hypothesis 1a that African Americans would report more negative scores on the global measure than European Americans. The final model accounted for 7.8% of the variance in the perception of equal treatment of students by faculty. Other independent variables (gender, race x gender, PERD) did not predict whether participants believed that faculty treated all students equally.

Factor 4, Own Academic Experiences

Like the previous factor, race was a significant predictor in the way students described their own academic experiences, with African American students significantly more unfavorable in their descriptions than European American students ($\beta=-.521$, $p=.003$), again consistent with the prediction made in Hypothesis 1a that African Americans would report more negative scores on the GMC than would European Americans. In the final model, race accounted for 9.9% of the variance in the ways students assessed their own academic experiences. Added in Block 2, gender was also significantly predictive, with men assessing their academic experiences significantly

99

more unfavorably than women (β=.173, *p*=.049). This finding is contrary to the

prediction in Hypothesis 1b, in which I expected women's scores to be more negative

than men's scores on the global measure.

Factor 5, Campus Social Integration

None of the independent variables was significantly predictive of the ways

students evaluated their integration into the campus social life. This outcome provided no

support for Hypotheses 1a or 1b, which predicted differences by race and by gender on

the GMC, nor did it support Hypothesis 1d, which predicted differences by PERD.

Factor 6, Informal Relationships with Faculty

For this factor, like the previous one, none of the independent variables was

significantly predictive in the ways students described informal relationships with

faculty. Hypotheses 1a, 1b, and 1d were not supported.

Conclusion, GMC Findings

Race and gender demonstrated significant predictive power for selected GMC

factors. Race was significantly predictive when considering students' overall assessment

of the campus racial climate, the characterization of students' own interracial

relationships, the perception of equal treatment in the classroom, and the evaluation of

students' own academic experiences. African American students were significantly more

likely than their European American counterparts to report lower scores for these factors.

Gender was a significant predictor of the ways individuals viewed the campus racial

climate and the evaluation of students' own academic experiences, with women

evidencing more favorable views than men. The interaction term, race x gender, was also

a significant predictor of the ways students viewed the campus racial climate, with race

moderating the gender effect. In other words, being an European American woman

predicted a higher score, while being an African American woman predicted a lower

score.

The independent variables demonstrated no predictive power for Factors 5 and 6.

Race served as the strongest independent variable for the first four factors. Overall,

independent variables explained a small amount of the variance for all factors. The

findings are summarized in Table 4.5.

Table 4.5 Summary of Linear Regression Results by Factor, GMC						
Factor	AA	EA	Men	Women	Significant Independent Variables	Variance Explained in Final Model
F1	-	+	-	+	Race, gender, race x gender	7.3%
F2	-	+	-	+	Race	2.7%
F3	-	+	-	+	Race	7.8%
F4	-	+	-	+	Race, gender	9.9%
F5	+	-	-	+		1.7%
F6	+	-	-	+		1.8%

Day Reconstruction Method (DRM)

The DRM is a form of experience sampling in which real-time measurements of

attitudes and behaviors are taken in an effort to reduce distortions in memory and recall

that frequently plague global surveys that ask more general questions (Krueger,

Kahneman, Schkade, Schwarz, & Stone, in press; Kahneman, Krueger, Schkade,

Schwarz, & Stone, 2004a). Respondents are asked to record the current feeling or

behavior of interest based on a diary of the previous day's events. Proponents argue that

such an approach utilizes information that is more readily accessible in memory than

global surveys that depend on complex cognitive heuristics. Respondents complete a

diary of their activities during the previous day, breaking down the day into a series of

101

episodes. For each episode, respondents indicate what they were doing, who they were with, and how they felt during the episode.

Preliminary Data Exploration, DRM

The U Index

The analytic measure of the DRM is the U index, a duration-weighted variable that describes the percentage of time across the day in which the predominant emotion is negative. It is an ordinal measure at the level of feelings and is described in detail in the previous chapter.

The U index for the total sample was 9.98, meaning that individuals in the sample reported episodes in which the predominant emotion was negative for nearly 10% of the preceding day. Using independent sample t-tests, I found that differences in the U index by race were not significant, but differences were significant by gender, with women reporting a higher U index than men ($p=.015$). Within racial groups, African American women reported a significantly higher U index than did African American men (12% vs. 7.7% of the time; $p=.008$). The duration-weighted U indices and standard deviations for the entire sample, for gender and race, and for various demographic variables are provided in Table 4.6. In addition, I have provided the U index for a few additional demographic subgroups. These differences will not be explored further here, but suggest possibilities for future analysis.

Table 4.6 U Index by Race, Gender, Other Variables, DRM

Sample and Subgroups	M	SD
Total Sample (*n*=268)	9.98	0.146
Males, total (*n*=128)	7.71*	0.112
Females, total (*n*=140)	12.06*	0.143
AA, total (*n*=138)	8.91	0.144
AA males (*n*=62)	5.44**	0.105
AA females (*n*=76)	11.74**	0.158
EA, total (*n*=130)	11.12	0.133
EA males (*n*=66)	9.83	0.115
EA females (*n*=64)	12.44	0.182
Freshmen and sophomores (*n*=150)	8.08*	0.133
Juniors and seniors (*n*=117	12.50*	0.159
Students living on campus (*n*=170)	9.40	0.139
Students living off campus (*n*=97)	11.10	0.159
Students involved in extracurricular activities (*n*=162)	10.83	0.152
Students not involved in extracurricular activities (*n*=104)	8.84	0.136
Students reporting overall GPA of A/B (*n*=188)	11.27*	0.154
Students reporting overall GPA of C or below (*n*=78)	7.12*	0.121
Students whose highest educational aspiration is a baccalaureate degree (*n*=65)	8.53	0.139
Students whose highest educational aspiration is some form of postgraduate work (*n*=184)	10.66	0.147

*p≤.05; **p≤.01; ***p≤.001
Note : The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted.

The U Index by Location. I examined whether differences in the U index might

be found by the locations where episodes occurred. Episodes occurring at work

produced the highest U index, with participants reporting the predominant emotion as

negative nearly 30% of the time, while episodes occurring somewhere else (not

specified) produced the lowest U index; the difference between the two settings was

significant ($p \leq .001$). Similarly, the U index for episodes occurring at work was significantly greater than for those occurring at home ($p=.015$).

I also examined whether any differences in the U index in episodes occurring on and off campus. The challenge to interpreting differences between episodes occurring on and off campus is that the categories are not discrete. For example, participants might have been at work *and* on campus; they were not asked whether they were working on or off campus. Noting this limitation, I compared episodes specifically flagged as occurring on campus with those occurring in other locations, and found no significant differences in the U index. The results are presented in Table 4.7.

Table 4.7 Frequency and U Index of the Total Sample by Location, DRM

Location	*M* U Index	SD	*n* Episodes	%
Home	13.95	0.558	1088	32.6
Work	28.60	0.952	113	3.4
On campus	11.89	0.452	1703	51.0
Somewhere else	6.99	0.271	434	13.0
Not on campus[a]	13.11	0.540	1635	49.0

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$
[a]=a composite variable comprised of *home*, *work*, and *somewhere else*
Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted.

The U Index by Interaction Partner. Next, I examined U index by interaction partner. Students often reported interacting with others who fell into more than one category of interaction partner, such as friends and spouse/significant other in the same episode. Table 4.8 lists the frequency of episodes in which each type of interaction partner was noted and the mean U index for these interactions. The most frequently reported interaction partner was friends.

Because the frequencies for episodes in which students indicated they were interacting with co-workers, customers, and boss were lower than the predetermined cut

point described in the previous chapter, I combined episodes about individuals in these roles into one category, work colleagues. For the total sample, the U index was highest for episodes in which students interacted with work colleagues, children, university staff, faculty, and when alone. Conversely, episodes in which students were with friends produced the lowest U index. Only two interaction partners produced any significant differences in the U index in group comparisons: when interacting with faculty, African American women reported a significantly higher U index than did African American men (p=.004), and women reported a significantly higher U index than men when interacting with staff (p=.027); and when alone, African American women reported a significantly higher U index than African American men (p=.035). When women interacted with faculty, the bulk of these interactions occurred in the classroom setting; no clear pattern emerged with staff interactions relative to location and activity. When women were alone, they most frequently reported that they were commuting, studying, or resting. Table 4.8 includes the details for the total sample; details for subgroups are reported in Appendix I.

Table 4.8 Mean and Standard Deviation for U Index and Frequency of DRM Episodes by Interaction Partner, Total Sample

Partner	M U Index	SD	n Episodes
Work colleagues[a]	25.69	0.948	157
Children	23.06	0.707	280
University staff	19.78	0.756	84
Faculty	15.51	0.453	281
Alone	13.50	0.463	1431
Family members	12.91	0.483	153
Other students	12.82	0.473	550
Spouse/ significant other	12.19	0.607	369
Other interaction partners[b]	10.82	0.333	77
Friends	6.89	0.356	974

[a]=boss, co-worker, customer
[b]=health care professionals, coach, child's teacher, representatives of a business, other unspecified interaction partner

Because the U index for episodes involving university staff appeared to be rather high, I examined the activities occurring when these interaction partners were noted. The five most frequently-occurring activities in episodes involving university staff were (in order of frequency), socializing, eating, employment, exercising, and studying. The number of episodes involving university staff is relatively small, however, n=84; caution is advised in any further interpretation of the U index for this group of interaction partners.

Duration by Interaction Partner. In addition to investigating the U index by interaction partner, I explored the duration of episodes in which students interacted with various individuals. When students indicated these individuals were interaction partners, they recorded the length of the episode. The duration and number of episodes are reported in Table 4.9. There were 1879 episodes in which interaction partners were present; the total number of episodes for all individuals in the sample is 3342.

When students interacted with these partners, they reported the greatest amount of time spent with friends (over six hours) and the least amount of time with children (just over two hours) and other miscellaneous interaction partners (a little over one hour). Episodes in which students were interacting with work colleagues were the longest at over two hours, while episodes in which students were alone were the shortest, lasting less than one hour.

Table 4.9 provides the details for the total sample for those who indicated episodes that included the various interaction partners, including the total time over the course of the day, the average episode duration, and number of episodes. Appendix J provides details by subgroups, including tests for mean differences.

Table 4.9 Mean and Standard Deviation for Time Allocation and Duration of DRM Episodes by Interaction Partner, Total Sample

Partner	*M* Time Allocated[a]	SD	*M* Episode Duration	SD	*n* Episodes
Friends	6.303	4.127	1.523	1.272	974
Alone	5.459	3.477	0.908	0.880	1431
Spouse/ significant other	4.744	3.737	1.474	1.337	369
Work colleagues[b]	3.698	2.125	2.397	1.678	157
Other students	3.665	2.731	1.422	0.932	550
University staff	2.473	1.811	1.591	1.421	84
Faculty	2.470	1.500	1.381	0.680	281
Family members	2.411	2.401	1.381	1.296	153
Children	2.115	1.666	1.437	1.298	280
Other interaction partners[c]	1.611	1.821	1.212	1.229	77

$*p \leq .05$; $**p \leq .01$; $***p \leq .001$
[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.
[b]= co-workers, customers, boss
[c]=health care professional, coach, child's teacher, representatives of a business, other unidentified partner

While interaction partners did not generate many differences in the U index between race and gender groups, differences in allocation of time with various interaction partners were found by race and by gender, with African Americans spending significantly more time alone than European Americans ($p=.010$), with family members ($p \leq .001$) and with children ($p \leq .001$), while European Americans spent significantly more time than African Americans with friends ($p \leq .001$) and with spouse/significant others ($p \leq .001$). In an examination of these findings by gender, men spent significantly more time than women with friends ($p \leq .001$), a gender difference that was true for both European Americans as well as African Americans. Men also reported spending more time than women with a spouse/significant other ($p=.003$), a difference that was largely attributable to African American men. Men reported more time spent with staff than women ($p \leq .001$), again largely attributable to African American men. Finally, counter to traditional gender stereotypes, men spent more time than women with children ($p=.009$), and, like other differences between genders, this difference was due primarily to time reported by African American men. African American men reported

more time spent with other students than did African American women (p=.002), faculty (p≤.001), and family members (p=.002). European American women spent significantly more time than European American men with work colleagues (p=.002) and with faculty (p=.021). For both African Americans and European Americans, where differences were found, they almost always reflected greater time spent in interactions for men.

The U Index by Race of Interaction Partner. As students responded to the DRM, they were asked to indicate for each episode whether they were interacting with someone, and, if so, the race of the interaction partner. Specifically, there were three response options: (1) same race, (2) different race, or (3) group containing individuals of the same and different race. It is plausible that respondents may have indicated that they were interacting with a group of same and different race individuals was the interaction partner, when in reality these individuals may have simply been present together, such as in a classroom situation, rather than actually interacting with one another. I examined a frequency of the race of the interaction partner by episode, which is depicted in Figure 4.2. Students indicated an interaction partner in 1879 (56%) of the total 3342 episodes reported and for 67.6% of the total time reported.
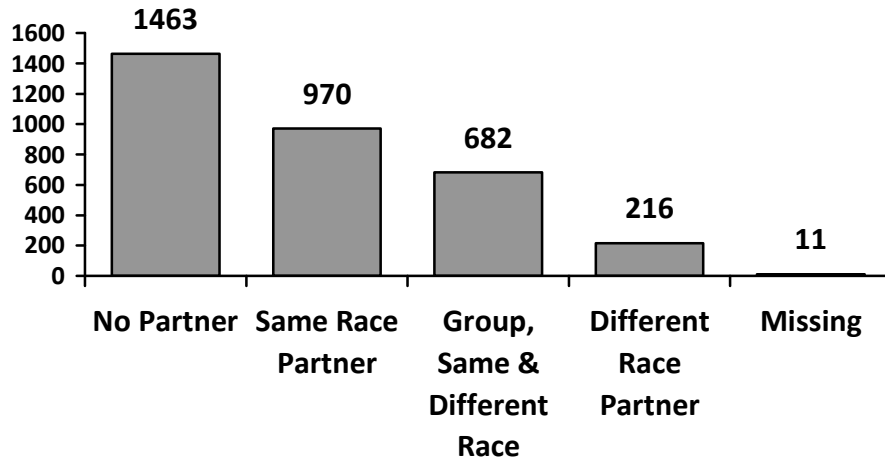
Figure 4.2 Distribution of Race of Interaction Partner by Episode, Total Sample

Respondents indicated the race of the interaction partner was the same as their own in over half of the episodes where an interaction partner was present, and a group containing both same and different race interaction partners (hereafter, a *blended group*) in just over one-third of the episodes where an interaction partner was present. The distribution by race and gender is reported in Table 4.10, including the number of episodes and the percentage relative to all episodes in which an interaction partner was present.

	AA n=1663 Episodes with Interaction Partner		EA n=1679 Episodes with Interaction Partner		Men n=1521 Episodes with Interaction Partner		Women n=1821 Episodes with Interaction Partner	
	n Ep.	% All Partner Ep.	n Ep.	% All Partner Ep.	n Ep.	% All Partner Ep.	n Ep.	% All Partner Ep.
Same Race	408	24.5	562	33.5	415	27.3	555	30.5
Diff. Race	140	8.4	76	4.5	114	7.5	102	5.6
Blended Group	326	19.6	356	21.2	315	20.7	367	20.2
Diverse Race[a]	466	28.2	432	25.7	429	28.2	469	25.7
Missing	8	<1.0	2	<1.0	3	<1.0	8	<1.0
No Partner	777	46.7	676	40.3	669	44.0	784	43.1

Table 4.10 Distribution of Interaction Partner Race, by Race and Gender

[a]=episodes involving both different race and blended group interaction partners

European Americans reported 27% more episodes involving same race interaction partners and 8% more blended group interaction partners than did African Americans, who reported 46% more different race episodes than European Americans. Given the racial composition of student populations at a PWI, this outcome is to be expected. In any of these interactions, it is impossible to know whether students were having a direct interaction with others or whether they simply were noting that others different from themselves were present during an episode. Of the 682 episodes in which students interacted with a blended group, 38% of them occurred when students were attending class, 32% occurred in situations where students were socializing, and 15% occurred while students were working. Given the importance of structural diversity for intercultural interactions (Jayakumar, 2008), I opted to combine episodes in which

students were interacting with different race partners and blended groups into a new, broader category, *diverse race*, for comparisons with same race partners. While there may not have been actual interaction in some situations, students were at least in the presence of others whose race differed from their own. Preliminary comparisons of the U index and of duration between same race and different race only episodes yielded substantially the same results as the comparisons between same race and diverse race episodes.

I examined the U index during diverse race episodes, comparing this with same race interaction partner episodes. Details of this analysis can be found in Table 4.11, and provides three types of comparisons of the U index: first, comparisons were made between race and gender groups when the partner race was the same; second, comparisons were made when the partner race was classified as diverse race; and third, comparisons were made of the difference in the U index for each race and gender group when the interaction partner was the same race and when the interaction partner race was classified as diverse race.

For the total sample, episodes in which the interaction partner was in the diverse race category produced a higher U index than those episodes in which the interaction partner was of the same race (p=.009). The mean score for European American men largely accounted for the significant differences in the U index noted for European Americans (p=.012), as well as the significant differences in the U index for men (p=.017) in comparisons of episodes where the interaction partner was in the diverse race category with an episodes where the interaction partner of the same race. When

making comparisons by race and gender within same and diverse race interactions, I

found no significant differences for the U index. Details are provided in Table 4.11.

Table 4.11 U Index of Interaction Partner Race, DRM

	Diverse Race[a]					Same Race					p value, Between Diverse Race/ Same Race
	M	SD	n Episodes	p value, Within Diverse Race		M	SD	n Episodes	p value, Within Same Race Partner		
Total Sample	14.93	0.632	880			8.54	0.392	960			.009**
AA Total	12.93	0.553	455	AA/EA	.331	8.68	0.456	406	AA/EA	.924	.222
AA Men	9.34	0.479	216			4.09	0.204	163			.191
AA Women	16.18	0.610	239	AA men/ Women	.188	11.76	0.564	243	AA men/ women	.097	.410
EA Total	17.08	0.707	425			8.44	0.338	554			.012**
EA Men	16.50	0.546	200			7.09	0.317	242			.024*
EA Women	17.59	0.825	225	EA men/ Women	.874	9.48	0.354	312	EA men/ women	.410	.122
Men	12.78	0.513	416			5.88	0.278	405			.017*
Women	16.86	0.722	464	Men/ Women	.339	10.48	0.457	555	Men/ women	.073	.087

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$

[a]=episodes in which students were interacting with others of a different race or a group of individuals containing same- and different-race interaction partners.

Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted.

Duration of Episodes by Interaction Partner Race. I calculated the average

duration for time spent with interaction partners and average duration of episodes by

diverse race partners (Table 4.12) and same race partners (Table 4.13) and the differences

in duration by race of interaction partner (Table 4.14). Noted previously, I combined

episodes in which the interaction partner was of a different race or the student was

interacting with a blended group into a broader diverse race category.

Over the course of the previous day, students spent an average of 5.9 hours

interacting with others in the diverse race category, and these episodes lasted an average

of 1.6 hours or just over an hour and a half (see Table 4.12). I found no significant

difference by race in the total time allocated to interactions with diverse race partners, but

a gender difference emerged, with men spending more time than women in diverse race

interactions (p=.004); this difference was due in large measure to the average duration of

time spent in diverse race interactions reported by African American men. When

interacting with others in the diverse race category, the interaction partner was most often

identified as a friend or another student, and the most commonly reported activities were

socializing, attending class, and relaxing.

Regarding same race interaction partners, students logged 5.2 hours in such

interactions over the course of the day, with an average episode duration of 1.3 hours or

about 90 minutes (see Table 4.13). African Americans spent significantly more time than

their European American counterparts in same race interactions (p≤.001), and men

reported significantly longer episodes when the interaction partner was the same race

than did women; this effect is due in part to the lower average episode duration of

European American women in same race interactions. When interacting with a same race

partner, that individual was most frequently identified as a friend or significant other, and the most common activities reported were socializing, eating, and relaxing.

In examining differences in duration between same race and diverse race interaction partners, students in the sample reported spending significantly more total time in diverse race interactions than in same race interactions, and these episodes lasted longer than episodes where the partner was the same race ($p \leq .000$). This race effect can be attributed to the greater time allocated to diverse race interactions reported by European Americans. African Americans allocated significantly more time to episodes where the interaction partner was of the same race ($p \leq .001$), an effect that appears to be due in large measure to the greater time allocated to same race interactions by African American women. All race and gender subgroups reported longer episodes when the interaction partner was in the diverse race category. Tables 4.12, 4.13, and 4.14 provide the details, beginning with duration of episodes with diverse race interaction partners, followed by duration of episodes with same race interaction partners, and a comparison of the duration of episodes with the two types of interaction partners.

Table 4.12 Duration of Episodes and Total Time Allocated, Diverse Race Interaction Partner

	Episode Duration					Total Time Allocated			
	M Episode Duration[b]	SD	*n* Episodes	*p* value, Difference in Episode Duration		*M* Total Time Allocated	SD	*p* value, Difference in Total Time Allocated	
Total Sample	1.616	1.271	899			5.990	3.710		
AA Total	1.648	1.353	466	AA/EA	.439	4.033	0.103	AA/EA	.219
AA Men	1.660	1.421	223	AA men/	.856	6.535	4.533	AA men/	.000***
AA Women	1.637	1.290	243	women		5.449	3.558	women	
EA Total	1.582	1.177	433			5.908	3.337		
EA Men	1.641	1.117	206	EA men/	.322	5.907	3.300	EA men/	.068
EA Women	1.529	1.229	227	women		6.227	3.365	women	
Men	1.651	1.283	429	Men/	.437	6.211	3.955	Men/	.004**
Women	1.585	1.260	470	women		5.812	3.490	women	

*p≤.05; **p≤.01; ***p≤.001

[a]=episodes in which students were interacting with others of a different race or a group of individuals containing same- and different-race interaction partners.

[b]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

Table 4.13 Duration of Episodes and Total Time Allocated, Same Race Interaction Partner

	Same Race Interaction Partner							
	Episode Duration					Total Time Allocated		
	M Episode Duration[a]	SD	n Episodes	p value, Episode Duration Difference		M Total Time Allocated	SD	p value, Total Time Allocated Difference
Total Sample	1.331	1.211	970			5.280	3.626	
AA Total	1.396	1.375	408	AA/EA	.153	4.659	3.369	AA/EA	.000***
AA Men	1.470	1.439	165	AA men/	.380	4.683	3.506	AA men/	.817
AA Women	1.346	1.332	243	women		4.641	3.270	women	
EA Total	1.284	1.074	562			5.849	3.759	
EA Men	1.437	1.172	250	EA men/	.002**	5.873	3.429	EA men/	.813
EA Women	1.161	0.974	312	women		5.828	4.023	women	
Men	1.450	1.283	415	Men/	.008**	5.335	3.513	Men/	.459
Women	1.242	1.147	555	women		5.236	3.713	women	

*$p\leq.05$; **$p\leq.01$; ***$p\leq.001$

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

	p value, Episode Duration, Diverse Race/ Same Race	Type of Interaction Partner Race Producing Greater Episode Duration	*p* value, Total Time Allocated, Diverse Race/ Same Race	Type of Interaction Partner Race Producing Greater Total Time Allocated
		Table 4.14 Differences in Duration of Episodes and Total Time Allocated, Interaction Partner Race		
Total Sample	.000***	Diverse race	.000***	Diverse race
AA Total	.007**	Diverse race	.000***	Same race
AA Men	.198	Diverse race	.000***	Diverse race
AA Women	.015*	Diverse race	.000***	Same race
EA Total	.000***	Diverse race	.000***	Diverse race
EA Men	.059	Diverse race	.062	Diverse race
EA Women	.000***	Diverse race	.000***	Diverse race
Men	.023*	Diverse race	.000***	Diverse race
Women	.000***	Diverse race	.000***	Diverse race

*p≤.05; **p≤.01; ***p≤.001

In order to better understand time spent in interactions with racially diverse others, I created a variable representing the percentage of time an individual spent with others who were included in the diverse race category; these findings are reported in Table 4.15. Examining time as a percentage is important, since students did not report activities for an identical span of time over the day, but rather provided details of their days in varying amounts of time. Some may have reported activities spanning 18 hours, while others only reported 14 hours, and so on. Time as a percentage equalizes these reports. Of the total sample, 66 students indicated one or more episodes in which they were interacting with someone in the diverse race category, representing 46.6% of the total time spent interacting with others.

I found no significant differences in the percentage of time spent in such interactions by race, but men reported a significantly greater percentage of time spent in interactions with individuals in the diverse race category than did women (p=.022). For both men and women, when interacting with diverse race interaction partners, that person was most often reported as a friend, another student, or faculty. The most commonly reported activities in such episodes were socializing and attending class; the only gender difference by activity was that men frequently reported eating while women reported working when interacting with diverse race partners.

Within race groups, African American men reported a significantly greater percentage of time in these interactions than did African American women (p=.046). When African American men were interacting with diverse race interaction partners, they most frequently reported those partners to be friends, other students, or faculty; the most common activities were attending class, socializing and eating. African American women

interacted with other students, friends, and faculty when with diverse race interaction

partners, and the most common activities were attending class, socializing, and working.

Faculty appear as interaction partners for both African American men and women; given

that African American faculty members at RSU are few, it is not surprising that African

Americans would frequently report faculty as diverse race interaction partners, rather

than same race interaction partners.

Recall that time spent with diverse race interaction partners includes both

individuals whose race was noted as different combined with groups containing

individuals of the same and different race and could have included situations where

students were simply present together rather than engaged in active interaction, described

previously. Table 4.15 provides the details.

Table 4.15 Percentage of Time Spent Interacting with Diverse Race Interaction
Partners, Relative to Total Time Interacting with Others

	M Percentage of Time		SD
Total subjects reporting one or more such episodes[a] (n=66 individuals)	46.6		24.302

	M Percentage of Time	SD	p value
AA (n=26 individuals)	50.2	28.902	.340
EA (n=40 individuals)	44.3	20.854	
AA Men (n=13 individuals)	61.4	31.101	.046*
AA Women (n=13 individuals)	39.0	22.384	
EA Men (n=13 individuals)	48.7	19.937	.363
EA Women (n=27 individuals)	42.2	21.322	
Men (n=26 individuals)	55.1	26.402	.022*
Women (n=40 individuals)	41.2	21.437	

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$
[a]=This includes episodes in which the interaction partner is of a different race, or a blended group

There were no differences by race, but a gender difference emerged, with men

reporting a significantly greater percentage of time than women interacting with diverse

race interaction partners. Within racial groups, African American men reported a significantly greater percentage of time in these diverse race interactions than did African American women.

Activities

As discussed in Chapter 3, participants reported all activities in which they were engaged within a single episode. It was possible for multiple activities to be recorded within a single episode; for example, in a single episode a participant might have indicated she was studying and watching television simultaneously. A later version of the DRM asks for a focal activity of the episode (Krueger et al., in press). Because the version of the DRM I employed did not ask participants to indicate a focal activity of each episode, I have included all reported activities in this analysis, and examined the number of activities reported for each episode.

The full details of frequency of activities, which includes the number of times each activity was noted and the percentage of time the activity occurred relative to the total number of activities reported, are reported in Appendix K. The most frequently reported activities for the total sample are represented in Figure 4.3. A total of 5,468 activities within 3,342 episodes were reported, with an average of 1.6 activities per episode. The average duration of an episode was 1.224 hours. Additional interpretation of time allocation, including statistical comparison between group means, is reported in a later section.

Activity frequency. The most frequently noted activities were, in order, socializing (*n=694*), eating (*n=537*), relaxing (*n=497*), commuting (*n=490*), attending class (*n=473*), studying or engaging in academic work (*n=419*), watching television

(n=405), using the computer (n=310), personal care (n=306), and napping or resting

(n=283). Figure 4.3 gives a visual representation of the frequency with which these

activities were reported. Figure 4.4 provides the duration of these activities; also provided

is the percentage of time students spent in these activities, relative to the total time

reported. Noted previously, students reported activities occurring over the course of the

previous day, from the time they woke up until the time they went to bed, for an average

total time reported of 15.263 hours in this day.
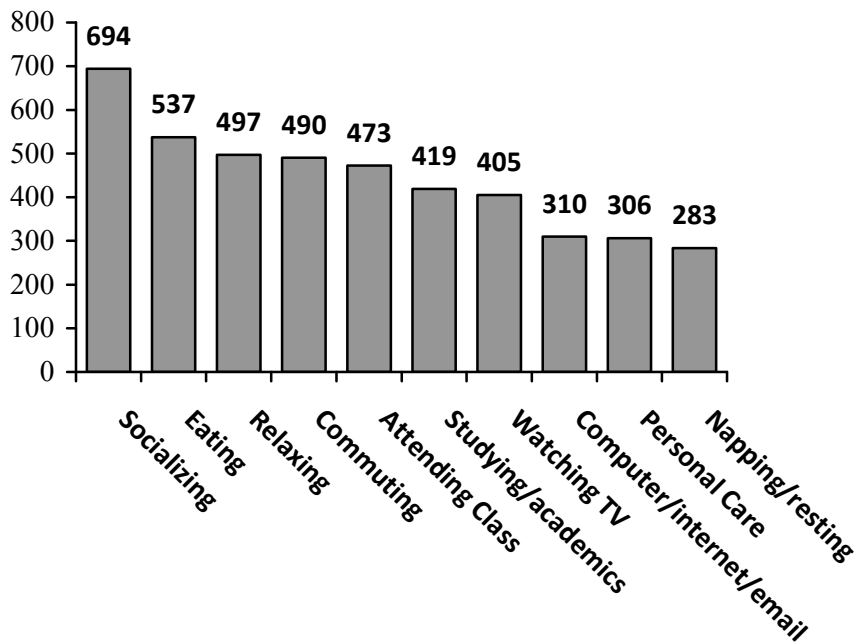
Figure 4.3 Most Frequently Reported Activities, Total Sample
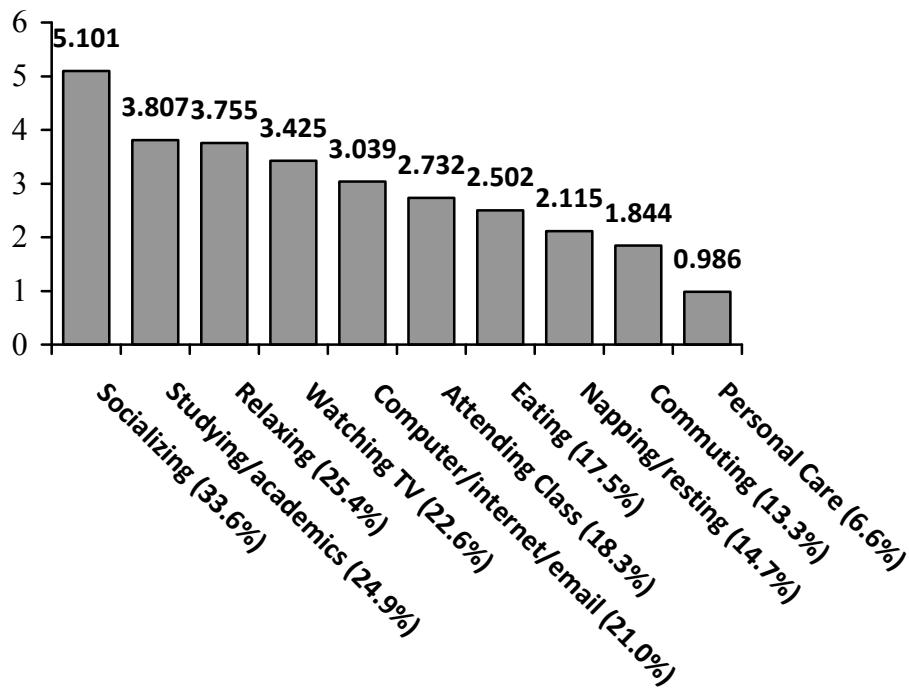
Figure 4.4 Duration of Most Frequently Reported Activities, Total Sample

The U Index by Activity. Here, I report the activities that produced a U index

above the sample mean of 9.98. These activities were (in order from highest to lowest),

employment, studying, preparing food, attending class, doing housework, and talking on

the telephone. As a contrast, the activities that resulted in the lowest U index for the total

sample were (in order of lowest to highest), leisure, eating, socializing, watching

television, exercising, and personal care. The activities producing the highest and lowest

U indices are presented in Figures 4.5 and 4.6, respectively. Details of all activities for

the entire sample and subgroups are reported in Appendix L, including tests of mean

differences.
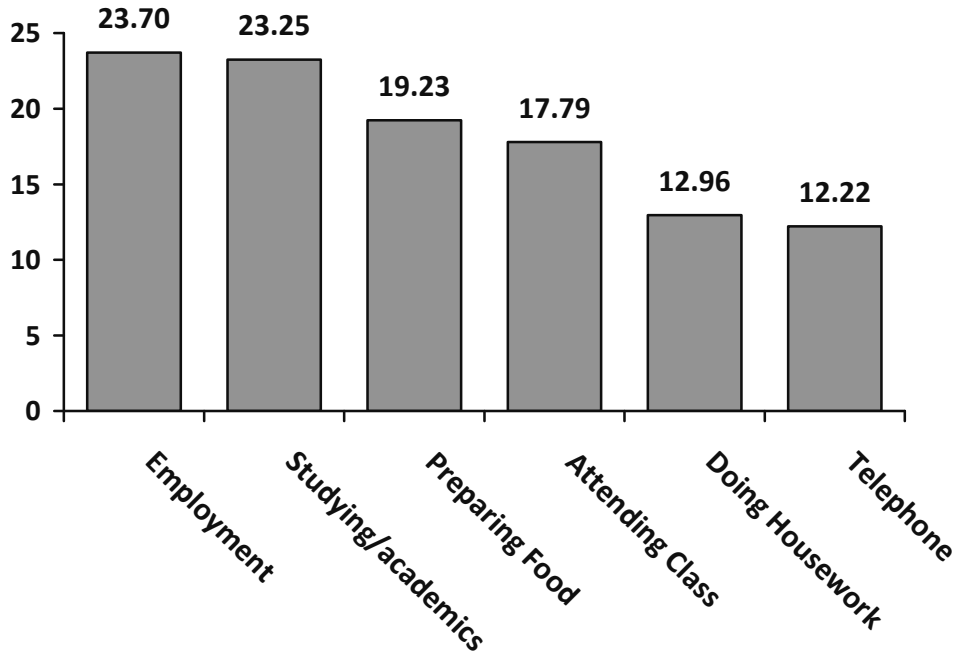
Figure 4.5 Highest U Index by Activity, Total Sample
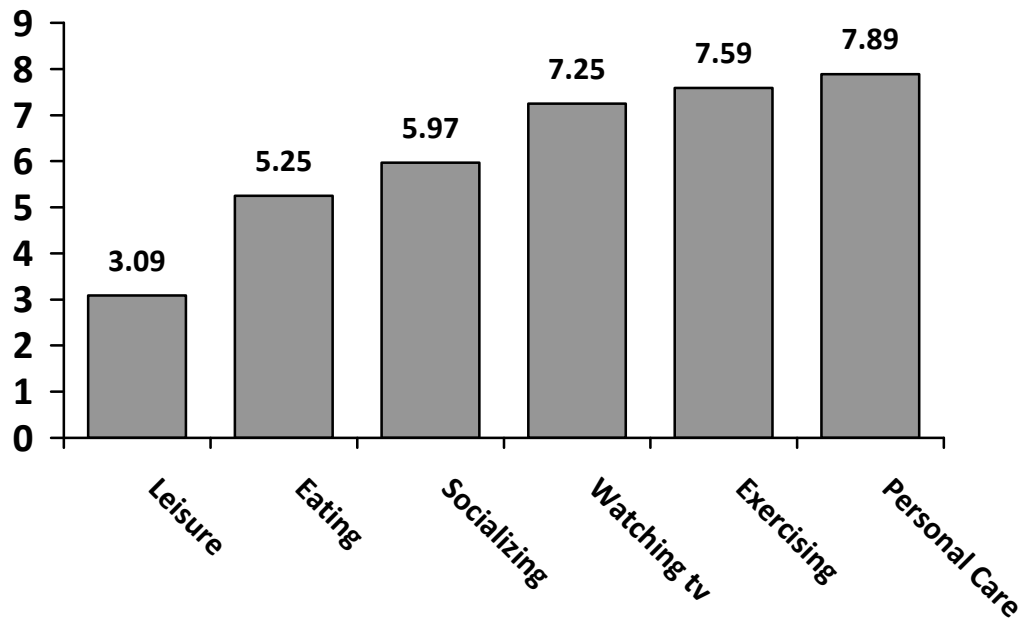
Figure 4.6 Lowest U Index by Activity, Total Sample

Both African Americans and European Americans reported a higher U index for employment, studying, and attending class than for other activities. For employment, the most frequently reported interaction partners were work colleagues, friends, and other students; for studying and attending class, students most commonly reported interacting with faculty, other students, and friends. All three activities included interaction partners also associated with a high U index, work colleagues and faculty.

In testing differences between groups in the U index, I discovered significant differences by race in the U index for eating (p=.039) and for socializing (p=.025), with African Americans reporting a lower U index than their European American peers for both activities; the difference in the U index for eating was largely attributable to African American men. Men reported a significantly lower U index than women for watching television (p=.017), a difference due in large measure to. African American men. The activities that prompted differences in the U index between men and women were somewhat surprising, as they are ostensibly pleasant activities.

In addition to these differences, I briefly examined the U index associated with types of classes students reported attending and the size of the classes. Students were asked to report the name of the class they attended; this was recoded by the college in which the class was housed (e.g., Introduction to Psychology was coded as the College of Arts and Sciences). I found no differences by race or gender relative to the college with which classes were associated, with the exception that European American men reported a significantly higher U index than European American women in classes in the College of Arts and Sciences (p=.036). Regarding class size, the U index increased as the class size increased; the difference was not significant, however. European American men

reported a significantly higher U index in medium-size classes than did European

American women (*p*=.025); no other differences were noted for class size. Courses

affiliated with the College of Education and the College of Technology were reported

infrequently; any further interpretation of classroom experiences by college affiliation

should omit these episodes.

Table 4.16 U Index by College of Class Affiliation and Class Size		
College Affiliation of Class	*n* Episodes	U Index
College of Arts & Sciences	325	17.95
College of Business	20	12.28
College of Education	8	0.00
College of Health & Human Services	25	19.44
College of Technology	14	47.01
Class Size	*n* Episodes	U Index
Small (fewer than 20 students)	154	15.99
Medium (between 21 and 49 students)	199	17.18
Large (50 or more students)	93	20.51

Finally, response options provided for the affective descriptors appeared not to

have been a good fit for one activity. The activity nap/resting produced a high U index.

An examination of the distribution of responses to the affective descriptors revealed that

for the positive descriptors (*smart, accepted, competent, warm/friendly, happy*, and

respected), the distribution was inverted; that is, both ends of the distribution were much

higher than the middle. For the negative descriptors (*powerless, frustrated, hassled,*

angry, worried, and *criticized*), the distribution of responses was positively skewed, with

the overwhelming number of responses at 0, *not at all true*. In other words, if an

individual was napping or resting, she or he was likely to indicate they experienced none

of the negative affective descriptors, and the ends of the scale (*not at all true, very true*)

were most frequently selected for the positive affective descriptors. In hindsight, this is unfortunate, as it makes interpretation of the data for this activity impossible.

   Duration of Activities. In addition to an examination of the U index by activity, I calculated the duration of activities, detailed in full in Appendix M. Here, I have outlined the duration of those activities, when noted as occurring in an episode, in which students spent at least 20% of their time. These activities were, in order, socializing, employment, studying or academic work, relaxing, watching television, and using the computer. Combining attending class and studying/academic work, students spent an average of 4.9 hours of the day engaged in academic endeavors. Of these six activities, employment and studying or academic work were also activities producing a higher U index. As a contrast, activities in which students spent the least amount of time were, in order, personal care, preparing food, doing housework, exercising, commuting, and napping/resting. Details of the duration of activities with the greatest and least duration are provided in Figures 4.7 and 4.8; the full table of duration of all activities for the total sample and all sub-groups is provided Appendix M.
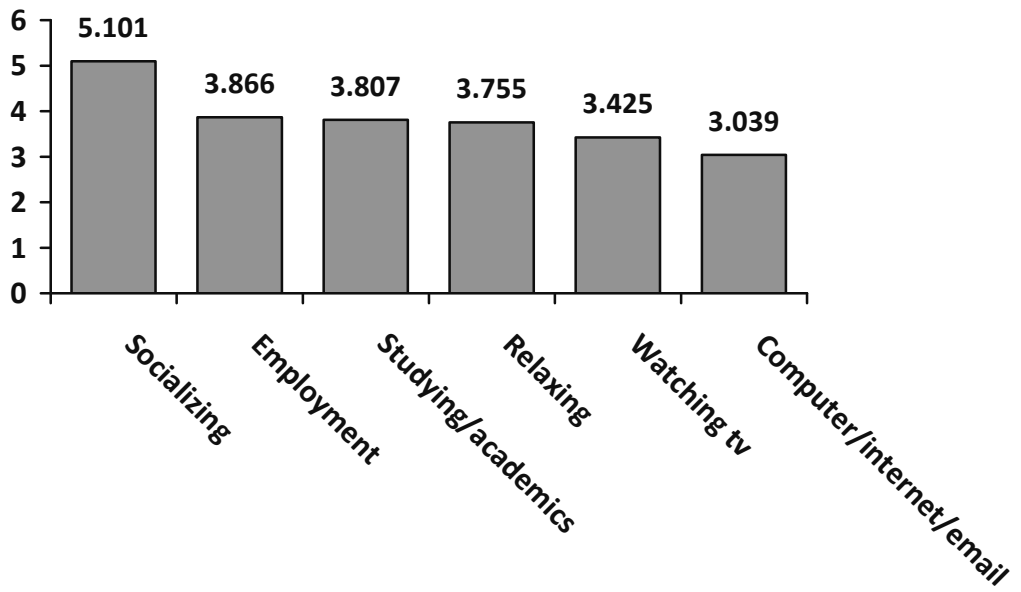
Figure 4.7 Greatest Duration of Activities, Total Sample
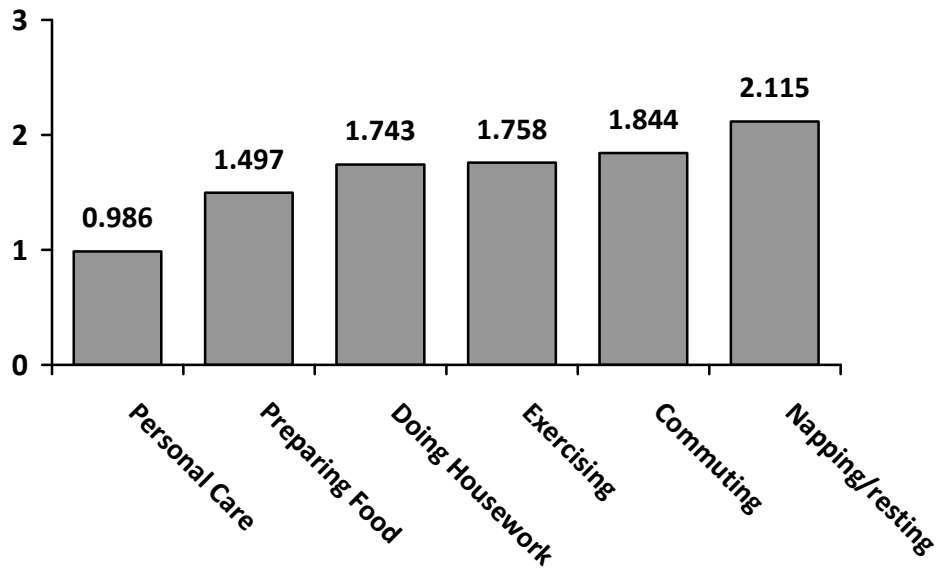
Figure 4.8 Lowest Duration of Activities, Total Sample

Examining differences in duration of activity by race, when they engaged in the activities, African American students spent significantly more time on the telephone

(*p*=.029) and in other miscellaneous activities (*p*=.002) than did their European American counterparts. In contrast, European American students spent significantly more time studying (*p*≤.001), watching television (*p*=.008), using the computer (*p*=.007), attending class (*p*=.011), eating (*p*≤.001), napping (*p*≤.001), exercising (*p*≤.001), and preparing food (*p*=.015) than African American students.

Men spent significantly more time than women watching television (*p*≤.001), using the computer (*p*≤.000), talking on the telephone (*p*≤.001), exercising (*p*≤.001), and preparing food (*p*≤.001); differences in duration were also found within both race groups, with men reporting more time spent in these activities than women. Men also spent more time than women socializing (*p*≤.001), eating (*p*=.004), in leisure activities (*p*≤.001), and napping (*p*=.009); these gender differences can be attributed to differences in time use between African American men and women.

On the other hand, women spent significantly more time than men in employment (*p*=.017). Women also reported spending more time studying than men (*p*=.008), and in personal care (*p*≤.001); differences in the duration of these activities were also noted between men and women in both race groups. Women spent significantly more time than men studying (*p*<.001) and attending class (*p*=.002); this difference was attributable to the time noted for these activities by European American women. Interestingly, African American men spent significantly more time than African American women relaxing (*p*≤.001), whereas European American women spent more time than European American men relaxing (*p*=.002).

Academic Activities. Because this is a study of college student behaviors and related affect, it is important to carefully examine academic-related activities. This

category combines time spent attending class with time spent studying and engaging in academic behaviors related to classroom performance. The U index for academic activities for the entire sample was 20.46, and there were no differences in the U index by race or by gender. Students allocated an average of 4.959 hours per day in academic activities, and differences by race and gender were found in the time allocated to such activities.

I calculated the percentage of the day students spent in academic activities, relative to the total duration of activities they reported, and found that students spent 32.5% of their time in academic activities. I found significant differences for the percentage of time spent in academic endeavors only for European Americans, with women spending 38.4% of their time in academic activities compared to 31.4% allocated by men. In trying to understand why a race difference in the percentage of time spent in academic activities did not appear as it had when examining total time spent in academic activities, I examined the total time reported for each group. I found that African American students reported both fewer hours in academic activities and fewer total hours of specific activities than did European Americans for the day. I concluded that an examination of the percentage of time spent in academic activities relative to the total day equalized the comparison of time allocation between race groups. Thus, although African Americans reported less total time spent in academic activities than did European Americans, the percentage of time spent in academic activities relative to the total time reported for the day was not significantly different by race group.

For men and women, the total time reported for the day was roughly equivalent, so the lack of significant difference in the percentage of time allocated to academic

activities was perplexing; the gender difference in the percentage of time spent

approached, but did not achieve, significance. Within race groups, the percentage of time

in academic activities was significant only for European American men and women,

mirroring the significant difference in total time spent in academic activities. Table 4.17

provides these details.

Table 4.17 U Index, Total Duration, and Percent Duration, Academic Activities

				Total Duration of Academic Activities			Percentage of Academic Activities for the Day		
	U Index	M	SD	n Persons Reporting Academic Activities	p value, Difference in Total Duration of Academic Activities		Total Duration of Day[a]	Percentage of Time Spent in Academic Activities	p value, Difference in Percentage of Time in Academic Activities
Total Sample	20.46	4.959	2.790	248			15.206	32.5	
AA Total	16.88	4.525	2.721	127	AA/EA	.000***	14.884	30.5	AA/EA	.058
AA Men	10.80	4.388	2.611	57			15.027	29.7	
AA Women	21.69	4.628	2.799	70	AA men/ AA women	.085	14.767	31.1	AA men/ AA women	.642
EA Total	23.84	5.395	2.792	121			15.546	34.7	
EA Men	25.66	4.905	2.820	64			15.429	31.4	
EA Women	22.28	5.888	2.676	57	EA men/ EA women	.000***	15.668	38.4	EA men/ EA women	.033*
Men	18.60	4.666	2.737	121			15.236	30.6	
Women	21.99	5.214	2.812	127	Men/ women	.000***	15.178	34.4	Men/ women	.092

*$p\leq.05$, **$p\leq.01$, ***$p\leq.001$
[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

132

Time Spent in Pleasant and Unpleasant Activities. I examined whether

students spent more time in activities they deemed pleasant, compared to those

they found to be unpleasant. I constructed a dichotomous U index for activities,

with 1=felt negative and 0=never felt negative for each episode. (Recall that the U

index is constructed based on emotions linked to episodes that are either

predominantly positive or predominantly negative. Episodes that were negative,

categorized as such because the maximum negative emotion was greater than the

maximum positive emotion, were coded as 1, and episodes that were positive

were coded as 0.) Although students spent slightly more time in activities they

deemed pleasant compared to those that were negative, the difference was not

significant.

Order Effect and the U Index

I investigated whether the order of completion of the instruments

affected the U index. I hypothesized that completion of the global measure first

(which focused heavily on race) would prime students to think about race, and

have a deleterious effect on the U index, especially for African Americans, much

in the same way as stereotype threat (Steele, 1997; Steele & Aronson, 1995). For

those completing the GMC first, African American women reported a

significantly higher U index than did African American men ($p=.006$), and

women reported a significantly higher U index than did men ($p=.030$). No

significant order effect emerged, however, when examining differences in the U

index when the GMC was completed first and when the DRM was completed

first. Table 4.18 provides the details of this examination, including the U index for

133

students who completed the GMC first and the DRM first, and includes a comparison within and between conditions. Following the presentation of this table, I provide the results of the multivariate analyses.

Table 4.18 U Index by Order of Instrument

	GMC First					DRM First					p value, GMC First/ DRM First Difference
	M	SD	*n*	*p value,* Within GMC First		*M*	SD	*n*	*p value,* Within DRM First		
Total Sample	10.81	0.159	132			9.24	0.132	135			.383
AA Total	9.23	0.143	75	AA/EA	.194	8.52	0.138	63	AA/EA	.554	.767
AA Men	4.49	0.089	35	AA men/	.006**	6.67	0.123	27	AA men/	.361	.421
AA Women	13.39	0.167	40	AA women		9.90	0.148	36	AA women		.342
EA Total	12.88	0.177	57			9.88	0.128	72			.267
EA Men	11.71	0.118	26	EA men/	.653	8.84	0.113	39	EA men/	.457	.329
EA Women	13.85	0.216	31	EA women		11.11	0.144	33	EA women		.551
Men	7.57	0.108	61	Men/	.030*	7.95	0.117	66	Men/	.269	.848
Women	13.59	0.189	71	women		10.48	0.145	69	women		.278

*p≤.05; **p≤.01; ***p≤.001

Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted

Multivariate Analysis, DRM

In order to further explore the data using inferential tests allowing for control of variables, I conducted a series of regression analyses. To be consistent with the presentation of data in the previous section, results for the percentage of time spent in academic activities will be presented first, followed by the percentage of time spent with diverse race others, followed by the effect of the order of completion of measures on the U index. This section concludes with a contrast of results from the DRM and the GMC. Before running these analyses, however, I examined the DRM data for consistency with the assumptions of linear regression analysis, as I did with the GMC data.

As described above, the U index is a measure indicating the percentage of time in which the predominant emotion is a negative one. Because it accounts for time, it is duration weighted. The researchers who developed the DRM found that individuals reported feeling positive most of the time, and thus the U index tends to be positively skewed, with few individuals reporting episodes during which the primary emotion was negative (Kahneman et al., 2004a; Krueger et al., in press). In other words, the U index for individuals who reported no episodes during which the primary emotion was negative was zero. This pattern has been replicated here, with the distribution of the U index demonstrating a positive skew, and over half of the scores are zero. This positive skew in the distribution of the U index violates assumptions of normality of distribution in linear regression analysis. Figure 4.9 provides a histogram of the distribution of the U index, with a normal distribution superimposed.
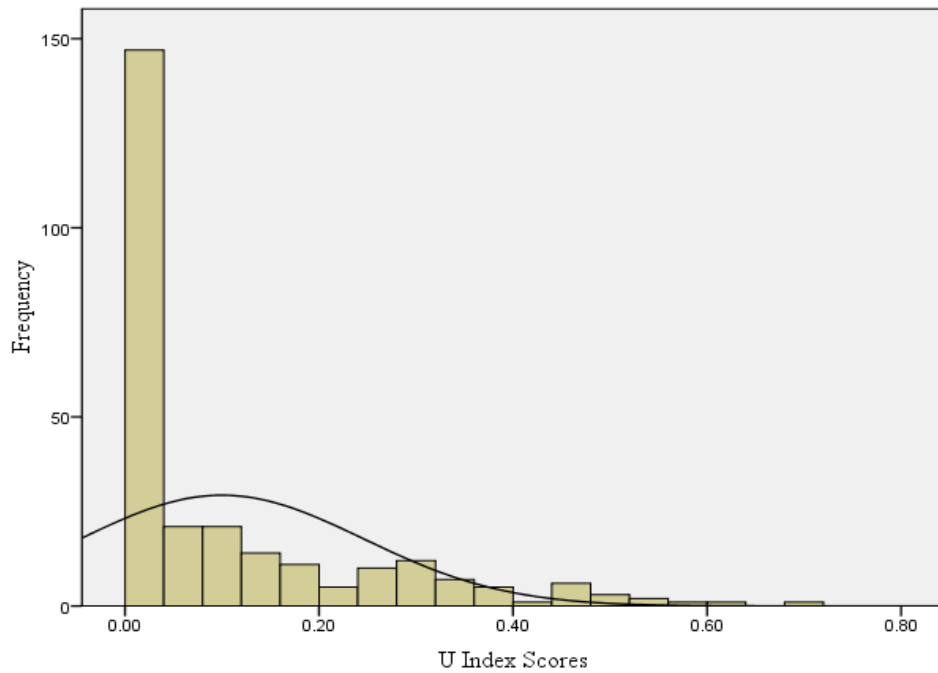
Figure 4.9 Distribution of the U Index Scores

It is readily apparent that the distribution of the U index is not normal. In general,

a distribution that is not normal can be managed either by employing nonparametric

statistical tests or by applying logarithmic transformations to the data. With the first

option, nonparametric tests, loss of statistical power is a serious concern. The second

option, the application of logarithmic transformation, does not compromise the power of

the analysis. Logarithmic, or log, transformation is a procedure in which data are

transformed statistically to induce normality in the distribution. There are several

methods of applying log transformation to a positively skewed distribution; I opted to

utilize the natural logarithm, where the constant e (2.7182818) is the base (Osborne,

2002). This transformation is employed when the range of responses is not extreme and is

commonly used in social and behavioral research. All data points remain in the same

relative order, allowing the U index to be interpreted essentially in the same way as it would have been prior to transformation (Osborne, 2002).

After applying the log transformation, the distribution took on a bimodal character, with a large number of responses clustered together (individuals who did not report any episodes during which the predominant emotion was negative over the course of the day and whose U index was zero) and a relatively normal distribution of responses clustered together (individuals who reported feeling negative at least some portion of the day and whose U index was higher than zero). Figure 4.10 provides a graphic of the distribution of the transformed U index.
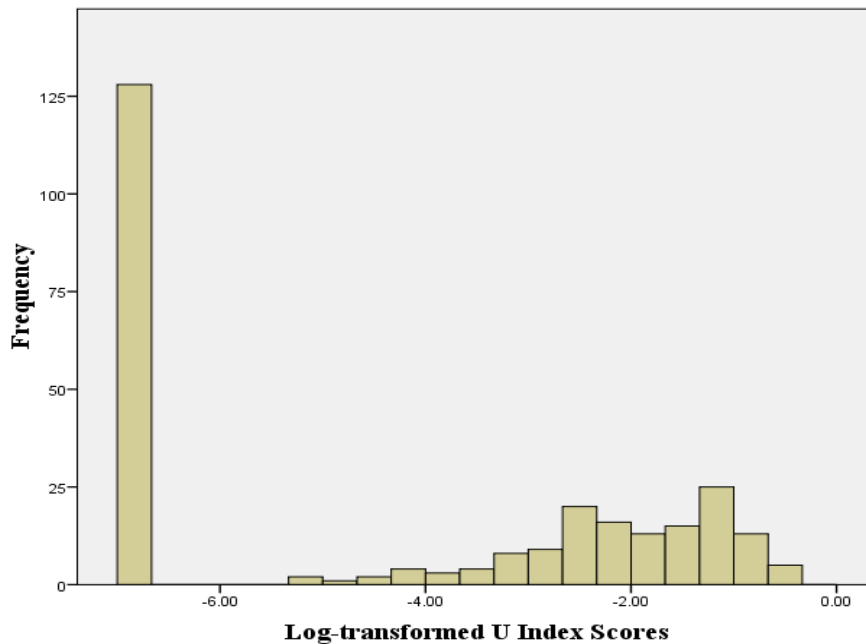
Figure 4.10 Distribution of the U Index with Application of Natural Log Transformation

In order to better understand factors affecting the distribution, I attempted to identify individual characteristics that might predict why individuals would fall into the lower end of the U index (those reporting no predominantly negative episodes) or into the higher end of the U index (those who experienced episodes where the primary emotion

138

was negative some percentage of the day). In order to do this, I constructed a

dichotomous U index variable, with 1=felt negative (*n*=140) and 0=never felt negative

(*n*=128). I entered race and gender as categorical variables, and prior experience with

racial diversity (PERD) as a continuous variable. None of the variables displayed

significance as predictors; race, gender, and prior experience with racial diversity had

little value in predicting the likelihood of reporting negative affect during episodes. Table

4.19 provides the details of this analysis.

Table 4.19 Logistic Regression of Log-transformed U Index, DRM

Predictor	β	SE β	Wald's X^2	*df*	*p* value	Odds Ratio
Constant	.114	.392	0.084	1	.772	1.120
Race	.454	.258	3.088	1	.079	1.575
Gender	-.313	.249	1.573	1	.210	0.731
PERD[a]	-.063	.237	0.071	1	.789	0.939

p≤.05, **p*≤.01, ***p*≤.001; *n*=265
[a]=prior experience with racial diversity
Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted.

I examined only the portion of the distribution containing individuals who

reported episodes where the predominant emotion was negative via linear regression

analysis (in other words, the individuals whose U index was not zero). I entered race,

gender, and PERD in one block; these variables displayed no significance as predictors,

although PERD approached significance (*p*=.051). The model accounts for a very small

portion of the variance in the non-zero portion of the distribution of the U index. Table

4.20 displays these results.

Table 4.20 Linear Regression, Non-zero Segment of the Distribution of Log-transformed U Index, DRM

	B	SE	β	p value	R^2	F	Sig. of F
Constant	-2.625	.254					
Race	-.123	.187	-.058	.509			
Gender	.300	.184	.141	.105			
PERD[a]	.341	.173	.170	.051	.043	2.046	.110

*$p \leq .05$, **$p \leq .01$, ***$p \leq .001$; $n=128$
[a]=prior experience with racial diversity
Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted

Next, I combined the entire distribution and conducted a linear regression analysis using the log transformed U index, examining the effects of race, gender, and PERD. Although the interaction term, *race x gender*, was not significant, I retained it in the final model because it helped explain more variance. The first block included race, the second added gender the third included the *race x gender* interaction term, and the final block included prior experience with racial diversity (PERD). The results are presented in Table 4.21.

Table 4.21 Linear Regression Results for Log-transformed U Index, DRM

	B	SE	β	p value	R^2	F	Sig. of F
Block 1							
Constant	-2.092	.124					
Race[a]	.008	.181	.004	.967	.000	0.002	.967
Block 2							
Constant	-2.218	.150					
Race	-.048	.185	-.023	.795			
Gender[b]	.275	.185	.129	.140	.016	1.104	.335
Block 3							
Constant	-2.211	.169					
Race	-.069	.283	-.033	.807			
Gender	.259	.249	.121	.300			
Race x Gender	.037	.374	.016	.921	.016	0.734	.534
Block 4							
Constant	-2.613	.264					
Race	-.165	.284	-.078	.563			
Gender	.268	.246	.126	.278			
Race x Gender	.072	.371	.031	.847			
PERD[d]	.342	.174	.170	.051	.044	1.533	.196

*p≤.05; **p≤.01; ***p≤.001; n=265
[a]= dummy coded, 1=African American, 0=European American
[b]=dummy coded, 1=female, 0=male
[c]= African American female is the reference group
[d]=prior experience with racial diversity
Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted

In examining findings by block, none of the independent variables demonstrated significance as predictors, although PERD was nearly so (p=.051), with individuals reporting higher prior experience with racial diversity displaying a higher U index. The final model with all independent variables accounted for a very small percentage of the variance, just over 4%.

Based on these preliminary explorations of the distribution of the U index, the use of the natural logarithm transformation was applied to the entire distribution of the U index for the remainder of the analyses. Having completed this series of checks on consistency with the assumptions of linear regression analysis, I next report the results of time allocation to academics and to interactions with racially diverse others, and order effect, followed by a contrast of the measures.

Allocation of Time in Academic Activities

I hypothesized that women would spend more time in academic activities (attending class or studying) than would men. I examined the effects of race, gender, and prior experience with racial diversity (PERD) on the percentage of time spent in class or studying, relative to activities reported for the entire day. In a previous section, I found that women spent significantly more total time than men in academic activities, and within race groups, European American women spent significantly more time than European American men in such activities. In examining the percentage of the day devoted to academics, the difference remained significant for European American men and women. To further explore this hypothesis, I conducted a linear regression on the percentage of time spent in academic activities. This variable had a normal distribution and thus no log transformation was needed. I found that women spent a significantly

greater percentage of the day in academic activities than did men, but no other

differences by race or PERD in the percentage of time spent in academic activities,

relative to the total time reported. The interaction term, *race x gender*, was not

significant, but I retained it because it slightly enhanced the model's ability to explain

variance. Overall, the model explained very little variance in the percentage of time

devoted to academics, at just over 3%. Findings from the linear regression model are

presented in Table 4.22.

Table 4.22 Linear Regression Results for Percentage of Time Spent in Academic Activities

	B	SE	β	p value	R^2	F	Sig. of F
Block 1							
Constant	.345	.016					
Race[a]	-.040	.022	-.115	.072	.013	3.255	.072
Block 2							
Constant	.327	.019					
Race	-.044	.022	-.125	.051			
Gender[b]	.040	.022	.112	.078	.026	3.205	.042*
Block 3							
Constant	.314	.022					
Race	-.017	.032	-.050	.583			
Gender	.066	.032	.189	.039*			
Race x Gender[c]	-.052	.045	-.134	.243	.031	2.596	.053
Block 4							
Constant	.311	.033					
Race	-.018	.032	-.052	.573			
Gender	.066	.032	.189	.040*			
Race x Gender	-.052	.045	-.134	.244			
PERD[d]	.003	.021	.009	.890	.031	1.944	.104

*p≤.05; **p≤.01; ***p≤.001; n=248
[a] = dummy coded, 1=African American, 0=European American
[b]=dummy coded, 1=female, 0=male
[c] = African American female is the reference group
[d]=prior experience with racial diversity

.

Allocation of Time with Diverse Race Interaction Partners

One of the study's hypotheses predicted that African American students would report more time spent interacting with others of different racial groups. In the preliminary analysis section, I combined episodes where the race of the interaction partner was different and episodes where there was a blended group, creating a new *diverse race* category, comparing this to episodes where the race of the interaction partner was the same. I found that students in the total sample spent significantly more time interacting with others in the diverse race category than with individuals of the same race and that the U index was significantly higher when interacting with diverse race others (see Tables 4.11 through 4.14). Additionally, in looking at the average duration of episodes containing partners of both the same race and diverse race, I found no significant differences by race.

Using multivariate analysis, I explored the effects of race, gender, and PERD on the percentage of time spent with diverse race others using the variable described previously. The results are presented in Table 4.23.

Table 4.23 Linear Regression Results for Percentage of Time Spent in Interactions with Diverse Race Interaction Partners

	B	SE	β	p value	R^2	F	Sig. of F
Block 1							
Constant	.440	.040					
Race[a]	.062	.063	.125	.326	.016	0.979	.326
Block 2							
Constant	.531	.056					
Race	.040	.061	.081	.515			
Gender[b]	-.137	.061	-.277	.029*	.090	3.021	.056
Block 3							
Constant	.412	.082					
Race	-.015	.066	-.031	.819			
Gender	-.139	.060	-.280	.024*			
PERD[c]	.106	.055	.257	.057	.144	3.357	.025*

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$; $n=66$
[a] = dummy coded, 1=African American, 0=European American
[b] =dummy coded, 1=female, 0=male
[c] =prior experience with racial diversity

Gender was a significant predictor of the percentage of time spent with diverse race interaction partners, with men spending a significantly greater percentage of time in such interactions. This result extends the preliminary data exploration in which I found that men allocated significantly more time than women to diverse race interactions ($p=.004$). The final model accounted for 14.4% of the variance in the percentage of time spent with diverse race interaction partners. I found no significant differences by race, by race x gender, or by PERD. Because the race and gender interaction term was not significant and contributed little to the explanation of variance, I removed it from the model.

In tandem with data preliminary data exploration section, these findings offer no support for Hypothesis 3b in which I predicted that African Americans would spend more time than their European American counterparts interacting with individuals whose racial backgrounds were different than their own. Gender played a greater role than race in interactions with diverse race others, with men spending more time in such interactions than women.

Order of Instrument Effect on U Index

In the preliminary data exploration section, I found no significant differences by race or gender groups for the U index when the GMC was completed before the DRM, although differences emerged by gender when looking at only individuals who completed the GMC first. I explored this effect further here, looking at the extent of the impact of race and gender on the U index for those completing the GMC first; in addition, I tested whether the order effect on the U index might be affected by prior experience with racial

diversity (PERD). I ran a blocked linear regression, the results of which are provided in

Table 4.24.

Table 4.24 Linear Regression Results, Order Effect on U Index by Race, Gender, PERD

	B	SE	β	p value	R^2	F	Sig. of F
Block 1							
Constant	-1.853	.187					
Race[a]	-.261	.255	-.124	.309	.015	1.052	.309
Block 2							
Constant	-2.087	.214					
Race	-.389	.256	-.185	.134			
Gender[b]	.534	.258	.252	.042*	.076	2.696	.075
Block 3							
Constant	-2.394	.361					
Race	-.416	.257	-.198	.111			
Gender	.571	.260	.270	.032*			
PERD[c]	.239	.226	.127	.294	.091	2.174	1.00

*$p \le .05$; **$p \le .01$; ***$p \le .001$; n=133
[a] =dummy coded, 1=African American, 0=European American
[b] =dummy coded, 1=female, 0=male
[c] =prior experience with racial diversity
Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted..

I dropped the interaction term, race x gender, as it was not significant and its inclusion did not contribute to the explanation of variance in the U index. Only gender played a predictive role, with women who completed the GMC first reporting a significantly higher U index than men. Race and PERD played no role in predicting the U index for students completing the GMC before the DRM. The final model accounted for 9.1% of the variance in the order of instrument effect on the U index.

Taken together, the preliminary data exploration and regression results offer partial support for hypothesis 2b, and no support for hypotheses 2, 2a, and 2c, the hypotheses on order effect outlined in Chapter 3. The order in which students completed the measures had no significant effect on the U index. Gender and PERD did not have an impact on the order effect for this sample.

Contrast of Measures

Comparison of two different types of measures was at the heart of this study. Given the differences in the nature of the two measures employed in this study, it is challenging to make direct comparisons between them statistically, however. I examined correlations between the outcomes of each measure, and conclude this section with a discussion of the differences between measures.

Correlations Between GMC and DRM Outcomes

None of the six GMC factors was significantly correlated with the DRM log-transformed U index. Examining Pearson correlations between the GMC factors and the U index prior to log transformation, I discovered that two factors were significantly correlated with the U index. The relationship between the U index and F5 Campus Social Integration was negative ($r=-.142$, $p=.025$), meaning that the more unfavorably students

viewed their social ties to the campus, the higher the U index, a relationship that intuitively makes sense. The relationship between the U index and F6 Informal Relationships with Faculty was positive (r=.145, p=.022), meaning that the more likely individuals were to indicate an informal relationship with faculty, the greater the U index.

This relationship piqued my curiosity, and I explored the interactions with faculty on the DRM further, although this analysis was not part of the study's hypotheses. Briefly, I found that students in the total sample reported a significantly higher U index in interactions with faculty members of the same race than when faculty race was different. I found no significant differences in the U index for the gender of faculty. When students were interacting with faculty, additional individuals who were also noted as present included other students, friends, and significant others. The most frequently reported activities during episodes involving faculty were attending class and studying; students indicated socializing with faculty far less frequently than academic activities. Although over half of the students in the sample indicated on the GMC that they often talk with faculty outside class and 42% of the sample reported they often socialize with faculty, data from the DRM do not provide much evidence to support this claim, with only 40 of 281 episodes involving faculty (or 14%) labeled as one in which socializing was an activity. The pattern of activities and interaction partners suggests that the bulk of these interactions occur within the traditional confines of the classroom (244 out of 281 episodes, or 87%).

Contrast of Findings, GMC and DRM

In Table 4.20, I examined the effects of race, gender, and prior experience with racial diversity (PERD) on the log transformed U index, finding none of the independent

variables to be significant predictors. Preliminary analyses showed no differences by race on the U index, although gender produced significant differences, with women reporting a higher U index than men. Students reported spending significantly more time in diverse race interactions, and those episodes produced a higher U index than same race interactions. Race was a significant predictor on the GMC, specifically of the ways participants perceived the campus racial climate, the characterization of one's own interracial relationships, the perception of equal treatment by faculty, and the perception of one's own academic experiences. African Americans were significantly more likely than European Americans to hold a less unfavorable perspective for these factors. Gender was a significant predictor of the perception of the campus racial climate and the perception of one's own academic experiences, with women more likely than men to hold a favorable viewpoint. Race played an important role on both measures, but in different ways.

Although the two measures are very different and thus allow for only indirect comparisons, Hypothesis 1, in which I predicted differences between the two measures was partially supported. On the GMC, African Americans held unfavorable views of the campus racial climate, felt they were not treated equally in the classroom, and viewed their academic experiences more unsatisfactorily than European American students. In comparison, on the DRM, nearly half the sample reported a U index of 0 (meaning that at no time was the predominant emotion a negative one), and the overall U index for the sample was 9.98. Hypothesis 1c, in which I predicted that gender differences would be more pronounced on the GMC than on the DRM was not supported. In fact, women looked favorably upon the campus racial climate and their own academic experiences.

152

Women tended to report greater negativity than men on the DRM. Differences by gender on the DRM were rather prominent, but in the opposite direction. The daily affective experience of women was fairly negative; women appeared more susceptible to the order effect, and spent more time in academic endeavors and less time in diverse race interactions.

Chapter Summary

The study was guided by research questions that dictated a set of three overall hypotheses and sub-hypotheses, outlined in Chapter 3. The first group of hypotheses made predictions regarding differences between the two measures; the second group of hypotheses focused on the effect of order of completion on the DRM; and the third group of hypotheses centered on allocation of time. Table 4.25 links the analyses to each of the hypotheses.

Table 4.25 Study Hypotheses and Results

Hypothesis	Result
H1. Reports of attitudes and experiences from the global measure will be more negative in comparison to data gleaned from the episodic measure.	Partially supported Significant differences found by race on four factors, by gender on two factors on GMC; on DRM roughly half of students report a U index of 0.00.
H1a. African American students' scores on the global measure will be more negative than European American students' scores on the global measure.	Partially supported African Americans' scores were significantly lower than European Americans' scores for four of the six GMC factors.
H1b. Among African American students, women's scores on the global measure will be more negative than men's scores on the global measure. The same relationship is hypothesized for European American men and women, but to a lesser extent than for their African American counterparts.	Not supported for any factors
H1c. Differences by gender for both African American and	Not supported

153

European American students will not be as pronounced on the DRM as on the global measure.	Significant differences found on 2 factors on GMC; significant differences by gender on DRM for U index in preliminary analyses, and gender was a significant predictor for the percentage of time spent with racially diverse others.
H1d. Among both African American and European American students, those indicating prior experience with racial diversity will report more positive scores on the global measure.	Not supported for any factors
H2. Order of instrumentation will produce marked effects on the U index, with the "global-first" condition resulting in more negative affect reports on the episodic instrument than the "DRM-first" condition.	Not supported
H2a. Within the "global-first" condition, African American students will report more negative affect on the DRM than will European American students.	Not supported
H2b. Within the "global-first" condition, among African American students, women will report more negative affect reports on the DRM than African American men. The same relationship is hypothesized for European American men and women, but to a lesser extent than for their African American counterparts.	Partially supported For African American students, the difference was significant; for European American students, the trend was present but not significant.
H2c. Within the "global-first" condition, both African American and European American students indicating prior experience with racial diversity will report more positive affect reports on the DRM.	Not supported
H3. Differences in time use will be found between African American and European American students. Time use will be related to the attitudes and emotions students report, with students spending more time in activities deemed pleasant than in activities regarded as unpleasant.	Partially supported Significant differences by race were found for 13 activities, in time spent with five interaction partners, and in time spent with interaction partners by racial background. Although students spent slightly more time in pleasant activities compared to unpleasant activities, this difference was not significant.

154

H3a. Both African American and European American women will report more time spent in academic activities than African American and European American men.	Partially supported; while this was true for European American women, it was not true for African American women.
H3b. African American students will report more time spent interacting with individuals from a variety of racial/ethnic backgrounds than will European American students.	Not supported

In general, the data from the GMC showed a trend toward unfavorable assessment of campus racial climate by African Americans and favorable perceptions by women. Of the six factors identified in the data, race was a significant predictor for four (F1, F2, F3, and F4) and gender for two (F1 and F4).

The DRM data painted a different picture, with European Americans reporting greater negativity with their daily affective experiences than African Americans. Unlike the overall positive reports on the GMC, women displayed greater negativity on the DRM. Hypothesis 1, which predicted differences between the two measures, received partial support, while hypotheses predicting differences in the U index related to order effect and time allocation received partial support. Race and PERD were not significant predictors of an order effect on the U index, although gender proved to be predictive. Regarding allocation of time, I found differences by race for time spent with various interaction partners and in specific activities. Focusing on academic activities, I found that European American students spent significantly more time than African American students attending class and studying, but no race difference emerged when looking at the percentage of time in academics relative to the total time reported. Thinking about the time spent with interaction partners of the same or different racial backgrounds, African

155

Americans spent significantly more time than did European Americans in episodes in which the interaction partner's race was the same.

A discussion of these findings can be found in the next chapter, linking the data analysis back to the study's purpose and research questions. I will offer concluding remarks and will make suggestions for further research.

CHAPTER 5

DISCUSSION

In Chapter 1, I highlighted the importance of higher education relative to life outcomes, underscoring the economic and social mobility associated with college attendance. Although it would seem intuitive that such benefits would prompt widespread college enrollment, this is not the case. Relative to their representation in the general population, African Americans are consistently under-represented in American institutions of higher education. The educational pipeline is a notion that has been advanced to characterize this phenomenon, with the conduit becoming more restrictive the farther one advances.

Some scholars of higher education have focused on the climate of a college campus as a primary force affecting the academic and social experiences of its students. Climate is reflected in the observable policies, practices, routines, and behaviors on a college campus; the perception by some African Americans and other minorities that the campus climate of institutions that have historically served the majority is inhospitable to them has been well-documented (Banks & Kohn-Wood, 2007; Biasco, Goodwin, & Vitale, 2001; Chavous, 2005; D'Augelli & Herschberger, 1993; Davis, 2004; Feagin, 1992; Feagin, Vera, & Imani, 1996; Hurtado, 1996; Hurtado, Carter, & Kardia, 1998; Hurtado, Milem, Clayton-Pedersen, & Allen, 1998; Schwartz & Washington, 1999). Even the most overtly welcoming of institutions may maintain policies and procedures that privilege some groups over others. Such an environment might have a negative

impact on personal well-being, and subsequently, on student success. Some researchers have argued that in order to acquire a more fine-grained understanding of the ways people intersect with their environments, it is informative to account for the ways in which individuals allocate their time (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004a). Economists talk about the notion of *utility*, which is a measure of the relative value of various activities; when evaluating the utility of a past episode (*remembered utility*), the temporal nature of the experience is often lost or distorted, when in fact the utility of events or episodes can vary in intensity from moment to moment. In remembering an episode, individuals do not evaluate the utility of each moment, but rather construct a representative moment and evaluate its utility, losing the affective variability of the experience and leading to distortions in memory. Described in detail in Chapter 2, incorporating this temporal element in understanding experience can provide data that are less susceptible to error (Kahneman, 1999). Thinking about time allocation by college students and its impact on well-being, an examination of the affect associated with daily experience may reveal those activities that contribute to a positive or negative total utility.

Understanding how college students perceive and respond to the qualities of their campus environments requires that assessments be conducted. Described in detail in Chapter 2, evaluations of campus climate have typically employed a global methodology that requires top-down cognitive strategies that only evaluate general or semantic knowledge. Because research has demonstrated that using multiple cognitive pathways facilitates information retrieval, a method has been developed that both accounts for time allocation and attempts to utilize bottom-up cognitive processing that focuses on episodic

knowledge (Kahneman et al., 2004a; Krueger, Kahneman, Schkade, Schwarz, & Stone, in press). For example, memory retrieval is enhanced when general knowledge questions are linked with other relevant cues from a subject's life (Belli, 1998).

My exploration of the issues related to African Americans' participation in higher education was inspired by the affirmative action lawsuits involving the University of Michigan. In addition, through my study of survey methodology, there appeared to be an opportunity to approach an understanding of campus climate from a slightly different angle. The purpose of this study was to examine the daily affective experiences of African American and European American students at a predominantly White institution (PWI), exploring the activities to which they devote their time, the people with whom they interact, and the emotions accompanying these experiences, contrasting this with their perceptions of campus racial climate. The data were collected using an episodic measure that examines specific activities or episodes of the previous day, contrasted with a global measure that assesses general student perceptions of campus climate. Hypotheses of the study were divided into three general categories focusing on differences in the outcomes of the global and episodic measures, whether the order of completion of measures was important, and how students allocated their time.

Organization of the Chapter

In the previous chapter, I presented the results of the data analysis for both the global measure of climate (GMC) and an episodic measure, the Day Reconstruction Method (DRM). In this chapter I will begin with a brief discussion of the measures, moving to a discussion of the results relative to the key variables of interest, namely, race, gender, prior experience with racial diversity, order effect, and time allocation. I

then offer concluding remarks regarding the results, followed by a discussion of the importance of the findings. Finally, I conclude with suggestions for future research.

The Measures

This study focused on two types of instruments, a global measure of climate (GMC) and the Day Reconstruction Method (DRM), representing distinct approaches to collecting and understanding data. Details of these differences have been provided in previous chapters; the GMC represents a global or top-down cognitive approach, while the DRM represents an episodic or bottom-up cognitive approach. The GMC collects semantic or general knowledge information, which requires respondents to construct estimates and compute judgments that are not always based on direct knowledge. For example, the GMC asks students to evaluate the extent of financial and administrative support provided by the university to particular groups; few students would have such direct knowledge, and so an answer must be constructed that could be based on hearsay or a hunch about what the student feels or senses is true. Data may also be subject to a social desirability bias, a phenomenon in which subjects wish to present themselves in the best possible light to the researcher by responding to questions in ways they believe the investigator would prefer or that are viewed as socially acceptable. Social desirability bias has been reported widely in survey methodology literature over the past 50 years (Edwards, 1957; Smith & Fischer, 2008).

The DRM focuses on the direct experience of the respondent, asking only for a description of the previous day's events. The respondent creates a diary (never shown to the researcher) that is used to answer a series of questions. In this way, issues related to social desirability bias may be reduced because the researcher is only given a very

160

generic outline of the respondent's experiences; respondents are aware of this before they begin. The DRM is a relatively new instrument, and is untested in research specifically focusing on college students. It has been employed with several adult samples in locations in both the United States and in Europe. In this study, my intent was not to utilize the DRM as a way to assess student perceptions of campus climate because that is not its purpose, but rather to examine students' daily affective experiences as a contrast to a global measure of the perception of campus climate. This contrast of two very different measures highlighted the issues associated with of sole reliance on global methodologies in understanding the experiences of college students at a predominantly White institution.

Discussion of Study Findings by Key Independent Variables

Key variables in the study were race, gender, prior experience with racial diversity, order effect, and time allocation. Each was suggested by research literature as critical in the understanding of perceptions of campus climate. The results are discussed below by variable. I will interpret the data reported in the previous chapter, positioning the findings within the literature presented in Chapter 2.

Race

Race was an essential variable in the study, as the fundamental aim of the research was to explore whether differences existed between African American and European American students' perceptions of campus climate and their daily affective experience. Because the GMC and the DRM are so distinctive, I will discuss the findings from each separately, and will then integrate the results.

Race and the GMC

Race proved to be an important negative predictor for this measure. (See Table 4.4 for specific details.) African Americans were more unfavorable than their European American peers in their general perception of campus racial climate, in their characterization of their own interracial relationships, in their perceptions of equal treatment of students by faculty, and in their assessment of their own academic experiences. European American students and their African American counterparts offered very divergent views of the climate at RSU.

The unfavorable view of campus racial climate exhibited by African American students in this study is consistent with research presented by Fischer (2007) and Gilliard (1996), who examined differences in the perception of campus racial climate for African Americans and other racial and ethnic groups. Presented in Chapter 2, a large body of literature has consistently produced such adverse perceptions on the part of African American college students. The belief by African American students regarding the differential treatment of students on the part of faculty is particularly important in light of a large body of research that has demonstrated the importance of faculty relationships for African American students (Booker, 2007; Davis, 1998; Loo & Rolison, 1986; Fischer, 2007; Mallinckrodt, 1988; Schwitzer, Griffin, Ancis, & Thomas, 1999). The finding that African Americans were significantly more unfavorable than European Americans in their assessment of their own academic experiences is consistent with the work of Mendoza-Denton, Downey, Davis, Purdie, and Pietrzak (2002) and with Gilliard (1996), particularly when there is a perception of discrimination in the campus environment.

Overall, race was an important variable on the GMC. My prediction that African Americans' scores would be lower than European Americans' scores was partially supported for four of the six GMC factors.

Race and the DRM

Race played a different role on the DRM. I examined the DRM data for differences by race in the U index, the percentage of time in which individuals report an emotion that is predominantly negative; a high U index score is indicative of greater time spent in situations where the main emotion is negative. Such situations were relatively rare, with respondents of both race groups expressing positive affect most of the time. The predominant emotion was positive was roughly 90% of the time, and there was no significant difference in the U index by race, with European Americans reporting a U index of 11.12 and African Americans reporting a U index of 8.91. Krueger et al. (in press) reported a higher U index for African Americans (23.8) than for European Americans (17.5) in the Princeton Affect and Time Survey (PATS), in which the DRM was adapted for telephone mode.

Interaction partners were, in some cases, an important determinant of the U index (see Table 4.8), and this was equally true for African Americans as it was for European Americans. Only within African American men and women did a gender difference in the U index emerge, with African American women reporting a higher U index than men when they were interacting with faculty and with staff. It is not immediately clear why faculty and staff interactions appear to produce higher U indices for these women.

African American and European American students alike reported a significantly greater U index when interacting with diverse race others than in same race interactions,

and students spent more time in diverse race interactions than in same race interactions (see Tables 4.11 through 4.14). This is an important finding, particularly in light of research on the impact of diversity and cross-race interactions in the college environment reported by a number of researchers, including Fischer (2007), Gurin, Gurin, Matlock, and Wade-Golden (2008), Jayakumar (2008), and others, noted in the literature review. For both racial groups in this study, it appears that cross-racial interactions were associated with negative affect, but African Americans and European Americans were equally affected. Intergroup communications can have positive and long-lasting effects for college students, although fostering positive intergroup relationships on campus can be challenging, as highlighted by Schoem and Hurtado (2001).

The negative affect associated with diverse race interactions may be an artifact of the structural diversity of the RSU campus, especially for African American students, but could also represent a developmental readiness on the part of students to engage with others who represent difference, even though such interactions may be difficult. Young adulthood is a time for individuals to question existing beliefs and adopt or reject those tenets consistent with a developing understanding of the self; this notion is described by Kegan (1994) as *self-authorship*, and serves as the foundation for models of intercultural maturity, about which a growing literature exists. King and Baxter Magolda (2005) defined intercultural maturity as "multi-dimensional and consisting of a range of attributes, including understanding (the cognitive dimension), sensitivity to others (the interpersonal dimension), and a sense of oneself that enables one to listen to and learn from others (the intrapersonal dimension)" (p. 574). In essence, the ability to appreciate difference in others can only be present when an individual has developed sufficient

164

cognitive complexity that permits the acceptance of ambiguity (King & Baxter Magolda, 2005). In this research, students are taking the incremental steps to interact with diverse others in ways that are both respectful and consistent with personal beliefs and values; this work is not easy.

Findings from the DRM for this sample suggest that race, while important, played a less prominent role than it did on the global assessment. African Americans and European Americans did not differ significantly in the U index, even when considering the influence of various interaction partners and the race of interaction partners.

Race, GMC and DRM

Taken together, the results from both measures paint very different tableaus around the role of race in understanding student perceptions of the climate and daily affective experience. The results from the GMC indicated a considerable difference in perspective between African American and European American students. European American students, particularly women, tended to hold favorable views of the campus climate, while their African American counterparts, especially women, arrived at a less favorable conclusion. The questions that comprised the GMC were general; in order to respond to most of these questions, students had to rely upon a blend of facts, direct and vicarious experiences, hearsay, estimates, and assumptions. The measure focuses on semantic or general knowledge, triggering only thematic processing by asking questions that highlight common beliefs or perceptions of all students, and does not tap into specific, individual-level experience. Given the historical experiences with racial discrimination that African Americans have encountered, it is not surprising that an unfavorable view of the campus might be reported.

The results from the DRM indicate that race was not the critical variable that it was on the GMC for this sample. Few differences between African Americans and European Americans were noted, and these were largely confined to differences within race and gender groups. As they completed the DRM, students focused on their direct experiences, what they did, who they were with, and how they felt as they went about the day. This approach tapped into thematic elements by having students consider aspects of college student life and temporal memories by asking students to remember what happened and when. In addition, the DRM may have triggered parallel processing as students thought about their daily activities and the feelings they experienced. A number of students shared informally that as they recalled events occurring early in the day, other activities came to mind with increasing ease.

These findings reinforce the notion that each measure is tapping into something quite different cognitively, consistent with reports from Belli (1998), Menon (1994), Kahneman et al. (2004a, 2004b), and Krueger et al. (in press). One measure encourages respondents to draw upon general ideas and stories to construct responses, while the other focuses directly on the participant and her experience. Findings from the two measures provide messages that are contradictory, with GMC data strongly indicating an unfavorable perception of the campus climate by African Americans relative to European American students, and DRM data indicating the daily affective experience of African American and European American students in this sample to be roughly equivalent.

The results also suggest that there could be some evidence of bias in the GMC data. Described in detail in the next section, the results of the GMC and the DRM, when considered together, suggest a form of response bias termed *social desirability bias* may

have occurred in some participants completing the GMC. This occurs when research participants over- or under-report activities or attitudes that are deemed to be socially or culturally desirable (or undesirable), in an effort to present themselves in the best possible light (Bernardi & Guptill, 2008). This appears to be more a gender effect than a race phenomenon, and is discussed in some detail in the next section.

Gender

Gender was a central variable in this study. My exploration of the literature on gender suggested that an examination of perceptions of campus climate and daily affective experience would be incomplete if gender was not considered. I will first present a discussion of the findings from the GMC, followed by an overview of the findings from the DRM, and will then weave the findings of the two measures together.

Gender and the GMC

Gender did not play the role I hypothesized on the GMC. Based on my reading of the literature, I expected that women would express more negative views of the campus climate than would men. While this was true for African American women regarding their views of campus racial climate, it was not true for all women in the sample. In examining gender alone, I found that women were significantly more likely than men to hold a favorable view of the campus racial climate, which was contrary to the predicted direction in Hypothesis 1b. The inclusion of the interaction of race and gender demonstrated how the favorable perception of campus racial climate by European American women in particular masked the more unfavorable views of African American women. For the perception of campus racial climate, of the four race and gender subgroups, the mean score for European American women was the highest, while the

167

mean score for African American women was the lowest. These findings are presented in the previous chapter, in Table 4.4.

Women were also significantly more favorable than men when assessing their own academic experiences, contrary to my prediction, reporting a slightly higher grade point average than men, with no interaction of race and gender. This finding is consistent with previous research in which women college students were found to be more academically motivated and more successful than their male peers (Hood, 1992; Shadrick, 1995). The women in this sample were asked to assess their academic performance relative to their expectations prior to college; compared to men, they reported satisfaction in their performance. Overall, the data from the GMC relative to gender display a more positive trend than I predicted, especially for European American women. This favorable outlook might be attributable to a number of factors. First, perhaps men in the sample responded in an inordinately unfavorable way to the GMC, and thus women just looked more favorable by comparison. Findings on gender differences in overall life satisfaction are mixed, as described previously (Kahneman et al., 1999). Second, perhaps women were truly more motivated and invested in academics and their campus environment than were men, and were more inclined to express satisfaction about it when queried. Described in Chapter 2, there is empirical evidence demonstrating such a gender difference. Third, perhaps the trend was in fact an artifact of a social desirability bias in women on the GMC; this possibility will be outlined in the discussion of the findings of the two measures relative to gender.

Gender and the DRM

Exploring gender differences in the U index on the DRM, I found that women reported a higher U index than men, or a greater percentage of time in which the predominant emotion was negative (see Table 4.6). This result is consistent with the trend reported by Krueger et al. (in press), who reported a similar finding (men=17.6, women=19.6). I explored the differences in the U index by gender and found few differences between men and women for interaction partners (see Appendix I) and activities (see Appendix L); where gender differences were found, women consistently reported a higher U index than men.

Activities that prompted a higher U index in women, when compared to men, were rather surprising: watching television and eating are activities that ostensibly would be expected to be pleasant, yet they appeared to produce negative feelings in women in this sample. Exploring this further, I examined activities that occurred in tandem with watching television for women; the most frequently reported activities were, in order, relaxing, socializing, and using the computer. I also examined interaction partners for women when watching television, finding women reported that they watched television with friends, a significant other, or family. I came to no conclusion about this difference, except to note that the gender gulf was greater for African Americans than it was for European Americans.

I found no difference for women in the U index when examining episodes where there was a diverse race interaction partner compared to a same race interaction partner, but men reported a significantly higher U index when the interaction partner was in the diverse race category than when the interaction partner's race was the same (see Table

4.11). For women interacting with a diverse race partner, the partner was most frequently identified as another student. Activities identified by women interacting with diverse race partners were, in order of occurrence, attending class, socializing, and working. Considering the type of interaction partner and the activities noted, there is a very strong possibility that women were indicating interaction partners of a diverse race who were merely present during an episode, such as other people in a class or in a group social setting. For men, the most frequently reported diverse race interaction partner was friend, and the most frequently reported activities with diverse race partners reported by men were socializing, attending class, and eating. Although a strong gender effect in the U index was noted for only a small number of activities and interaction partners, the duration of episodes was dependent upon the gender of the student. Details about these differences are presented in a subsequent section covering allocation of time.

Gender, GMC and DRM

Women displayed favorable perceptions on the GMC for two factors, reporting higher factor scores regarding the campus racial climate and their own academic work than did men, and this was especially true of European American women. This finding ran contrary to Hypothesis 1b, in which I predicted that women would evidence greater negativity than would men on the global measure. Research presented in the literature review prompted me to believe that women's perspectives on this issue would be more negative than men's views. For this sample, my application of this literature to the RSU sample was incorrect, since women expressed more favorable viewpoints overall about the campus and their experiences as college students than did men.

Women exhibited considerably more negativity than men on the DRM, however. Feldman, Barrett, Robin, Pietromonaco, and Eyssell (1998) and Robinson, Johnson, and Shields (1998) noted that gender differences in subjective well-being research tend to diminish on episodic measures compared to global measures; this did not seem to be true in this research, with considerable gender differences noted on the episodic measure. The direction of the differences was quite the opposite for the DRM than it was for the GMC, however. The different viewpoints of women in the data from each measure point to the possibility of a social desirability bias at work in the GMC data for women. Crocker et al. (2003) found that women are more likely to report that their self-esteem is linked to approval from others. Seeking external approval might prompt a research subject to respond to survey questions in ways that he or she believes are acceptable to the researcher. The DRM provided fewer opportunities for a social desirability bias to affect the data because participants did not submit their diaries to the researcher, but rather turned in only very general episode sheets that did not reveal the specifics of the activities and episodes. This merits further consideration.

Over the past half-century or so, researchers have noted the tendency of survey respondents to answer questions in ways that are intended to present them in the most socially desirable way possible, whether or not the responses given are accurate, especially when the topic is sensitive in some way. It is a way for subjects to attempt to control how others view them, a sort of impression management. This is an important problem to consider in research, because the validity of measures (and subsequently, the results) can be called into question when subjects have deliberately modified their responses in this way (Borkenau & Amelang, 1985). With regard to gender differences in

social desirability bias, some investigators have found women to be more prone to socially desirable responding (Bernardi, 2006; Bernardi & Guptill, 2008). In addition, this type of response bias has been found in research across cultures (Smith & Fischer, 2008). Psychologists tend to attribute the bias to the personality, while survey methodologists see the bias as a response strategy in the context of the information gathering setting (Tourangeau & Yan, 2007; Tourangeau, Rips, & Rasinski, 2000). This is not the forum for the resolution of this debate; whether social desirability bias in survey response emanates from a personality characteristic or from the context of the survey situation (or both) cannot be determined here. Thinking back to the graphic of the survey response process presented in Figure 2.1, the greatest potential for the introduction of a social desirability bias occurs in the last step, in which participants edit their responses before actually giving them.

In this research, I met with each respondent individually to explain the study and administer the instruments. Questions on the GMC asked participants to tell me, a newcomer to the campus, about the general atmosphere and climate. We shared a pleasant interaction and even though their names were not attached to the measures, they knew I would see their responses. The students did not turn in their DRM diaries, so I did not have access to their specific daily activities. This procedure reduced the possibility of social desirability bias, since I was only given episode sheets that were essentially checklists (see Appendix B). Based on the prevalence of social desirability bias in surveys described in the literature, it seems plausible that subjects, especially women, painted a portrait of their campus as they wished me to see it. The desire engage in "impression management" by women (and particularly by European American women)

seems to be a realistic possibility, especially in light of the results relative to gender on the DRM, discussed next, in which the daily affective experience of women was not as positive.

Alternatively, it is important to consider the possibility that men were more inclined than women to make more unfavorable reports on the GMC when thinking about general campus experiences and relationships, and more favorable in their daily affective experience rather than placing the explanatory burden on women alone. Krueger et al. (in press) reported that American women were more likely to report higher levels of life satisfaction than were French women, but these samples contained no men, so it is impossible to assess whether a gender difference existed. Data from the Princeton Affect and Time Survey (PATS) showed that the U index for women was higher for women than for men, however (Krueger et al., in press). And finally, it is possible that men were more inclined than women to report more positive daily affective experiences, given Krueger et al.'s (in press) report that men appear to avoid unpleasant experiences. These notions, in tandem with the potential for social desirability bias, help explain the trends in the measures.

Comparing the two measures, the prediction in Hypothesis 1c that gender differences would be less pronounced on the DRM than on the GMC is not supported. While there were strong gender effects on the GMC, there were also strong gender effects noted in the DRM data, albeit in a different direction. As with race, the two measures may be tapping into different cognitive mechanisms relative to gender. It is also plausible that social desirability concerns influenced the results of the GMC for women, which made the overall negative daily affective reports of women on the DRM that much more

173

conspicuous. Women devoted more time to academics than did men, consistent with the prediction in Hypothesis 3a, although this was more the case for European American women than for African American women, and their assessments of their academic experiences were more favorable than were men's assessments. Finally, men reported a higher U index than did women in episodes where the race of the interaction partner was in the diverse race category, and men spent more time in such interactions than did women. Perhaps women were more inclined to give a favorable report on the campus racial climate on the GMC because they spent less time interacting with others whose race differed from their own than did men. Overall, the differences in the two measures are striking when considering gender.

Prior Experience with Racial Diversity

Based on literature that examined the impact of diversity on college campuses on student outcomes, and explored the differences and similarities of the pre-college background to the college environment, the consideration of one's previous experiences with racial diversity prior to coming to college was important in this study. Thinking of Bean and Eaton's (2000) theoretical model of student retention that emphasized the importance of past experiences in the adjustment to college, I theorized that individuals who grew up in diverse communities and neighborhoods might experience greater ease in adjusting to new environments, and would be able to more effectively traverse the cultural distances they encountered in college, compared to those whose racial backgrounds were more homogeneous. Founded on Erikson's (1946, 1956) developmental theory that argued for space to work through different social roles so crucial to the growth of young adults, Gurin, Dey, Hurtado, and Gurin (2002) found that

174

the multiplicity of belief, thought, and culture found on campuses that are structurally diverse fostered enhanced learning and civic outcomes. More recent work focusing on the development of intercultural maturity by King and Baxter Magolda (2005) highlights the importance of cognitive complexity and personal development in comfortable interactions with diverse others. In this case, it seemed logical to infer that individuals who had already begun this difficult work before coming to college might report more favorable outcomes on both the GMC and the DRM by virtue of having already achieved a greater appreciation for and experience with intercultural difference.

In this study, prior experience with racial diversity was a composite variable, combining data about the racial diversity of the high school environment and the neighborhood in which students were raised, keyed to the race of the respondent. An initial exploration of the variable demonstrated that PERD values for African Americans were significantly higher (indicating these students had more racial diversity in their pre-college backgrounds) than their European American peers.

PERD and the GMC

Contrary to my expectations regarding the influence of racial diversity in the pre-college background, the composite variable PERD demonstrated no significance as a predictor on any of the six factors of the GMC, reported outlined in Table 4.4. For this sample, at least, racial diversity in one's high school and home neighborhood played no appreciable role in the perception of the campus racial climate, in the way students viewed their own interracial relationships, in the perception of equal treatment of students by faculty, in the evaluation of one's own academic experiences, in social integration, and in informal relationships with faculty. Although some researchers have found that

prior experience with racial diversity facilitated the transition to college, particularly for African American students attending predominantly White institutions (Adan & Felner, 1995), the data in this study did not support the prediction made in Hypothesis 1d, specifically, that higher values for PERD would result in higher scores on the global measure.

PERD and the DRM

As with the global measure, PERD played no significant role in the DRM data, with findings not significant for any outcome. Although not significant, it is worth noting that in analyses examining the U index and the percentage of time spent interacting with different-race individuals, a higher PERD value (meaning greater racial diversity in the pre-college background) was associated with a *higher* U index. Prior experience with racial diversity exhibited no value as a predictor in the DRM data in this study.

PERD, GMC and DRM

The racial diversity of one's neighborhood and high school had no effect on both the GMC data and the DRM data, as it did not serve as a predictor in any of the analyses. The lack of influence by PERD is difficult to interpret, but it may be the result of the construction of this measure, which is perhaps too simplistic to reveal much about the influence of prior experiences with racial diversity. Based only on the racial diversity of the home neighborhood and secondary school, prior experience with racial diversity might be expanded to include a measure of the quality of such interactions. In addition, consideration of other elements of diversity in one's background might also be useful, including indicators of diversity in cultural beliefs and practices, worship, and the like.

Finally, the construction of the PERD variable was drawn from a measure containing questions that were keyed to European Americans as the normative experience. Although I recoded the responses to link to the race of the respondent so that the responses represented heterogeneity or homogeneity in the background, future exploration of such a variable should de-couple the construct from the European American/non-European American response options in order to better capture the complexity of the pre-college environment. For example, some students may have grown up in areas that could be classified as "all non-European American," but that are very rich in breadth of background and experience.

The data provide no support for Hypothesis 1d, in which I predicted that greater PERD would result in more positive outcomes on the global measure, and no support for Hypothesis 2c, in which I predicted that PERD would offset the effect of completing the GMC first. In this study, prior experience with racial diversity was not a variable of predictive value.

Effect of Order of Completion of Measures on U Index

A great deal of research has demonstrated that various features of the survey instrument can influence results (Igou, Bless, & Schwarz, 2002; Schwarz, 1996; Schwarz, Strack, & Mai, 1991; Schuman & Presser, 1981), discussed in detail in Chapter 2. The GMC posed questions about race that could lead a respondent to answer in a particular way. For example, respondents had to assess whether they had been discriminated against, whether European American students respected the attitudes and beliefs of African American students, and whether faculty treated European American students and African American students differently. In addition, response options focused on the

177

white/non-white experience. These questions may have prompted students to think about matters of race in ways that could have potentially influenced the survey outcomes, a phenomenon in survey methodological research described as *priming effects*. Tourangeau et al. (2000) presented the results of priming studies that provided empirical evidence that prior questions about an issue affected both the speed and the nature of the responses to subsequent questions. To test whether a priming effect had been introduced by asking questions that made race salient, I introduced an experimental condition into the study in which half the sample completed the GMC first and the other half completed the DRM, and I theorized that completion of the GMC first would lead to a higher U index.

For the entire sample, the U index was unaffected when comparing the two conditions, GMC-first and DRM-first, contrary to my prediction in Hypothesis 2 in which I posited that completion of the GMC first would result in a higher U index than would completion of the DRM first. Similarly, Hypothesis 2a, in which I predicted that African Americans completing the GMC first would report a higher U index than European Americans completing the GMC first, was also not supported by the data. I found no difference by race in the U index when the GMC was the first measure completed. Like race, PERD did not predict a difference in the U index when the GMC was completed first, contrary to my prediction in Hypothesis 2c.

In looking only at those students completing the GMC first, however, I found a gender effect, with women reporting a higher U index than men when they completed the GMC first (see Tables 4.18 and 4.24). These findings support Hypothesis 2b, in which I predicted that women completing the GMC first would report a higher U index than men completing the GMC first. Given the very disparate findings by gender between the two

measures, with women reporting favorable scores on the GMC and negative scores on the DRM, it is possible that this order effect may be an artifact of this overall gender pattern, and less a response to the initial priming of race.

Taken together, the order in which the instruments were completed had an effect on the U index only for women, and only when looking at those individuals who completed the GMC first rather than comparing them with individuals who completed the DRM first. This outcome may be the result of the gender differences noted in the two measures, or it may be a true response to the priming of race for women only. More perplexing is the lack of order effect by race and by prior experience with racial diversity. It appears that European Americans and African Americans were somewhat impervious to the priming of race, or at least not affected sufficiently to influence their responses on the DRM. Noted previously, PERD played a negligible role on both measures, and it is therefore not surprising that it had no influence on the U index relative to the order of completion of the measures.

Allocation of Time

I explored the ways in which students allocated their time in considerable detail, presented in Chapter 4. Students spent the most time socializing, in employment, studying, and relaxing; the U index for these activities was, respectively, 5.97 (socializing), 23.70 (employment), 23.25 (studying), and 8.57 (relaxing). I hypothesized that students would spend more time in pleasant activities compared to unpleasant activities, but found little empirical support for this prediction. For example, employment and studying were two activities for which respondents noted a relatively lengthy

duration as well as a higher U index, relative to other activities. Full details of the time allocated to activities and the average episode duration can be found in Appendix M.

I found differences in time allocation by race in the data analyses, described in detail in the previous chapter; most differences by race showed European American students reporting greater duration than African American students. African Americans reported greater duration for only a few activities: napping, exercising, and talking on the telephone. Perhaps most notable was the finding that European American students spent significantly more total time in academic activities than did African Americans, but this difference by race was eliminated when I examined the duration of academic activities as a percentage of the total time reported. European Americans reported activities spanning more total time than did African Americans, and when examining time devoted to academics as a percentage of the total day, students from both race groups devoted roughly the same proportion of the day attending class and studying. The commitment of time to academics by students in this sample is good news, given the finding of Crocker, Luhtanen, Cooper, and Bouvrette (2003) that students whose sense of self-worth is connected to academic performance tend to spend more time engaged in such activities and Fischer's (2007) report that commitment to academic achievement, operationalized by grade point average was strongly related to persistence. Thus, commitment of time to academics by students in this sample may be reflective of a commitment to achievement in academics by both African American and European American students in this sample.

I also examined whether a difference existed between African Americans and European Americans in time spent with individuals whose backgrounds were racially diverse. Initial analyses indicated that students spent significantly more total time with

diverse race others than with others of the same race; this was true for European Americans, but not for African Americans, who recorded more time in same race interactions (see Table 4.11). This was a curious finding, given that the setting is a predominantly White institution, and by definition, there are fewer students of color than European American students. Again turning to an examination of time as a percentage, the differences by race vanished when looking at interactions with diverse race others relative to the total time reported for the day. Having predicted that African Americans would report more time spent interacting with diverse race others than would European Americans based on the racial distribution of students at RSU, the data provide no support for Hypothesis 3b. Overall, differences by race in allocation of time were present, but they did not include the percentage of time spent in academics nor the percentage of time spent with diverse race others. These results provide partial support for Hypothesis 3, in which I predicted differences in time use by race.

Women and men allocated their time in different ways. Differences in time use between men and women were found for many activities, with men devoting more time to activities that carried immediate or tangible rewards, such as eating or socializing, while women allocating more time to activities that were goal- or future-oriented, such as employment or attending class. This result is also consistent with research by Tkach and Lyubomirsky (2006), who found men to be more likely to engage in activities with a tangible outcome. In addition, this finding is consistent with evidence presented by Krueger et al. (in press), in which a longitudinal dataset was examined (American Heritage Time Use Studies); the authors reported that there has been a shift by men away from activities associated with unpleasant feelings.

181

I examined the percentage of time spent in academic activities, and found that women spent a greater percentage of time in academic activities compared to men, and this was especially true for European American women compared to European American men (see Tables 4.17 and 4.22). In Hypothesis 3a, I predicted that women would spend more time in academic activities than would men; the data provided partial support for this hypothesis, as the prediction was true for European Americans but not for African Americans.

I also looked at gender differences with regard to time spent with racially diverse interaction partners. Initial analyses indicated that men spent significantly more time with diverse race others than with others of the same race, and significantly less time than women in same race interactions (see Tables 4.12 through 4.14), particularly for European American men and women. In diverse race interaction partner episodes, men allocated more total time than women. In examining the percentage of time spent in interactions with diverse race interaction partners, men recorded a significantly greater percentage of time than women in these interactions.

Students in this sample were quite companionable, with socializing being the activity to which students devoted the most time. In a sample of young adults, this is to be expected, as these individuals are in the process of establishing their social identities, exploring their values and deciding who they are and with whom they wish to affiliate (Chickering & Reisser, 1993; Erikson, 1946, 1956; King & Baxter Magolda, 2005). Students did not always enjoy the activities to which they devoted the most time, however. For example, they spent a great deal of their time in employment, an activity they found less enjoyable than social interactions but one to which they devoted

considerable time. Given that the population of RSU students is not drawn from the highest socioeconomic strata, it is possible that these students were working out of necessity, both on and off campus. Studying and attending class were also significant time commitments for these students, all of whom reported being enrolled in 12 or more credit hours. Academic activities, like employment, produced greater reports of negative affect. Episodes involving faculty similarly resulted in negative emotions. One potential explanation for this negativity could be the diurnal rhythms of students. Students in this sample proved to be rather nocturnal, staying up very late and getting up early to attend class. The negative affect reported for these academic activities and for employment may be attributed to insufficient sleep, although I did not examine diurnal patterns here and made no such predictions.

Examining the various activities in which students reported spending their time, differences by race and by gender emerged. Differences by race were not substantial, particularly in terms of the associated affect; more commonalities than differences were found for African Americans and European Americans. The time spent in activities differed by race for a small number of activities, with European Americans reporting more time spent in most cases. Regarding gender differences, few differences in the U index were noted, but men tended to spend more time in activities with an immediate reward, whereas women spent time in more future-oriented activities. No differences were found by race with regard to time spent in interactions with diverse others, but men spent more time than women in such interactions. Finally, women spent more time than men in academic activities, particularly European American women.

Conclusion to Discussion of Findings

Six key findings emerged from this research. First, the two measures produced very different outcomes relative to race and gender. Relying on the GMC alone for information about the ways students perceived the campus climate would lead educators to believe that women were pretty satisfied and that African Americans were fairly dissatisfied. In addition, based on the divergent findings between the two measures employed in this study, they appeared to tap into different cognitive mechanisms. The GMC employed the top-down cognitive processing discussed extensively in the literature review. Questions from this measure focused on race and race relations, and produced significantly more negative reports by African Americans regarding the overall campus racial climate. The GMC explored semantic or general knowledge, asking respondents to make judgments and construct estimates not based on their own personal knowledge or experience, but rather on their beliefs about the campus and on hearsay from other individuals. Given the legacy of institutional discrimination faced by many African Americans, the lower factor scores for this measure is not surprising. By contrast, the DRM employed the bottom-up cognitive processing discussed previously. Focusing on specific activities and related emotions, students in the sample took a strikingly different perspective than on the GMC. Race did not play the significant role on the DRM that it did on the GMC. The DRM only asked students to think about themselves and their experiences, and did not trigger the need to compute judgments and compute estimates, or consider factors such as rumors or hearsay in responding to questions.

Second, women reported scores on the GMC that were higher than men's scores, but demonstrated negative outcomes on the DRM, as well as a higher U index than men

when completing the GMC first. It is conceivable that a social desirability bias was at work for women respondents. In the administration of the measures, I interacted with students to introduce the study and obtain their informed consent to participate; women may have subconsciously felt a desire to provide the responses they thought were acceptable or appropriate on the GMC. Because the DRM diary was never given to me and students were not describing attitudes, but rather only what they did the previous day, there was less opportunity for social desirability bias to affect the DRM data. Given the negativity of women's reports on the DRM, the possibility that a social desirability bias was activated is plausible.

Third, the daily affective experience for women of both races was consistently negative. This is related to the previous findings, but is worthy of additional, separate consideration. The institution has a women's center on campus and a plethora of courses on the experiences of women from which to choose, but there was clearly something prompting women to reporting such negative daily affect. It is possible that the student murder on campus was a driving force, but there could be other, more subtle influences that produce a chilly climate for the women in this sample. Perhaps the women in this sample were simply more tired than men, given their greater time commitment to academics and employment.

Fourth, interacting with others whose race was diverse produced a stronger unfavorable response than interacting with others whose race was the same. Students spent more time in diverse race interactions than in same race interactions, an unexpected finding at a predominantly White institution, or PWI. This institution, although a PWI, is more structurally diverse than many other comparable universities, with students of color

185

representing over 30% of the undergraduate student population. It is possible that students in the sample truly did spend more time in such diverse race interactions. In addition, it may be that European American students were more likely than African Americans to report interaction partners of different racial backgrounds in episodes who were merely present and not actively engaged in interactions (such as in a classroom setting). From a developmental perspective, this negative response to structural diversity can also be interpreted in a positive light. Learning to accept and value difference takes time, and these young adults are engaged in the growth-producing challenges Erikson discussed in his theory of human development (1946, 1956). King and Baxter Magolda's (2005) model of intercultural maturity, discussed in Chapter 2, posits that cognitive, interpersonal, and intrapersonal complexity is required in order to effectively engage with diverse others without feeling a threat to the self. Both African Americans and European Americans alike, as well as men and women, reported negative affect when the interaction partner's race was identified as diverse race, and there was no race difference in the percentage of time spent in these interactions. Women spent a significantly reduced percentage of time than men in diverse race interactions, however.

Fifth, when looking at the percentage of time students allocated to activities associated with college attendance – namely, attending class and studying – there was no difference by race. African Americans and European Americans alike devoted roughly the same percentage of the day to these activities. Overall, differences by race were few; African Americans and European Americans exhibited many more similarities than differences. Women, and particularly European American women, committed a greater

percentage of their time to academics than did men, however, and gender differences in time allocation were much more prominent than race differences.

Finally, the order in which the measures were completed was important only for women, with completion of the GMC first producing a more negative U index on the DRM for them. Because the GMC contained a number of pointed questions about race and race relations, race was primed for students, but this did not appear to affect African Americans to the extent I expected. Similar to the mechanism at work in stereotype threat, the priming of race was assumed to play a role in producing a higher U index when students subsequently completed the DRM after the GMC. Although women appeared to be affected by the order of completion of instruments, it is quite likely that this finding can be attributed to the social desirability bias for women, in which the scores for women on the GMC were very positive, but very negative on the DRM.

Figures 5.1 and 5.2 provide graphic displays of the relationships among the key variables of the study relative to the outcomes of the DRM and the GMC. Because the two measures are so distinct and the findings quite different for each instrument, I have separated them in this representation, whereas previously I grouped them together. Heavy lines represent relationships that were found to be particularly important; these variables were consistently significant predictors of the outcomes in most analyses. Lighter lines represent relationships in which variables displayed statistical significance as predictors in some analyses. For the DRM, gender was a significant predictor on a number of analyses, with women reporting a significantly higher U index than men, spending more time in goal-oriented activities than men, spending less time with diverse others, more time in academic activities, and demonstrating greater sensitivity to the order of

187

completion of measures via the U index. Although some race differences were noted in the U index and in time allocation, they were fewer in number and scope than the gender differences and thus the lighter line is a more appropriate depiction of the relationship. For the GMC, race was a significant predictor for four of the six factors, while gender was a predictor for only two factors.
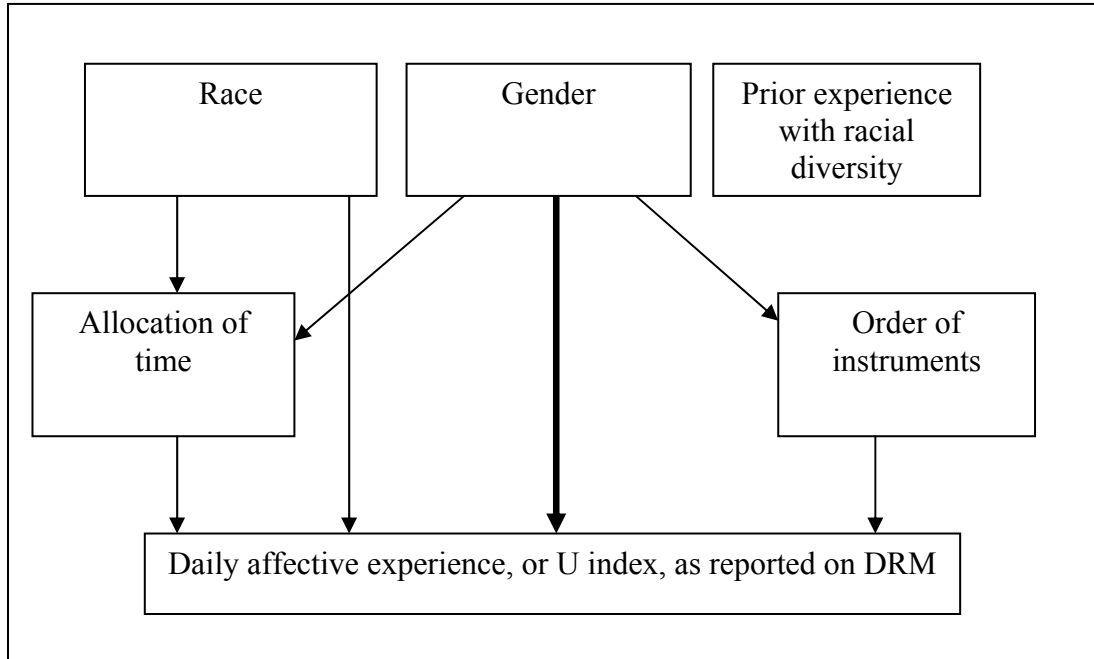
Figure 5.1 Relationships Among Factors Influencing Daily Affective Experience (U Index) of African American and European American College Students at a PWI
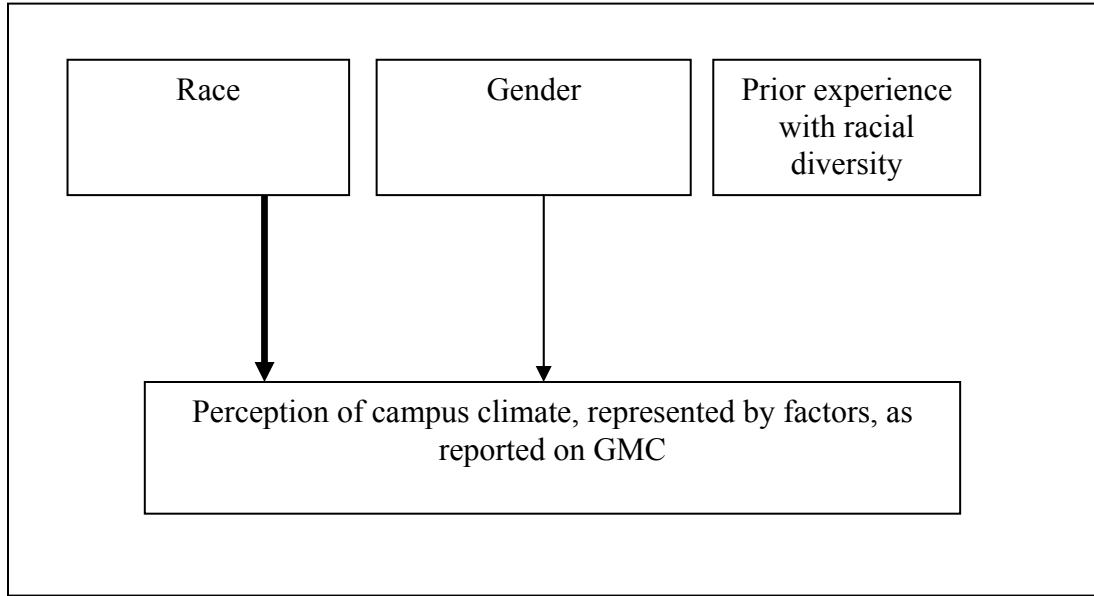
Figure 5.2 Relationships Among Factors Influencing Perceptions of Campus Climate (GMC Factors) of African American and European American College Students at a PWI

Limitations of the Study

In Chapter 3, I outlined methodological limitations of the study, issues of which I was aware as I embarked upon the study. Here, I outline some limitations that became apparent as I considered the results of the investigation. These limitations include the PERD variable, the lack of a focal activity within episodes, and uncertainty as to whether students identified interaction partners with whom they were actively engaged or whether they were individuals who were simply present. Finally, my own race and cultural heritage played a role in the interpretation of the data. Each of these is discussed briefly below.

Prior experience with racial diversity played no significant role for either measure. The PERD variable as constructed for this study cannot be fully interpreted without a more nuanced understanding of students' pre-college experiences with diversity. Prior experience with diversity can mean a variety of things, beyond the racial composition of school and neighborhood; the quantity and quality of previous interactions with diverse others might be an essential component of this variable.

The lack of a focal activity for each episode was a limitation that only presented itself upon embarking upon data analysis. This limitation became apparent to the DRM developers after the collection of data for the Texas DRM study, and they subsequently modified the measure to include a question about the focal activity. I had already collected data for this study before I became aware of the issue. My original thought was to identify a general activity type for each episode, such as academic, social, and the like, but I ultimately rejected this notion, concluding that it was an artificial contrivance in the

service of data reduction. Instead, I analyzed all activities, acknowledging that there was an average of 1.6 activities reported per episode.

Students interpreted questions on the DRM in ways I did not anticipate. As I analyze the data regarding interaction partner, it occurred to me that it was possible that students were, in some cases, simply noting that particular individuals (e.g., "other students") were present, but that they may not have been actually engaged in an interaction. The application of the DRM to a college setting required some modifications, and this was an adaptation I simply did not anticipate. College students often come together in groups, attending class, participating in organized events, and other activities involving large numbers of individuals, and they may not be interacting directly with other people who also happen to be present. Since it is not possible to go back to students to ask for clarification, I simply acknowledge it as a limitation of the study.

Finally, while not a limitation per se, I must note that this project was conceptualized, carried out, and interpreted by a female researcher who is European American, which represents a unique perspective. Someone with a different perspective might have drawn other conclusions. My own developmental growth is such that I recognize my race and gender identity status, and realize that others could examine identical data and arrive at somewhat different interpretations.

Importance of the Findings

European American students and faculty frequently underestimate or do not comprehend the manifestations and impact of an inhospitable climate that exists for African Americans at many PWIs, largely because the privilege generally accorded to European Americans is so taken for granted or because they do not seek out this

information (Feagin et al., 1996; Tatum, 1997). Many European Americans do not view themselves in an ethnic light, but frequently profess to be "color blind." In fact, a key feature of the debates regarding race and ethnicity is frequent denial of the reality of racism by European Americans (Thompson & Carter, 1997). Because African American students are under-represented at PWIs, it is easier for these beliefs to go unchallenged (Feagin et al., 1996). Many PWIs have a history of exclusion that influences the prevailing climate (Hurtado et al., 1998). The consequences of inequality in educational attainment are profound, resulting in a significantly narrowed opportunity structure for African Americans (Hattery & Smith, 2007).

Why is it important to think about measurement issues in the assessment of the perceptions of climate by African American college students? As I have demonstrated, issues of measurement bias can have a profound impact on survey results, potentially affecting the validity of data gleaned using global measurement tools. Moreover, data from global assessments of climate are used to establish policy at colleges and universities. Basing important policy decisions on data that may be flawed can have significant negative results. In this case, the GMC data by itself would have underscored the notion that African Americans view the campus climate unfavorably and used to argue that programs should be developed that target African Americans. The supplemental use of the DRM demonstrates here that African Americans are not so dissatisfied in their daily lives at RSU, but that all students experience difficulty in interacting with others who are of a different racial background. In addition, women presented a positive perspective on the GMC, but their daily affective experience on campus was negative; this finding would not have come to light without the DRM. The

192

findings from this research are not intended to discourage the use of global measurements per se, but rather to promote greater attention to the potential for bias that is inherent in these instruments and to encourage the combination of episodic and global measures wherever feasible.

Use of an instrument that provides information about the daily experiences of college students may provide a new window into how students perceive their environments and how they evaluate their own experiences within such environments. In this case, the DRM highlighted the negative perspectives of women, and also revealed that the African Americans students in this sample tended to interact more often with their same-race peers. While this is not by itself a problem, exposing students to different perspectives and ideas is at the heart of a college education, and administrators at RSU would want to encourage all students to take advantage of such opportunities.

In addition, this is a time-budget study of college students. Although educators often suggest appropriate ways for college students to allocate time, there is little empirical work documenting the time use of American college students in this way, beyond Crocker et al.'s (2003) study of time allocation relative to self-esteem and Schilling and Schilling's (1999) examination of student expectations in regard to time spent studying. The study provides a contemporary picture of the way African American and European American students at a PWI spend their time. It is useful to understand how much time students devote to academic activities, and to be able to identify whether differences exist among groups of students. Student affairs practitioners and faculty alike would probably not be surprised to learn that college students spent most of their time socializing, but the data also show that students spent a nearly five hours per day

attending class or engaged in studying or academic activities such as writing papers and doing homework. Schilling and Schilling (1999) found that although faculty generally articulated the need to study two to three hours outside of class for every one hour in class, undergraduates reported spending about a third of that time, and the researchers found the pattern of time use relative to academics set in the first year was durable over the next several years. If a student at RSU is enrolled in 12 credit hours, and spends a minimum of two hours studying for every one hour of enrollment (24 hours), a minimum of 36 hours per week should be devoted to academics; the optimal rate of 3 hours studying for every 1 hour in class for 12 credit hours translates to 48 hours per week spent in academic endeavors. Students in this sample reported an average of five hours per day attending class and studying, which sums to 35 hours per week, just under the minimum expected amount of time, and 13 hours less than the optimal amount of time devoted to academics, provided that students devoted the same amount of time to academics on the weekend.

The analysis points to some important considerations for researchers and educators who wish to understand the experiences of college students. Data are only as useful as the questions asked; policy decisions can be faulty if they are based on data that contain bias. In an increasingly financially lean higher education environment, there is little room for such error. In addition, the cost to individuals of decisions based on flawed data can likewise be high. This research in no way invalidates the fine work of other researchers in assessing student perceptions of campus climate, but rather highlights the problems related to question wording and other contextual effects in designing and conducting research with college students. Researchers investigating the attitudes and

experiences of college students should carefully examine even established measures for biased question wording. Creativity in exploring ways to combine the global assessments commonly used in higher education research with episodic measurement is needed to capture a more complete picture of the student experience by incorporating data on daily affective experience into research on college students. It is not necessary in every assessment to conduct a full DRM study; episodic assessments of specific experiences of interest could be incorporated into traditional global measures, focusing on very recent activities in a specified domain, such as attending class or participating in a social event on campus. In this way, institutions can acquire a more granular understanding of the college student experience.

The findings on level of intergroup interactions suggest the need for programs that encourage such interactions and teach students how to handle themselves given this content. One such program is called intergroup dialogue (Schoem & Hurtado, 2001), which could help students bridge the racial divide that may exist at this campus. Sidanius, Levin, van Laar, and Sears (2008) noted that racial balkanization – or the tendency for students of a particular race or ethnicity to tend to cluster together socially -- is a common concern on many college campuses. Intergroup dialogue programs can help students learn how to talk to one another about difficult issues, finding safe spaces to work through areas of difference. Such programs have been conducted successfully focusing not just on race, but also on sexual orientation, cultural differences, and other areas where students feel topics are highly emotionally laden. Programs generally take the form of classes students may take for credit, but additional modes could be used to promote this kind of safe dialogue. The administration could designate one semester per year as a "theme"

semester in which dialogues around difference could be incorporated into course work across the curriculum. Research demonstrates the positive cognitive, social, and democratic outcomes connected to intergroup dialogue and diversity courses (Hurtado, 2005).

Other ways to enhance dialogue across race boundaries include the initiation of a larger conversation around extracurricular organizations either focused on race or social groups, such as Greek organizations. The latter in particular tend to discourage students from significantly interacting with others who may be different from them in some way. Sidanius et al. (2008) found that for European American students, the decision to "go Greek" was positively related to pre-college opposition to affirmative action, and increased levels of racism and opposition to campus diversity. Institutions that delay "rush" until at least the second term or even the second year give students a longer opportunity to establish a variety of diverse relationships before entering into more homogeneous groups.

The results also point to concerns about the experiences of women at RSU. In spite of the favorable scores on the GMC, the daily affective experiences reported by women are predominantly negative over 12% of the day. It is not clear at this time why this might be, but further exploration of the campus experiences of women might shed additional light on this finding. Again, the study took place at RSU at a difficult time for the campus, when a young woman had been brutally slain in her dorm room, so it is quite conceivable that this gender effect could be related to that event. A women's center is established on campus, but perhaps it could play a more proactive role in understanding the daily experiences women have on the campus and assessing the needs of its women

students. In addition, although a smorgasbord of courses focusing on women appear in the undergraduate catalog, the general education program does not list any such courses as satisfying its requirements. The institution offers first-year interest groups, or FIGs, and this would be an excellent vehicle to highlight gender issues; the currently posted list of FIGs focused exclusively on various occupations and disciplines, such as health care and business. For students living on campus, educational programs for and about gender issues should be regular events, and additional resources should be provided to students who commute. These initiatives could address some of the daily negative affect by promoting awareness of and sensitivity to gender issues and providing spaces for women to voice their concerns.

This study fills a gap that has long existed in higher education research, drawing upon the extensive body of research in survey methodology to inform our understanding of the college student experience. This link has been missing in climate research in higher education contexts for a very long time, and this research has taken the first step toward making the connection. It highlights the importance of measurement, and illuminates the different ways we approach assessment and survey response. The study emphasizes the need to promote improved cross-racial relationships, and to investigate the experience of women on campus.

Suggestions for Future Research

This study provides a glimpse into a very different way of approaching research with college students, taking into account the daily affective experiences of students. The results point to a number of possibilities for future research.

Limitations of time and finances prohibited the inclusion of individuals drawn from more varied backgrounds in this study. It is possible that students from diverse racial and ethnic backgrounds might respond quite differently to the DRM and future analyses should incorporate students from a variety of backgrounds. In addition, future studies should include non-traditional students, for example, who might allocate time very differently or have a unique perspective of the campus. Similarly, the daily affective experience of international students is an area worthy of exploration, as these students may experience major cultural transitions in adapting to campus life. It is important that universities understand their students, and this method provides a window into their lives.

Noted previously, the inclusion of part-time students in a DRM study would shed light on the daily affective experiences of non-traditional college students. Part-time students may experience different influences and pressures than do full-time students, and such an exploration could prove to be valuable in establishing useful programs and services. Given the changing economic circumstances of the nation, it is possible that universities may see an increase in the numbers of part-time college students, and it is essential that appropriate services and policies be in place.

The daily affective experience of women was fairly negative in this study, and is worth a more intensive exploration. Additionally, women noted more time spent than men with same-race partners. It could be useful to explore women's experiences in targeted activities, for example. The institution may need to evaluate its programs and policies around women students, and this could be accomplished with an expanded DRM study at RSU.

This study briefly touched upon differences in the U index by student class level, by GPA, by housing status, educational aspirations, and involvement in extracurricular activities that are worth exploring. For example, why would students whose grades are higher report a higher U index? In addition, an exploration of differences by major or academic discipline would also be intriguing, particularly for those units that are developing curriculum and programs for students. These findings could be extremely useful for student affairs administrators in developing programs and services, as well as for academic program officers.

Interactions with staff appeared to provoke considerable negativity in students, and it would be worthwhile to explore these relationships. Little research has been conducted looking at relationships with university staff members, so this is an area that merits further research. Because some university staff work closely with students, such as those individuals who work in housing units, for example, it is critical to better understand what it was about these relationships that produced negativity, and specifically what negative emotions were generated. For example, did students feel angry in these interactions, or were they perhaps feeling sad and homesick, and a staff member just happened to be present? An exploration of these experiences would be useful in helping administrators develop training opportunities for staff and educational opportunities for students.

The U index for work and interaction with work colleagues was also very high, and this would be a useful avenue of exploration. Many college students hold part- and full-time jobs, and, at least for this sample of students, working was not a particularly happy experience for them. It was not possible to ascertain whether students were

working at on-campus jobs or whether they were working off-campus, and a deeper exploration of working and student life might be illuminating. Particularly for on-campus employment in which students work with and for university personnel who can directly influence the experience, it would be useful to know how students felt about such work.

An expansion of the study to other PWIs could help explore how differing levels of structural diversity might relate to the daily affective experiences of students. Such a study could include historically Black colleges and universities, as well as Hispanic-serving institutions. In addition, other types of institutions, such as two year colleges, could also provide a more complex picture of the daily affective experience of American college students. A more comprehensive study of the daily affective experiences of students at institutions of varying levels of structural diversity and type could help educators to not only better understand the activities in which students engage, but also to help improve cross-racial interactions and the experiences of students of color.

A new modified version of the DRM, the Event Reconstruction Method, has been developed for targeted types of activities and interactions without asking participants to record an entire day's worth of activities, requiring a reduced time commitment from respondents. This could be a useful tool for student reactions to a wide range of specific activities or events, such as orientation, move-in day, special events, or as an aspect of academic course evaluation. In addition, the DRM has recently been adapted for use in a telephone data collection mode, as well as for online data collection (Krueger et al., in press). These new modalities will make the instrument more adaptable for different types of participants.

Conclusion

In the context of the under-representation of African Americans in American higher education and the lawsuits surrounding the use of affirmative action policies in higher education admissions, this study undertook an examination of the perceptions of campus climate and the daily affective experiences of African American and European American college students at a regional state university. A global measure of perception of campus climate, adapted from an earlier study, showed unfavorable views of the racial environment at the institution by African Americans, while the episodic measure of daily affective experience (the Day Reconstruction Method, or DRM) indicated little such negativity on the part of African Americans, and in fact, showed more commonality between African Americans and European Americans than difference. For men and women, the two measures also produced very different results, with women portraying the campus climate favorably on the global instrument, yet reporting fairly negative daily affective experiences on the episodic measure.

The DRM is a new approach in research with college students, drawing upon momentary assessment techniques without the added respondent burden and expense typically associated with such approaches. Although the DRM can be somewhat time-consuming for respondents to complete, it provides detailed daily affective reports that contain less "noise" or potential bias than a global measure. Results from this study highlighted the need to carefully consider measurement in assessing student attitudes and experiences. Even established measures may prime subjects to respond in particular ways, for example, and thus researchers may wish to augment their data collection to include a tool like the DRM. In this contrast of two different measures, the semantic

knowledge accessed on the GMC was complemented with the specific, lived experience of the DRM.

The results of this study provide a more comprehensive picture of the ways in which RSU students in this sample live and experience the campus. Some group differences between African Americans and European Americans were found in this study in the ways in which students allocated their time and the emotions accompanying their experiences, but many similarities were noted as well, similarities that would not have been identified on a global measurement of the perceptions of campus racial climate. Gurin et al. (2008) advocate a new concept of integration that embraces "commonality," or a sense of having common ground with others in different groups while still valuing one's sense of racial or ethnic identity; this commonality does not result in "color blindness." This ideology of color blindness was at the heart of the affirmative action lawsuits against the University of Michigan. In their book discussing the case, Gurin et al. (2008) note that opponents of affirmative action argued that division results when race is acknowledged. These findings support the notion of commonality across races by highlighting a methodology that provides evidence of the many experiences shared by African American and European American college students. It is also intended to spark a dialogue around issues of measurement in research on college students, while opening a window into the daily experiences of college students.

APPENDIX A

GLOBAL MEASURE OF CLIMATE (GMC)

We are interested in learning about your general attitudes and experiences at this university.

1. Indicate the extent to which you agree or disagree with each of the following statements. (circle only one response per item)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
A. I have done as well academically at this university as I expected.	1	2	3	4	5
B. When I have questions about an assignment, I talk it over with my professor.	1	2	3	4	5
C. Most students at this university have values and attitudes compatible with my own.	1	2	3	4	5
D. I feel part of the general campus life.	1	2	3	4	5

2. In general, how satisfied are you with each of the following at this university? (circle only one response per item)

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
A. your relations with faculty	1	2	3	4	5
B. your social life	1	2	3	4	5
C. student organizations & activities	1	2	3	4	5
D. your academic performance	1	2	3	4	5

3. Are you a member of any extracurricular organizations (such as Greek organizations, academic clubs, interest groups, fine arts/performance groups, etc.)? (select only one)
   o Yes
   o No

4. On average, how many hours do you study per week? _____ hours

5. On average, how many hours do you socialize per week? _____ hours

6. How often have you engaged in any of the following activities with a faculty member since enrolling at this institution? (circle only one response per item)

	Very often	Often	Sometimes	Seldom	Never
A. socialized informally	1	2	3	4	5
B. discussed your career plans and opportunities	1	2	3	4	5
C. discussed a personal concern	1	2	3	4	5
D. discussed academic or intellectual issues outside of class	1	2	3	4	5
E. discussed and gotten helpful feedback on tests, assignments, and other academic work	1	2	3	4	5

7. Have you ever seriously considered leaving this university? (select only one)

   o Yes (go to 7a)
   o No (skip to 8)

7a. If yes, why? (use additional paper if necessary)
_____
_____

_____

   Now we would like to ask some questions about your perceptions of racial relationships and attitudes on your campus.

8. How do you think the racial relationships and attitudes on your campus compare to other similar universities? (select only one response)

- o It is much friendlier here than at most universities like this one.
- o It is somewhat friendlier here than at most universities like this one.
- o It is about the same here as at most universities like this one.
- o It is somewhat more hostile here than at most universities like this one.
- o It is much more hostile here than at most universities like this one.

9. Indicate the extent to which you agree or disagree with each of the following general statements. (circle only one response per item)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
A. There is administrative support for minority groups, organizations, and programs on this campus.	1	2	3	4	5
B. I feel discriminated against at this campus.	1	2	3	4	5

10. How would you describe **your** relationships at this university with: (circle only one response per item)

	Excellent	Good	Poor	Very Poor	No contact
A. White students	1	2	3	4	5
B. Students of color	1	2	3	4	5
C. White faculty	1	2	3	4	5
D. Faculty of color	1	2	3	4	5
E. White staff	1	2	3	4	5
F. Staff of color	1	2	3	4	5

11. Indicate the extent to which you agree or disagree with the following statements about student attitudes and behaviors on your campus. (circle only one response per item)

	Strongly disagree	Disagree	Agree	Strongly agree
A. White students respect the attitudes and beliefs of students of color.	1	2	3	4
B. White students interact comfortably with students of color.	1	2	3	4
C. Students of color respect the attitudes and beliefs of White students.	1	2	3	4
D. Students of color interact comfortably with White students.	1	2	3	4

12. How would you rate the extent to which each of the following is descriptive of your campus? (circle only one response per item)

	Very little	Slight	Some	Substantial	Very substantial
A. Students of color participate regularly in all-campus events.	1	2	3	4	5
B. Dating relationships exist between students of color and White students.	1	2	3	4	5
C. Students of color are visible and influential on campus.	1	2	3	4	5
D. There is adequate support and funding for events and organizations geared toward students of color.	1	2	3	4	5

13. Based on **your experiences** with faculty on this campus, indicate whether faculty engage in the following activities more or less frequently with students of color than with other students. (circle only one response per item)

	More with non-Whites	Same with all students	Less with non-Whites	Seldom or never with any students
A. Faculty provide individual academic help.	1	2	3	4
B. Faculty refer students to counseling or tutorial services.	1	2	3	4
C. Faculty encourage students to consider graduate school.	1	2	3	4
D. Faculty grade students fairly.	1	2	3	4
E. Faculty praise students for work well done.	1	2	3	4
F. Faculty acknowledge student contributions in class.	1	2	3	4

DAY RECONSTRUCTION METHOD (DRM)

Yesterday

We would like to learn what you did and how you felt **yesterday**. Not all days are the same. Some are better, some are worse, and others are pretty typical. Here we are only asking you about **yesterday**. Because many people find it difficult to remember exactly what they did and experienced, we will do this in three steps:

1. We will ask you when you woke up and went to sleep.

2. We'd like you to reconstruct what your day was like, as if you were writing in your diary. Where were you? What did you do and experience? How did you feel? Answering the questions will help you to reconstruct your day.

   This diary is only for **you**, to help you remember and describe what happened yesterday. It is yours to keep, so your notes are strictly personal and confidential. Nobody will read what you jot down about your day.

3. After you have finished reconstructing your day in your diary, we will ask you specific questions about this time. In answering these questions, we'd like you to consult your diary and the notes you made to remind you of what you did and how you felt.

To begin, please indicate the day of the week that YESTERDAY was (choose only one):

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday

Diary Pages

About what time did you wake up yesterday?   _____

And when did you go to sleep?   _____

  In the area provided, please describe your day. Think of your day as a continuous series of scenes or episodes in a film. Give each episode a brief name that will help you remember it (for example, "commuting to work" or "at lunch with B," where B is a person or a group of people). Write down the approximately times at which each episode began and ended. The episodes people identify usually last between 15 minutes and 2 hours. Indications at the end of an episode might be going to a different location, ending one activity and starting another, or a change in the people with whom you are interacting.

  There is one section for each part of the day – Morning (from waking up until noon), Afternoon (from noon to 6 pm), and Evening (from 6 pm until you went to bed). There is room to list 10 episodes for each part of the day, although you might not need that many, depending on your day. It is not necessary to fill up all of the spaces – use the breakdown of your day that makes the most sense to you and best captures what you did and how you felt.

  Try to remember each episode in detail, and write a few words that will remind you of exactly what was going on. Also, try to remember how you felt, and what your mood was like during each episode. What you write only has to make sense to you, and to help you remember what happened when you are answering the questions in the next section.

Remember, what you write in the diary will not be seen by anyone else. It will not be submitted with your other survey materials. You may take it with you when you leave.

Morning

(from waking up until just before lunch)

Episode name	Time it began	Time it ended	Notes to yourself: What happened? What did you feel? Who were you with?	#
				1M
				2M
				3M
				4M
				5M
				6M
				7M
				8M
				9M
				10M

KEEP THIS PAGE FOR YOURSELF – DO NOT TURN IT IN

Afternoon

(from lunch until just before dinner)

Episode name	Time it began	Time it ended	Notes to yourself: What happened? What did you feel? Who were you with?	#
				1A
				2A
				3A
				4A
				5A
				6A
				7A
				8A
				9A
				10A

KEEP THIS PAGE FOR YOURSELF – DO NOT TURN IT IN

Evening

(from dinnertime until just before you went to sleep)

Episode name	Time it began	Time it ended	Notes to yourself: What happened? What did you feel? Who were you with?	#
				1E
				2E
				3E
				4E
				5E
				6E
				7E
				8E
				9E
				10E

KEEP THIS PAGE FOR YOURSELF – DO NOT TURN IT IN

Please review your diary. Are there any other episodes that you'd like to revise or add more notes to? Is there an episode that you would want to break up into two parts? If so, please go back and make the necessary adjustments. Extra paper is available to you if you need it.

When you feel your diary is complete, please move on to the next section. Be sure to keep your diary. DO NOT TURN IT IN TO THE RESEARCHER.

How did you feel yesterday?

Before going further, review your diary pages to make sure they are complete.

How many episodes did you record for the **Morning?** _____

How many episodes did you record for the **Afternoon?** _____

How many episodes did you record for the **Evening?** _____

Now, we would like to learn in more detail about how you felt during those episodes. For each episode, there are several questions about what happened and how you felt. Please use the notes on your diary pages as often as you need to.

Please answer the questions for every episode you recorded, **beginning with the first episode in the Morning**. To make it easier to keep track, we will ask you to write down the number of the episode that is at the end of the line where you wrote about it in your diary. For example, the first episodes of the Morning was number 1M, the third episode of the Afternoon was number 3A, the second episode of the Evening was number 2E, and so forth.

It is very important that we get to hear about **all** of the episodes you experienced yesterday, so please be sure to answer the questions for each episode you recorded. After you have answered the questions for all of your episodes, including the last episode of the day (just before you went to bed), you can go on to the next section.

First Morning Episode

Please look at your diary and select the earliest episode you noted in the morning.

When did this first episode begin and end (e.g., 7:30 am)? Please try to remember the times as precisely as you can.

This is episode number _____, which began at _____ and ended at _____.

1. What were you doing? (check all that apply)

___ commuting   ___ working
___ attending class   ___ studying/engaged in academic work
___ shopping   ___ preparing food
___ doing housework   ___ taking care of children
___ eating   ___ praying/worshipping/meditating
___ socializing   ___ watching TV
___ nap/resting   ___ computer/internet/email
___ relaxing   ___ on the phone
___ intimate relations   ___ exercising
___ other (please specify _____)

2. Where were you?

___ At home   ___ At work   ___ On campus   ____ Somewhere else

   2a. If you were somewhere else, where were you? _____

3. Were you interacting with anyone (including on the phone, in a teleconference, etc.)?
___ Yes   ___ No [skip to question 4]

   3a. If you were interacting with someone, indicate who this person was (check all that apply)

   ___ spouse/significant other   ___ children
   ___ friends   ___ parents/relatives
   ___ co-workers   ___ boss
   ___ customers   ___ other students
   ___ faculty/teaching assistant   ___ other people not listed _____
   ___ university staff

   3b. If you were interacting with someone, indicate the person's gender (check only one)
   ____ male
   ____ female
   ____ group containing both males and females

216

3c. If you were interacting with someone, indicate the person's age (check only one)
____ younger than you
____ about the same age as you
____ older than you
____ group containing a variety of ages

3d. If you were interacting with someone, indicate the person's race/ethnicity (check only one)
____ same race/ethnicity as you
____ different race/ethnicity than you
____ group with a variety of racial/ethnic backgrounds

4. If you were attending class, what was the subject? _____

    4a. Was the class: ____ small (fewer than 20 students)
                                           ____ medium (21-49 students)
                                         ____ large (50 or more students)

How did you **feel** during this episode (number _____)?

Please rate each feeling on the scale given. A rating of 0 means that you did not experience that feeling at all. A rating of 6 means that this feeling was a very important part of the experience. Please circle only one number between 0 and 6 that best describes the extent to which you experienced each emotion listed.

	NOT AT ALL						VERY MUCH
Powerless	0	1	2	3	4	5	6
Smart	0	1	2	3	4	5	6
Frustrated/annoyed	0	1	2	3	4	5	6
Accepted	0	1	2	3	4	5	6
Competent/capable	0	1	2	3	4	5	6
Hassled/pushed around	0	1	2	3	4	5	6
Warm/friendly	0	1	2	3	4	5	6
Angry/hostile	0	1	2	3	4	5	6
Worried/anxious	0	1	2	3	4	5	6
Happy	0	1	2	3	4	5	6
Criticized/put down	0	1	2	3	4	5	6
Respected	0	1	2	3	4	5	6

Have you rated all of your episodes, including the last episode of the day, just before you went to bed? If so, you may continue to the next section.

Next Episode

Now look at your diary and select the episode that immediately followed the one you just rated.

When did this first episode begin and end (e.g., 7:30 am)? Please try to remember the times as precisely as you can.

This is episode number _____, which began at _____ and ended at _____.

1. What were you doing? (check all that apply)

___ commuting	___ working
___ attending class	___ studying/engaged in academic work
___ shopping	___ preparing food
___ doing housework	___ taking care of children
___ eating	___ praying/worshipping/meditating
___ socializing	___ watching TV
___ nap/resting	___ computer/internet/email
___ relaxing	___ on the phone
___ intimate relations	___ exercising

___ other (please specify _____)

2. Where were you?

___ At home   ___ At work   ___ On campus   ____ Somewhere else

    2a. If you were somewhere else, where were you? _____

3. Were you interacting with anyone (including on the phone, in a teleconference, etc.)?

___ Yes   ___ No [skip to question 4]

    3a. If you were interacting with someone, indicate who this person was (check all that apply)

___ spouse/significant other	___ children
___ friends	___ parents/relatives
___ co-workers	___ boss
___ customers	___ other students
___ faculty/teaching assistant	___ other people not listed _____
___ university staff	

    3b. If you were interacting with someone, indicate the person's gender (check only one)

____ male
____ female
____ group containing both males and females

219

3c. If you were interacting with someone, indicate the person's age (check only one)
____ younger than you
____ about the same age as you
____ older than you
____ group containing a variety of ages

3d. If you were interacting with someone, indicate the person's race/ethnicity (check only one)
____ same race/ethnicity as you
____ different race/ethnicity than you
____ group with a variety of racial/ethnic backgrounds

4. If you were attending class, what was the subject? _____

   4a. Was the class: ____ small (fewer than 20 students)
                           ____ medium (21-49 students)
                           ____ large (50 or more students)

How did you **feel** during this episode (number _____)?

Please rate each feeling on the scale given. A rating of 0 means that you did not experience that feeling at all. A rating of 6 means that this feeling was a very important part of the experience. Please circle only one number between 0 and 6 that best describes the extent to which you experienced each emotion listed.

	NOT AT ALL						VERY MUCH
Powerless	0	1	2	3	4	5	6
Smart	0	1	2	3	4	5	6
Frustrated/annoyed	0	1	2	3	4	5	6
Accepted	0	1	2	3	4	5	6
Competent/capable	0	1	2	3	4	5	6
Hassled/pushed around	0	1	2	3	4	5	6
Warm/friendly	0	1	2	3	4	5	6
Angry/hostile	0	1	2	3	4	5	6
Worried/anxious	0	1	2	3	4	5	6
Happy	0	1	2	3	4	5	6
Criticized/put down	0	1	2	3	4	5	6
Respected	0	1	2	3	4	5	6

Have you rated all of your episodes, including the last episode of the day, just before you went to bed? If so, you may continue to the next section.

A Few More Questions about Yesterday

Now that you have told us about your day in detail, we have a few more general questions.

We would like to know **overall** how you felt and what your mood was like yesterday. Thinking only about yesterday, what percentage of the time were you

in a bad mood	_____ %
a little low or irritable	_____ %
in a mildly pleasant mood	_____ %
in a very good mood	_____ %
Sum:	100%

Now we'd like to know how **typical** yesterday was for that day of the week (i.e., for a Monday, for a Tuesday, and so on). Compared to what that day of the week is usually like for you, yesterday was (circle only one)

Much worse	Somewhat worse	Pretty typical	Somewhat better	Much better
1	2	3	4	5

If you attended classes yesterday, we would like to know overall how you felt and what your mood was like **in class** yesterday. Thinking only about the time you spent in class yesterday, what percentage of the time were you

in a bad mood	_____ %
a little low or irritable	_____ %
in a mildly pleasant mood	_____ %
in a very good mood	_____ %
Sum:	100%

Now we'd like to know how yesterday compares to a **typical** school day. Compared to a typical day of attending classes, my time spent attending classes yesterday was (circle only one)

Much worse	Somewhat worse	Pretty typical	Somewhat better	Much better
1	2	3	4	5

You have completed this packet. Please take it up to the front desk and pick up the next packet.

APPENDIX C

DEMOGRAPHIC QUESTIONS

Now we would like to learn a little more about you.

1.   Your sex:

   O Male   O Female

2.   Your age: _____

3.   Are you…. (choose as many as apply)

   o   White/Caucasian
   o   African American/Black
   o   American Indian/Alaska Native
   o   Asian American/Asian
   o   Native Hawaiian/Pacific Islander
   o   Mexican American/Chicano
   o   Puerto Rican
   o   Other Latino
   o   Other _____

4.   Student classification:

   o   Freshman (0-29 hours completed)
   o   Sophomore (30-59 hours completed)
   o   Junior (60-89 hours completed)
   o   Senior (90+ hours completed)
   o   Other _____

5.   Are you presently enrolled as a: (select only one)

   o   Full-time student (12+ credit hours)
   o   Part-time student (11 or fewer credit hours)

6.   Which of the following best describes your **current** (or expected, if this is your first semester) college grade point average? (select only one)

- o   A+ or A
- o   A-
- o   B+
- o   B
- o   B-
- o   C+
- o   C
- o   C-
- o   D+ or less

7.   What is your overall or total ACT/SAT score? _____

8.   What is your major? _____

9.   What is the highest academic degree you plan to obtain? (select only one)

- o   Some college
- o   BS or BA degree
- o   MA or MS degree
- o   MSW, MPH, or MBA
- o   MD, DDS, or JD
- o   PhD or EdD
- o   Other: _____

10. Do you live (select only one)

- o   on campus
- o   off campus

11. Regardless of whether you live on campus or off campus, did you move from your family home to attend this university? (select only one)

- o   Yes (answer 11a)
- o   No (skip to 12)

11a. If yes, how far did you move? (select only one)

- less than 50 miles
- 51-100 miles
- 101-200 miles
- 201 or more miles

12. Are you involved in extracurricular activities?

- Yes (answer 12a)
- No (skip to 13)

12a. If yes, what activities? _____

13. Place an X or check mark in the category that best describes each item.

	All or nearly all White	Mostly White	Half White and half non-White	Mostly non-White	All non-White
A. The neighborhood where you grew up					
B. The high school you attended					
C. Your friends on this campus					
D. Your friends in general					

14. Please indicate the highest level of education for your **parents or guardian(s)**.
(place only one X or check mark in the appropriate box for each applicable column)

Years of School Completed	Father	Mother	Guardian 1	Guardian 2
Not applicable				
1-8 years				
9-11 years				
High school graduate				
Some college				
Bachelor's degree				
Graduate degree (MA, MS, PhD, etc.)				
Professional degree (JD, MBA, MD, etc.)				
Not sure				

15. Were you born **before** January 1, 1982?

- o Yes (answer 15a)
- o No (skip to 15b)

15a. What is your **best estimate** of **your** total income last year? Consider income from all sources **before taxes**. (select only one response)

o	Less than $10,000	o	$50,000-59,999
o	$10,000-14,999	o	$60,000-74,999
o	$15,000-19,999	o	$75,000-99,999
o	$20,000-24,999	o	$100,000-149,999
o	$25,000-29,999	o	$150,000-199,999
o	$30,000-39,999	o	$200,000-249,999
o	$40,000-49,999	o	$250,000 or more

15b. What is your **best estimate** of **your parents'** (or guardians') total income last year? Consider income from all sources **before taxes.** (select only one response)

o	Less than $10,000	o	$50,000-59,999
o	$10,000-14,999	o	$60,000-74,999
o	$15,000-19,999	o	$75,000-99,999
o	$20,000-24,999	o	$100,000-149,999
o	$25,000-29,999	o	$150,000-199,999
o	$30,000-39,999	o	$200,000-249,999
o	$40,000-49,999	o	$250,000 or more

A DAY IN THE LIFE OF COLLEGE STUDENTS

The purpose of this research project is to learn how college students spend their time – what you do and who you spend time with - and how you feel about these activities and the campus in general. Participants will create a special diary that outlines daily activities, which they will keep. The project will compare two different types of surveys.

There is no risk involved in participating in the study – you'll simply be asked to complete two surveys about your campus experiences, as well as a short demographic questionnaire. This research will provide information about college student activities that simply does not exist at this time, so you will be making an important contribution to our understanding of college students and campus life. You can expect to spend around **60-90 minutes** engaged in study activities. To thank you for participating in this research project, you will receive a **$10 Meijer gift card** upon completion of the surveys.

Contact the researcher to schedule a session in **Winter 2007**. Tell a friend!

Nancy Birk, Principal Investigator
University of Michigan
nbirk@umich.edu
734-330-0740

INFORMED CONSENT DOCUMENT

Research study: A Day in the Life of College Students
IRB Protocol #HUM00008388

Researcher: Nancy Adair Birk, Principal Investigator, Center for the Study of Higher and Postsecondary Education, University of Michigan
Doctoral Committee Chair: Pat King, Professor, Center for the Study of Higher and Postsecondary Education, University of Michigan

Description of the research: The purpose of this study is to understand how college students spend their time and how they feel about their activities and their campuses, looking at the activities students report and the people with whom they interact.

Involvement as a participant: You will be asked to spend approximately 60 minutes completing two surveys, plus a demographic questionnaire. As part of this activity, you'll create a diary of the things you did yesterday. Information you provide will be kept in a database for future analysis.

Risks to participation: Very few risks are posed by this study. Because you will be reporting about yesterday's events, you might feel a little upset if you had a bad day. If you feel this way, the researcher can provide you with a list of counseling resources in the area. In addition, because you won't be giving any private information as part of the research, you won't be identified in any way.

Benefits to participation: Although you may not directly benefit from being in the study, others may ultimately benefit from the study. Faculty often say that college students should spend a particular amount of time studying, but no research has shown exactly how much time college students devote to academics. In addition, there is no current information that relates use of time to how students feel about their campus.

Costs to participation: There is no cost to you to participate in the study.

Payments for participation: After you complete all three surveys, you will be given $10 to thank you for your participation. If you decide to withdraw early, you will receive a token gift, such as a pencil or pad, in appreciation for your time.

Voluntary nature of your participation: Your participation in this project is voluntary. You are free to refrain from answering any question you wish. Even after you agree to

participate, you may decide to leave the study at any time without penalty or loss of benefits to which you may otherwise be entitled.

Confidentiality of data: No information will be collected that can identify you. The surveys you complete will be assigned a study number. All data will be kept on a password-protected computer accessible only by the researcher. The responses you provide on the surveys will be entered into a database; these surveys will be shredded when the study is complete. The database will be maintained indefinitely to permit additional analyses. You will not be personally identified in any reports or publications that result from this study. These de-identified study records will be kept confidential to the extent provided by federal, state, and local law. However, the Institutional Review Board or university officials responsible for monitoring this study may inspect these records.

Contact information: If you would like more information about the study, you may contact the principal investigator and/or the faculty advisor:

Nancy Adair Birk, PI
nbirk@umich.edu
(734) 330-0740

Patricia M. King, Committee Chair
patking@umich.edu
(734) 647-8753

Should you have questions regarding your rights as a research participant, please contact the Institutional Review Board – Behavioral Sciences, 540 E. Liberty, Suite 202, Ann Arbor, MI 48104-2210, (734) 936-0933, irbhsbs@umich.edu.

"This research protocol has been reviewed and approved by the Eastern Michigan University Human Subjects Review Committee. If you have questions about the approval process, please contact Dr. Deb deLaski-Smith (734.487.0042, Dean of the Graduate School, ddlaski@emich.edu).

Consent of the subject: I have read the information provided here. The researcher has offered to answer any questions I may have concerning the study. I hereby consent to participate in the study.

No signature is required; a waiver of documentation of informed consent is granted by the University of Michigan IRB and the EMU Human Subjects Review Committee. You will be given a copy of this informed consent document to keep.

APPENDIX F

CODING

Variable	Instrument	Original coding	Recoded values
1a Performance met academic expectations *AcadPerf*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
1b Talk to prof about assignments *TalkProf*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
1c Student values similar to mine *SimValue*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
1d Feel part of campus life *CampLife*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
2a Satisfied with faculty relationships *SatFacRel*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
2b Satisfied with social life *SatSocLife*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	

2c Satisfied with student organizations & activities *SatStdtAct*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
2d Satisfied with own academic performance *SatAcadPerf*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
3 Extracurricular activities *Extracurrorg*	GMC	1=yes 2=no	
4 Study hours per week *StudyHours*	GMC	Open	
5 Social hours per week *SocialHours*	GMC	Open	
6a Socialized informally w/faculty *FacSocr*	GMC	1=very often 2=often 3=sometimes 4=seldom 5=never	1=never 2=seldom 3=sometimes 4=often 5=very often
6b Discussed career plans w/faculty *FacTalkCareerr*	GMC	1=very often 2=often 3=sometimes 4=seldom 5=never	1=never 2=seldom 3=sometimes 4=often 5=very often
6c Discussed personal concern w/faculty *FacTalkPersr*	GMC	1=very often 2=often 3=sometimes 4=seldom 5=never	1=never 2=seldom 3=sometimes 4=often 5=very often
6d Discussed academic or intellectual issues outside class w/faculty *FacTalkOutr*	GMC	1=very often 2=often 3=sometimes 4=seldom 5=never	1=never 2=seldom 3=sometimes 4=often 5=very often
6e Discussed own academic work w/faculty *FacFeedbackr*	GMC	1=very often 2=often 3=sometimes 4=seldom 5=never	1=never 2=seldom 3=sometimes 4=often 5=very often
7 Considered leaving *Leaving*	GMC	1=yes 2=no	

7a Why considered leaving	GMC	Open text	
8 Rating of racial relations and attitudes compared to other institutions *RacRelr*	GMC	1=much friendlier here 2=somewhat friendlier here 3=about the same 4=somewhat more hostile here 5=much more hostile here	1=much more hostile here 2=somewhat more hostile here 3=about the same 4=somewhat friendlier here 5=much friendlier here
9a Support by administration for minority groups *AdminSupt*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	
9b Feel discrimination *FeelDiscr*	GMC	1=strongly disagree 2=disagree 3=neither agree nor disagree 4=agree 5=strongly agree	1=strongly agree 2=agree 3=neither agree nor disagree 4=disagree 5=strongly disagree
10a Relationships w/white students *RelWhiteStdtr*	GMC	1=excellent 2=good 3=poor 4=very poor 5=no contact	1=no contact 2=very poor 3=poor 4=good 5=excellent
10b Relationships w/students of color *RelStdtColorr*	GMC	1=excellent 2=good 3=poor 4=very poor 5=no contact	1=no contact 2=very poor 3=poor 4=good 5=excellent
10c Relationships w/white faculty *RelWhiteFacr*	GMC	1=excellent 2=good 3=poor 4=very poor 5=no contact	1=no contact 2=very poor 3=poor 4=good 5=excellent
10d Relationships w/faculty of color *RelFacColorr*	GMC	1=excellent 2=good 3=poor 4=very poor 5=no contact	1=no contact 2=very poor 3=poor 4=good 5=excellent
10e Relationships w/white staff	GMC	1=excellent 2=good	1=no contact 2=very poor

Item		Coding 1	Coding 2
RelWhiteStaffr		3=poor 4=very poor 5=no contact	3=poor 4=good 5=excellent
10f Relationships w/staff of color *RelStaffColorr*	GMC	1=excellent 2=good 3=poor 4=very poor 5=no contact	1=no contact 2=very poor 3=poor 4=good 5=excellent
11a White students respect students of color *WhiteStdtRespr*	GMC	1=strongly disagree 2=disagree 3=agree 4=strongly agree	1=strongly disagree 2=disagree 3=dummy 4=agree 5=strongly agree
11b White students interact w/students of color *WhiteStdtInterr*	GMC	1=strongly disagree 2=disagree 3=agree 4=strongly agree	1=strongly disagree 2=agree 3=dummy 4=agree 5=strongly agree
11c Students of color respect white students *StdtColorRespr*	GMC	1=strongly disagree 2=disagree 3=agree 4=strongly agree	1=strongly disagree 2=disagree 3=dummy 4=agree 5=strongly agree
11d Students of color interact w/white students *StdtColorInterr*	GMC	1=strongly disagree 2=disagree 3=agree 4=strongly agree	1=strongly disagree 2=disagree 3=dummy 4=agree 5=strongly agree
12a Students of color participate in all-campus events *StdtColorPart*	GMC	1=very little 2=slight 3=some 4=substantial 5=very substantial	
12b Dating exists between students of color & white students *DatingRel*	GMC	1=very little 2=slight 3=some 4=substantial 5=very substantial	
12c Students of color visible/influential on campus *StdtColorVis*	GMC	1=very little 2=slight 3=some 4=substantial 5=very substantial	
12d Adequate support/funding for orgs & events for students of	GMC	1=very little 2=slight 3=some	

color *SuptStdtColor*		4=substantial 5=very substantial	
13a Faculty provide individual academic help *FacHelpr*	GMC	1=more with non-whites 2=same with all students 3=less with non-whites 4=seldom or never with any students	1=discriminatory 2=not helpful to any 3=not discriminatory
13b Faculty refer to counseling or tutoring services *FacRefCounsr*	GMC	1=more with non-whites 2=same with all students 3=less with non-whites 4=seldom or never with any students	1, 3 recoded into 1 4 recoded into 2 2 recoded into 3 1=discriminatory 2=not helpful to any 3=not discriminatory
13c Faculty encourage students to consider grad school *FacGradSchoolr*	GMC	1=more with non-whites 2=same with all students 3=less with non-whites 4=seldom or never with any students	1, 3 recoded into 1 4 recoded into 2 2 recoded into 3 1=discriminatory 2=not helpful to any 3=not discriminatory
13d Faculty grade fairly *FacGradeFairr*	GMC	1=more with non-whites 2=same with all students 3=less with non-whites 4=seldom or never with any students	1, 3 recoded into 1 4 recoded into 2 2 recoded into 3 1=discriminatory 2=not helpful to any 3=not discriminatory
13e Faculty praise students *FacPraiser*	GMC	1=more with non-whites 2=same with all students 3=less with non-whites	1, 3 recoded into 1 4 recoded into 2 2 recoded into 3 1=discriminatory 2=not helpful to any

		4=seldom or never with any students	3=not discriminatory
13f Faculty acknowledge student contributions in class *FacAckClassr*	GMC	1=more with non-whites 2=same with all students 3=less with non-whites 4=seldom or never with any students	1, 3 recoded into 1 4 recoded into 2 2 recoded into 3 1=discriminatory 2=not helpful to any 3=not discriminatory
Day of the week *DayWeek*	DRM	1=Monday 2=Tuesday 3=Wednesday 4=Thursday 5=Friday	1, 3 recoded into 1 4 recoded into 2 2 recoded into 3
Time wake up *WakeUp*	DRM	Time	
Time go to bed *GoSleep*	DRM	Time	
Number morning episodes *MornEp*	DRM	Numeric	
Number afternoon episodes *AfterEp*	DRM	Numeric	
Number evening episodes *EveEp*	DRM	Numeric	
Total episodes *TotalEp*	DRM	Numeric	
Episode number *Episode#*	DRM	String of letters and numbers	
Time episode begins *TimeBegin*	DRM	Time	
Time episode ends *TimeEnds*	DRM	Time	
Duration of episode *Duration*	DRM	Numeric	Recoded into decimal clock
1 Activity *ActivityA*	DRM	1=commuting 2=attending class	

ActivityB		3=shopping
ActivityC		4=housework
ActivityD		5=eating
ActivityE		6=socializing
ActivityF		7=nap/resting
ActivityG		8=relaxing
ActivityH		9=intimate relations
		10=working
		11=studying/academic work
		12=preparing food
		13=child care
		14=praying/worshipping /meditating
		15=watching TV
		16=computer/internet/ email
		17=on the phone
		18=exercising
		19=other
		20=personal care (shower, dress, hair, brush teeth, make-up)
		21=meeting
		22=errands
		23=preparation/planning
		24=health care
		25=leisure (listening to music, reading for pleasure, video games, board games, etc.)
		26=waiting
		27=legal business
		28=animal care
		29=volunteering
2 Location	DRM	1=at home
Location		2=at work
SomewhereElse		3=on campus
		4=somewhere else
		5=restaurant/café
		6=store/business
		7=church
		8=significant other's home
		9=friend's home
		10=bar/adult

			entertainment
			11=car/bus
			12=health care facility
			13=home of family member
			14=location outside town
			15=athletic/sporting facility
3 With someone else	DRM		1=yes
Int			2=no
3a Interaction partner	DRM		1=spouse/significant other
IntPartnerA			2=friends
IntPartnerB			3=co-workers
IntPartnerC			4=customers
IntPartnerD			5=faculty/teaching assistant
IntPartnerE			6=university staff
IntPartnerF			7=children
IntPartnerG			8=parents/relatives
			9=boss
			10=other students
			11=other people
			12=employees/reps
			13=health care professionals
			14=child's teacher/tutor
			15=coach
3b Interaction partner sex	DRM		1=male
IntPartnerSex			2=female
			3=group containing both males and females
3c Interaction partner age	DRM		1=younger than you
IntPartnerAge			2=about the same age as you
			3=older than you
			4=group containing a variety of ages
3d Interaction partner race	DRM		1=same race/ethnicity as you
IntPartnerRace			2=different race/ethnicity than you
			3=group with a variety of racial/ethnic backgrounds

4 Class subject *ClassSub1Recode* *ClassSub2Recode*	DRM	Text entry recoded by college	1=College of Arts & Sciences 2=College of Business 3=College of Education 4=College of Health & Human Services 5=College of Technology 6=Interdisciplinary (including secondary ed)
4a Class size *ClassSize*	DRM	1=small (<20) 2=medium (21-49) 3=large (>50)	
Powerless *Powerless*	DRM	0=not at all 1 2 3 4 5 6=very much	
Smart *Smart*	DRM	0=not at all 1 2 3 4 5 6=very much	
Frustrated/annoyed *Frust*	DRM	0=not at all 1 2 3 4 5 6=very much	
Accepted *Accepted*	DRM	0=not at all 1 2 3 4 5 6=very much	

Competent/capable *Competent*	DRM	0=not at all 1 2 3 4 5 6=very much
Hassled/pushed around *Hassled*	DRM	0=not at all 1 2 3 4 5 6=very much
Warm/friendly *WarmFriend*	DRM	0=not at all 1 2 3 4 5 6=very much
Angry/hostile *AngryHostile*	DRM	0=not at all 1 2 3 4 5 6=very much
Worried/anxious *Worried*	DRM	0=not at all 1 2 3 4 5 6=very much
Happy *Happy*	DRM	0=not at all 1 2 3 4 5 6=very much
Criticized/put down *Criticized*	DRM	0=not at all 1 2 3

		4
		5
		6=very much
Respected *Respected*	DRM	0=not at all 1 2 3 4 5 6=very much
Mood *Mood*	DRM	1=bad mood 2=low or irritable 3=mildly pleasant 4=very good mood
Typical day *YestTypical*	DRM	1=much worse 2=somewhat worse 3=pretty typical 4=somewhat better 5=much better
1 Sex *Sex*	Demo	1=male 2=female
2 Race/ethnicity *Race*	Demo	1=White/Caucasian 2=Black/African American 3=American Indian/ Alaska Native 4=Asian American/ Asian 5=Native Hawaiian/ Pacific Islander 6=Mexican American/Chicano 7=Puerto Rican 8=Other Latino/a 9=Other 10=More than one race/ethnicity
3 Age *Age*	Demo	Open text
4 Student classification *StudentClass*	Demo	1=freshman 2=sophomore 3=junior 4=senior 5=second bachelors 6=graduate student 7=other

5 Enrollment status *StudentEnroll*	Demo	1=full-time 2=part-time	
6 Self-reported GPA *CurrentGPA*	Demo	1=A+ or A 2=A- 3=B+ 4=B 5=B- 6=C+ 7=C 8=C- 9=D+ or less	
7 ACT or SAT score *SATorACT* *ACTRecode*	Demo	ACT or SAT score	Converted to ACT
8 Major *Major* *MajCollegeRecode*	Demo	Text entry recoded by college	1=College of Arts & Sciences 2=College of Business 3=College of Education 4=College of Health & Human Services 5=College of Technology 6=Interdisciplinary (including secondary ed)
9 Degree aspiration *DegreeAspir*	Demo	1=some college 2=BS or BA degree 3=MA or MS degree 4=MSW, MPH, MBA 5=MD, DDS, JD 6=PhD or EdD 7=other	
10 Residence *Live*	Demo	1=on campus 2=off campus	
11 Move from family *MoveHome*	Demo	1=yes 2=no	
11a How far move *HowFarMove*	Demo	1=< 50 miles 2=51-100 miles 3=101-200 miles 4=201 or more miles	
12 Extracurricular activities *ExtraCurrAct*	Demo	1=yes 2=no	
12a What activities	Demo	Text entry recoded into	1=student orgs

WhatExtraCurrAct *ExCurrAct1* *ExCurrAct2*		categories	2=athletics 3=arts 4=religious 5=academic 6=service 7=military
13a Diversity of home neighborhood *NeighborDiv*	Demo	1=all or nearly white 2=mostly white 3=half white & half non-white 4=mostly non-white 5=all non-white	For AA: 1=similar (4, 5) 2=mixed (3) 3=dissimilar (1, 2) For EA: 1=similar (1, 2) 2=mixed (3) 3=dissimilar (4, 5)
13b Diversity of high school *HighSchoolDiv*	Demo	1=all or nearly white 2=mostly white 3=half white & half non-white 4=mostly non-white 5=all non-white	For AA: 1=similar (4, 5) 2=mixed (3) 3=dissimilar (1, 2) For EA: 1=similar (1, 2) 2=mixed (3) 3=dissimilar (4, 5)
13c Diversity of campus friends *CampusFriends*	Demo	1=all or nearly white 2=mostly white 3=half white & half non-white 4=mostly non-white 5=all non-white	
13d Diversity of friends *Friends*	Demo	1=all or nearly white 2=mostly white 3=half white & half non-white 4=mostly non-white 5=all non-white	
Prior experience with racial diversity *PERD*		Mean of 13a and 13b 1=similar 2=mixed 3=dissimilar	
Parent education *FatherEd* *MotherEd* *Guardian1Ed* *Guardian2Ed*	Demo	1=not applicable 2=1-8 years 3=9-11 years 4=high school graduate 5=some college 6=bachelor degree 7=graduate degree	

		8=professional degree
		9=not sure
15 Born before 1/1/82	Demo	1=yes
BornBefore1182		2=no
15a Student income	Demo	1=<10,000
Yestotalincome		2=10,000-14,999
		3=15,000-19,999
		4=20,000-24,999
		5=25,000-29,999
		6=30,000-39,999
		7=40,000-49,999
		8=50,000-59,999
		9=60,000-74,999
		10=75,000-99,999
		11=100,000-149,999
		12=150,000-199,999
		13=200,000-249,999
		14=>250,000
15b Parent income	Demo	1=<10,000
Nototalincome		2=10,000-14,999
		3=15,000-19,999
		4=20,000-24,999
		5=25,000-29,999
		6=30,000-39,999
		7=40,000-49,999
		8=50,000-59,999
		9=60,000-74,999
		10=75,000-99,999
		11=100,000-149,999
		12=150,000-199,999
		13=200,000-249,999
		14=>250,000

FACTOR LOADINGS AND CRONBACH'S ALPHA,

GLOBAL MEASURE OF CLIMATE

Factor and Items	Factor Loading	Cronbach's Alpha for Factor
Factor 1: General Perceptions of Campus Racial Climate		.805
11a. White students respect the attitudes and beliefs of students of color.	.693	
11b. White students interact comfortably with students of color.	.759	
11c. Students of color respect the attitudes and beliefs of white students.	.696	
11d. Students of color interact comfortably with white students.	.722	
12a. Students of color participate regularly in all-campus events.	.524	
12c. Students of color are visible and influential on campus.	.530	
12d. There is adequate support and funding for events and organizations geared toward students of color.	.505	
Factor 2: Characterization of Own Interracial Relationships		.740
10a. Describe own relationships with white students.	.512	
10c. Describe own relationships with white faculty.	.787	
10d. Describe own relationships with faculty of color.	.558	
10e. Describe own relationships with white staff.	.813	
10f. Describe own relationships with staff of color	.783	
12a. Students of color participate regularly in all-campus events.	.400	
Factor 3: Perceptions of Equal Treatment of Students by Faculty		.702
13a. Faculty provide individual academic help.	.677	
13b. Faculty refer students to counseling or tutorial services	.546	
13c. Faculty encourage students to consider graduate school.	.638	
13d. Faculty grade students fairly.	.454	

13e. Faculty praise students for work well done. .661

13f. Faculty acknowledge student contributions in class. .600

Factor 4: Own Academic Experiences .734

1a. Own academic performance has lived up to personal expectations. .856

1b. Talk to professor when questions arise about an assignment. .496

2a. Satisfaction with general relations with faculty. .550

2d. Satisfaction with own academic performance. .873

Factor 5: Campus Social Integration .659

1d. Feel part of the general campus life. .783

2b. Satisfaction with your social life. .696

2c. Satisfaction with student organizations and activities. .725

1c. Most students have values and attitudes comparable to my own. .471

7. Ever seriously considered leaving the university? .406

Factor 6: Informal Relationships with Faculty .565

6a. How often have you socialized informally with faculty? .503

6b. How often have you discussed your career plans and opportunities with faculty? .573

6c. How often have you discussed a personal concern with faculty? .546

6d. How often have you discussed academic or intellectual issues outside of class with faculty? .651

8. Compare the racial relationships and attitudes on campus to other similar universities. .533

APPENDIX H

CONVERSION TO DECIMAL TIME, DRM

Table 3.11 Conversion to Decimal Time, DRM

24-hour clock increment	Decimal time equivalent
5 minutes	.083
10 minutes	.166
15 minutes	.250
20 minutes	.333
25 minutes	.416
30 minutes	.500
35 minutes	.583
40 minutes	.666
45 minutes	.750
50 minutes	.833
55 minutes	.916
60 minutes	1.00

APPENDIX I

U INDEX BY TYPE OF INTERACTION PARTNER

U Index of DRM Episodes by Interaction Partner

Partner	Total Sample			African American Total			European American Total			p value, AA/EA Difference
	M	SD	n Episodes	M	SD	n Episodes	M	SD	n Episodes	
Work colleagues[a]	25.69	0.948	159	17.96	0.798	77	33.12	1.073	80	.318
Children	23.06	0.707	283	25.05	0.775	150	20.77	0.622	130	.614
University staff	19.78	0.756	84	12.90	0.643	31	23.88	0.819	52	.526
Faculty	15.51	0.453	281	10.63	0.356	134	20.15	0.526	141	.212
Alone	13.50	0.463	1453	11.92	0.438	767	15.32	0.489	664	.165
Family members	12.91	0.483	155	8.44	0.317	77	17.43	0.606	76	.251
Other students	12.82	0.473	559	14.10	0.553	266	11.62	0.385	284	.540
Spouse/significant other	12.19	0.607	373	12.05	0.544	139	12.28	0.643	230	.971
Other interaction partners[b]	10.82	0.333	79	17.90	0.465	27	7.00	0.230	50	.172
Friends	6.89	0.356	995	6.42	0.378	452	7.30	0.337	522	.701

U-Index of DRM Episodes by Interaction Partner, Continued

Partner	African Americans						p value, AA Men/ AA Women Difference
	African American Men			African American Women			
	M	SD	n Episodes	M	SD	n Episodes	
Work colleagues[a]	12.80	0.677	28	20.92	0.865	49	.670
Children	20.77	0.611	69	28.70	0.893	81	.534
University staff	21.29	0.843	18	1.28	0.046	13	.402
Faculty	7.38	0.297	61	13.35	0.399	73	.004**
Alone	8.00	0.358	322	14.75	0.486	445	.035*
Family members	0.00	0.000	28	13.26	0.390	49	.077
Other students	9.66	0.344	113	17.37	0.665	153	.261
Spouse/significant other	6.59	0.258	67	17.13	0.712	72	.255
Other interaction partners[b]	1.79	0.662	14	35.25	0.633	13	.060
Friends	7.16	0.454	206	5.79	0.299	246	.702

*$p\leq.05$; **$p\leq.01$; ***$p\leq.001$; [a]= co-workers, customers, boss; [b]=health care professional, coach, child's teacher, other unidentified partner

U-Index of DRM Episodes by Interaction Partner, Continued

Partner	European Americans						p value, EA Men/ EA Women Difference
	European American Men			European American Women			
	M	SD	n Episodes	M	SD	n Episodes	
Work colleagues[a]	16.22	0.635	37	47.67	1.332	43	.193
Children	23.40	0.693	68	17.88	0.537	62	.615
University staff	0.00	0.000	16	34.49	0.969	36	.163
Faculty	23.51	0.478	67	17.12	0.567	74	.688
Alone	14.54	0.460	333	16.11	0.517	331	.679
Family members	29.54	0.854	33	8.14	0.282	43	.128
Other students	15.63	0.441	145	7.43	0.313	139	.073
Spouse/significant other	13.79	0.547	87	11.36	0.696	143	.782
Other interaction partners[b]	3.43	0.122	17	8.84	0.269	33	.436
Friends	7.28	0.317	261	7.31	0.356	261	.991

U-Index of DRM Episodes by Interaction Partner, Continued

Partner	Gender						p value, Men/Women Difference
	Men			Women			
	M	SD	n Episodes	M	SD	n Episodes	
Work colleagues[a]	14.74	0.649	65	33.42	1.110	92	.225
Children	22.08	0.651	137	24.01	0.759	143	.820
University staff	11.27	0.615	34	25.68	0.841	49	.027*
Faculty	15.82	0.409	128	15.25	0.490	147	.397
Alone	11.32	0.414	655	15.33	0.499	776	.102
Family members	15.98	0.641	61	10.87	0.343	92	.523
Other students	13.02	0.402	258	12.64	0.529	292	.926
Spouse/significant other	10.66	0.445	154	13.29	0.700	215	.681
Other interaction partners[b]	2.69	0.099	31	16.30	0.416	46	.078
Friends	7.23	0.383	467	6.57	0.329	507	.775

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$; [a]= co-workers, customers, boss; [b]=health care professional, coach, child's teacher, other unidentified partner

APPENDIX J

DURATION OF EPISODES BY INTERACTION PARTNER

Duration of DRM Episodes by Interaction Partner

| Partner | Total Sample | | | | | Percent of the Day Spent with Interaction Partner[b] |
	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	
Friends	6.303	4.127	1.523	1.272	995	41.3
Alone	5.459	3.477	0.908	0.880	1453	34.1
Spouse/significant other	4.744	3.737	1.474	1.337	373	32.4
Work colleagues[c]	3.698	2.125	2.397	1.678	159	24.4
Other students	3.665	2.731	1.422	0.932	559	24.7
University staff	2.473	1.811	1.591	1.421	84	18.0
Faculty	2.470	1.500	1.381	0.680	281	17.2
Family members	2.411	2.401	1.381	1.296	155	16.6
Children	2.115	1.666	1.437	1.298	283	14.7
Other interaction partners[d]	1.611	1.821	1.212	1.229	79	11.2

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.
[b]=Because students were able to indicate multiple partners per episode, this column does not total 100%.
[c]= co-workers, customers, boss
[d]=health care professional, coach, child's teacher, other unidentified partner

Duration of DRM Episodes by Interaction Partner, Continued

Partner	African American Total					European American Total					p value, AA/EA Difference, Interaction Partner Duration
	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	
Friends	5.894	4.091	1.587	1.423	460	6.700	4.124	1.467	1.123	535	.000***
Alone	5.615	3.803	0.899	0.923	777	5.302	3.107	0.919	0.830	676	.010**
Spouse/ significant other	4.306	3.441	1.557	1.562	139	5.055	3.906	1.425	1.183	234	.000***
Work colleagues[b]	3.792	2.421	2.415	1.763	79	3.619	1.835	2.378	1.601	80	.158
Other students	3.589	2.535	1.438	0.989	270	3.736	2.903	1.406	0.877	289	.163
University staff	2.572	2.141	1.653	1.421	31	2.412	1.574	1.555	1.107	53	.146
Faculty	2.404	1.425	1.312	0.695	138	2.528	1.560	1.449	0.662	143	.069
Family members	3.058	3.000	1.592	1.475	79	1.936	1.692	1.162	1.046	76	.000***
Children	2.294	1.853	1.506	1.373	151	1.937	1.434	1.357	1.208	132	.000***
Other interaction partners[c]	1.625	1.821	1.613	1.395	28	1.601	1.823	0.992	1.079	51	.859

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

[b]= co-workers, customers, boss

[c]=health care professional, coach, child's teacher, other unidentified partner

Duration of DRM Episodes by Interaction Partner, Continued

| | African Americans | | | | | | | | | | |
| | African American Men | | | | | African American Women | | | | | p value, AA Men/ AA Women Difference, Interaction Partner Duration |
Partner	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	
Friends	6.476	4.381	1.687	1.530	213	5.462	3.808	1.501	1.321	247	.000***
Alone	5.592	3.691	0.953	1.032	325	5.631	3.886	0.860	0.834	452	.836
Spouse/ significant other	5.093	3.862	1.719	1.700	67	3.639	2.882	1.406	1.417	72	.000***
Work colleagues[b]	3.847	1.890	2.455	1.888	30	3.760	2.683	2.391	1.701	49	.686
Other students	3.865	2.643	1.463	1.042	115	3.412	2.449	1.420	0.950	155	.002**
University staff	3.095	2.775	1.870	1.611	18	2.138	1.267	1.352	1.097	13	.000***
Faculty	2.675	1.529	1.314	0.739	62	2.241	1.334	1.310	0.661	76	.000***
Family members	3.669	3.276	1.767	1.666	30	2.743	2.801	1.485	1.352	49	.002**
Children	2.455	1.815	1.505	1.379	69	2.175	1.872	1.508	1.376	82	.010**
Other interaction partners[c]	2.055	2.441	1.774	1.570	14	1.332	1.152	1.452	1.233	14	.000***

*p≤.05; **p≤.01; ***p≤.001

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

[b]= co-workers, customers, boss

[c]=health care professional, coach, child's teacher, other unidentified partner

Duration of DRM Episodes by Interaction Partner, Continued

| | European Americans | | | | | | | | | | |
| | European American Men | | | | | European American Women | | | | | p value, EA Men/ EA Women Difference, Interaction Partner Duration |
Partner	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	
Friends	7.099	3.923	1.542	1.170	273	6.324	4.273	1.388	1.069	262	.000***
Alone	5.563	3.091	0.968	0.851	344	5.058	3.103	0.869	0.806	332	.001***
Spouse/ significant other	5.064	4.003	1.638	1.175	143	5.048	3.837	1.289	1.173	143	.955
Work colleagues[b]	3.361	2.144	2.320	1.445	37	3.819	1.526	2.428	1.740	43	.002**
Other students	3.658	3.572	1.323	1.456	17	3.815	2.021	0.826	0.806	34	.315
University staff	2.550	1.359	1.625	0.936	16	2.362	1.691	1.525	1.184	37	.063
Faculty	2.416	1.572	1.525	0.713	69	2.640	1.543	1.377	0.606	74	.021*
Family members	1.911	1.426	1.427	1.202	33	1.957	1.897	0.959	0.869	43	.740
Children	1.999	1.556	1.372	1.303	69	1.881	1.315	1.341	1.106	63	.159
Other interaction partners[c]	1.809	2.268	1.323	1.456	17	1.468	1.459	0.826	0.806	34	.062

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

[b] co-workers, customers, boss

[c]=health care professional, coach, child's teacher, other unidentified partner

Duration of DRM Episodes by Interaction Partner, Continued

	Gender										
	Men					Women					p value, Men/ Women Difference, Interaction Partner Duration
Partner	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	M Interaction Partner Duration[a]	SD	M Episode Duration[a]	SD	n Episodes	
Friends	6.813	4.150	1.606	1.340	486	5.877	4.060	1.443	1.198	509	.000***
Alone	5.576	3.385	0.961	0.942	669	5.362	3.550	0.864	0.822	784	.079
Spouse/ significant other	5.077	3.939	1.672	1.417	158	4.484	3.552	1.329	1.258	215	.003**
Work colleagues[b]	3.564	2.054	2.380	1.646	67	3.790	2.169	2.408	1.710	92	.069
Other students	3.745	3.213	1.474	1.012	263	3.600	2.267	1.375	0.854	296	.172
University staff	2.778	2.087	1.755	1.323	34	2.260	1.557	1.480	1.154	50	.000***
Faculty	2.513	1.559	1.425	0.730	131	2.432	1.451	1.343	0.633	150	.209
Family members	2.525	2.400	1.588	1.440	63	2.331	2.401	1.239	1.176	92	.194
Children	2.215	1.693	1.438	1.338	138	2.034	1.635	1.435	1.264	145	.009**
Other interaction partners[c]	1.917	2.345	1.527	1.500	31	1.410	1.338	1.008	0.980	48	.000***

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

[b]= co-workers, customers, boss

[c]=health care professional, coach, child's teacher, other unidentified partner

APPENDIX K

ACTIVITY FREQUENCY

	Total Sample		African American		European American	
Activity	*n* Occurrences	% of Sample Reporting	*n* Occurrences	% of Sub-sample Reporting	*n* Occurrences	% of Sub-sample Reporting
Socializing	694	81.0	322	78.3	372	83.8
Eating	537	87.7	240	82.6	297	93.1
Relaxing	497	72.8	216	66.7	281	79.2
Commuting	490	62.7	232	58.7	258	66.9
Attending class	473	82.8	248	81.1	225	84.6
Studying/ academic work	419	70.9	184	69.6	235	72.3
Watching TV	405	69.4	193	68.8	212	70.0
Computer/ internet/ email	310	60.1	109	48.5	201	72.3
Personal care[b]	306	71.0	174	71.7	132	70.0
Nap/resting	283	67.9	151	68.8	132	66.9
Telephone	170	37.7	98	42.0	72	33.1
Employment	155	37.3	66	32.6	89	42.3
Preparing food	122	30.6	41	22.5	81	39.2
Doing housework	121	32.1	57	29.7	64	34.6
Leisure[c]	97	24.6	45	23.9	52	25.4
Exercising	93	26.1	43	21.7	50	30.8
Intimate relations	54	17.5	19	11.6	35	23.8
Shopping	52	16.4	26	17.4	26	15.4

DRM Activity Frequency

DRM Activity Frequency

Activity	Total Sample		African American		European American	
	n Occurrences	% of Sample Reporting	*n* Occurrences	% of Sub-sample Reporting	*n* Occurrences	% of Sub-sample Reporting
Prayer/ worship/ meditation	51	12.7	25	13.8	26	11.5
Meeting	34	10.4	10	5.8	24	15.4
Errands	22	7.1	8	5.8	14	8.5
Preparation/ planning	22	6.7	10	6.5	12	6.9
Child care	15	5.0	4	2.9	11	3.1
Other activities	14	4.1	11	5.8	3	2.3
Waiting	12	3.3	5	3.6	7	3.1
Volunteer activities	7	1.5	1	<1.0	6	2.3
Health care	6	1.5	2	1.4	4	3.1
Animal care	5	1.4	2	1.4	3	1.5
Legal business	2	1.3	2	1.4	0	0.0
Total activities	5468		2544		2924	

DRM Activity Frequency				
	Men		Women	
Activity	n Occurrences	% of Sub-sample Reporting	n Occurrences	% of Sub-sample Reporting
Socializing	333	82.0	361	80.0
Eating	252	88.3	285	87.1
Relaxing	251	75.0	246	70.7
Commuting	215	61.7	275	63.6
Attending class	229	84.3	244	81.4
Studying/academic work	184	68.7	235	72.8
Watching TV	196	68.7	209	70.0
Computer/ internet/ email	145	59.4	165	60.7
Personal care[c]	122	60.9	184	80.0
Nap/resting	138	67.2	145	68.6
Telephone	77	34.4	93	40.7
Employment	63	33.6	92	40.7
Preparing food	66	31.2	56	30.0
Doing housework	43	25.8	78	37.8
Leisure[b]	59	28.1	38	21.4
Exercising	56	32.0	37	20.7
Intimate relations	28	18.0	26	17.1
Shopping	19	14.1	33	18.6
Prayer/ worship/ meditation	25	13.3	26	12.1
Meeting	10	7.8	24	12.8
Errands	2	1.6	20	12.1
Preparation/planning	4	3.1	18	10.0
Child care	2	1.6	13	4.3
Other activities	10	5.5	4	2.8
Waiting	3	2.3	9	4.3
Volunteer activities	1	<1.0	6	2.1
Health care	1	<1.0	5	3.6

DRM Activity Frequency				
	Men		Women	
Activity	*n* Occurrences	% of Sub-sample Reporting	*n* Occurrences	% of Sub-sample Reporting
Animal care	2	1.6	3	1.4
Legal business	2	1.6	0	0.0
Total activities	2538		2930	

APPENDIX L

U INDEX BY ACTIVITY

U Index by Activity

Activity	Total Sample			African American Total			European American Total			p value, AA/EA Difference
	M	SD	n Episodes	M	SD	n Episodes	M	SD	n Episodes	
Employment	23.70	0.919	155	15.38	0.755	66	29.77	1.022	89	.339
Studying/academic work	23.25	0.704	419	18.76	0.667	184	26.80	0.731	235	.249
Preparing food	19.23	0.773	122	1.01	0.065	41	29.06	0.946	81	.061
Attending class	17.79	0.482	473	14.38	0.433	248	21.54	0.529	225	.112
Doing housework	12.96	0.350	121	13.69	0.340	57	12.30	0.361	64	.831
Telephone	12.22	0.496	170	11.49	0.495	98	13.19	0.501	72	.827
Computer/internet/ email	9.54	0.440	310	11.31	0.482	109	8.55	0.416	201	.600
Worship/prayer/ meditation	8.82	0.282	51	7.00	0.245	25	10.58	0.318	26	.655
Relaxing	8.57	0.401	497	10.89	0.501	216	6.73	0.298	281	.256
Commuting	8.09	0.312	490	7.27	0.222	232	8.82	0.375	258	.586
Personal care	7.89	0.305	306	7.23	0.326	174	8.78	0.276	132	.662
Exercising	7.59	0.559	93	11.90	0.771	43	3.82	0.264	50	.486
Shopping	7.37	0.288	52	2.88	0.147	26	11.86	0.379	26	.266
Watching television	7.25	0.343	405	5.73	0.364	193	8.65	0.323	212	.396
Socializing	5.97	0.362	694	2.62	0.207	322	8.83	0.452	372	.025*
Eating	5.25	0.282	537	2.42	0.162	240	7.53	0.348	297	.039*
Leisure	3.09	0.255	97	1.11	0.045	45	4.81	0.347	52	.479
Intimate relations	0.00	0.000	54	0.00	0.000	19	0.00	0.000	35	.000
Child care	53.57	2.004	15	0.00	0.000	4	75.00	2.372	11	.549

U Index by Activity

Activity	Total Sample			African American Total			European American Total			p value, AA/EA Difference
	M	SD	n Episodes	M	SD	n Episodes	M	SD	n Episodes	
Nap/resting	23.06	0.707	283	25.05	0.775	151	20.77	0.622	132	.614
Other activity[a]	16.18	0.406	122	22.00	0.510	50	12.15	0.312	72	.189

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$

[a]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified

Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted.

U Index by Activity, Continued

| Activity | African Americans | | | | | | p value, AA Men/ AA Women Difference |
| | African American Men | | | African American Women | | | |
	M	SD	n Episodes	M	SD	n Episodes	
Employment	0.00	0.000	26	25.64	0.966	39	.182
Studying/academic work	9.18	0.362	79	26.04	0.821	104	.090
Preparing food	0.00	0.000	18	1.81	0.087	23	.383
Attending class	11.06	0.340	110	17.17	0.498	131	.276
Doing housework	8.33	0.233	15	15.65	0.372	41	.481
Telephone	8.53	0.359	42	13.83	0.583	53	.607
Computer/internet/ email	2.27	0.151	44	17.44	0.606	65	.107
Worship/prayer/ meditation	7.50	0.237	10	6.67	0.258	15	.936
Relaxing	5.10	0.260	111	17.07	0.664	104	.080
Commuting	7.43	0.284	102	7.14	0.157	127	.923
Personal care	5.27	0.434	68	8.49	0.223	106	.527
Exercising	19.23	0.980	26	0.00	0.000	16	.440
Shopping	0.00	0.000	11	0.50	0.194	15	.403
Watching television	0.00	0.000	86	10.38	0.486	106	.049*
Socializing	0.69	0.083	145	4.26	0.270	170	.126
Eating	0.00	0.000	102	4.29	0.214	132	.045*
Leisure	0.00	0.000	20	0.20	0.060	25	.146
Intimate relations	0.00	0.000	11	0.00	0.000	8	.000
Child care	0.00	0.000	2	0.00	0.000	2	.000
Nap/resting	20.77	0.611	69	28.70	0.893	81	.534
Other activity[a]	17.11	0.382	19	25.00	0.579	31	.601

*$p \le .05$; **$p \le .01$; ***$p \le .001$

[a]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified

Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted

U Index by Activity, Continued

Activity	European Americans						p value, EA Men/ EA Women Difference
	European American Men			European American Women			
						n	
	M	SD	n Episodes	M	SD	Episodes	
Employment	16.67	0.644	36	38.68	1.212	53	.321
Studying/academic work	24.50	0.635	100	28.56	0.799	131	.677
Preparing food	22.29	0.669	43	37.88	1.223	33	.480
Attending class	26.87	0.558	111	16.05	0.494	108	.130
Doing housework	10.00	0.353	25	13.89	0.370	36	.683
Telephone	11.36	0.374	33	14.74	0.592	39	.778
Computer/internet/ email	7.29	0.472	96	9.76	0.356	99	.680
Worship/prayer/ meditation	0.00	0.000	15	25.00	0.461	11	.045*
Relaxing	5.30	0.275	129	8.04	0.317	141	.451
Commuting	5.91	0.187	110	11.05	0.470	144	.279
Personal care	8.65	0.318	53	8.87	0.246	77	.963
Exercising	6.79	0.353	27	0.00	0.000	21	.384
Shopping	21.87	0.619	8	7.41	0.217	18	.380
Watching television	5.37	0.273	104	11.97	0.364	103	.141
Socializing	6.26	0.388	181	11.32	0.507	187	.284
Eating	6.34	0.298	138	8.61	0.390	152	.581
Leisure	0.00	0.000	39	19.23	0.693	13	.083
Intimate relations	0.00	0.000	17	0.00	0.000	18	.000
Nap/resting	23.40	0.693	68	17.88	0.537	62	.615
Child care	0.00	0.000	0	75.00	2.372	10	.000
Other activity[a]	3.89	0.129	15	14.32	0.342	57	.252

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$

[a]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified

Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted

U Index by Activity, Continued

Activity	Men			Women			p value, Men/Women Difference
	M	SD	n Episodes	M	SD	n Episodes	
Employment	9.68	0.494	63	33.15	1.110	92	.120
Studying/academic work	17.74	0.536	184	27.45	0.807	235	.165
Preparing food	15.71	0.569	66	23.06	0.952	56	.610
Attending class	19.00	0.468	229	16.66	0.496	244	.604
Doing housework	9.37	0.311	43	14.82	0.369	78	.426
Telephone	9.78	0.363	77	14.22	0.584	93	.566
Computer/internet/ email	5.71	0.400	145	12.80	0.471	165	.162
Worship/prayer/ meditation	3.00	0.150	25	14.42	0.362	26	.150
Relaxing	5.21	0.268	251	11.87	0.496	246	.067
Commuting	6.64	0.239	215	9.22	0.359	275	.367
Personal care	6.75	0.386	122	8.65	0.238	184	.596
Exercising	12.89	0.727	56	0.00	0.000	37	.284
Shopping	9.21	0.401	19	6.31	0.204	33	.731
Watching television	2.94	0.204	196	11.16	0.429	209	.017*
Socializing	3.78	0.295	333	7.96	0.413	361	.132
Eating	3.65	0.228	252	6.60	0.320	285	.232
Leisure	0.00	0.000	59	7.89	0.406	38	.138
Intimate relations	0.00	0.000	28	0.00	0.000	26	.000
Nap/resting	22.08	0.651	138	24.01	0.759	145	.820
Child care	0.00	0.000	2	62.50	2.165	13	.700
Other activity[a]	11.27	0.302	34	18.08	0.440	88	.409

*p≤.05; **p≤.01; ***p≤.001

[a]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified

Note: The U index is the proportion of time that the predominant emotion is negative, and as such, is duration-weighted

ACTIVITY DURATION

Activity	M Total Time Allocated to Activity	SD	M Episode Duration[a]	SD	n Episodes	Percent of the Day Spent in Activity[b]
Activity Duration						
			Total Sample			
Socializing	5.101	3.653	1.631	1.294	694	33.6
Employment	3.866	1.994	2.539	1.747	155	25.1
Child care	3.835	2.413	1.972	1.969	15	21.0
Studying/academic work	3.807	2.602	1.752	1.226	419	24.9
Relaxing	3.755	2.799	1.540	1.249	497	25.4
Watching television	3.425	2.311	1.587	1.282	405	22.6
Computer/internet/ email	3.039	2.389	1.705	1.406	310	21.0
Attending class	2.732	1.417	1.285	0.706	473	18.3
Eating	2.502	2.109	1.169	1.124	537	17.5
Leisure[c]	2.431	1.865	1.756	1.243	97	16.3
Telephone	2.207	1.896	1.461	1.372	170	15.9
Nap/resting	2.115	1.666	1.437	1.298	283	14.7
Intimate relations	1.916	1.532	1.768	1.392	54	13.1
Commuting	1.844	2.097	0.686	0.862	490	13.3
Exercising	1.758	1.115	1.404	1.000	93	12.3
Doing housework	1.743	1.333	1.307	1.106	121	11.7
Worship/prayer/ meditation	1.645	1.463	1.173	1.170	51	11.8
Preparing food	1.497	1.716	1.137	1.025	122	11.1
Shopping	1.217	0.834	1.049	0.940	52	8.2
Other activity[d]	1.095	0.968	0.906	0.740	153	8.5
Personal care[e]	0.986	0.779	0.625	0.518	306	6.6

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.
[b]=This column does not total 100% due to multiple activities per episode; [c]=reading for pleasure, playing games, listening to music, etc.
[d]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified
[e]=shower, dressing, personal hygiene, brushing teeth, etc.

Activity Duration

Activity	African American Total					European American Total					p value, AA/EA Difference, Activity Duration
	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	
Socializing	4.962	3.678	1.732	1.444	322	5.229	3.627	1.544	1.143	372	.057
Employment	3.945	1.973	2.757	1.955	66	3.808	2.008	2.377	1.567	89	.239
Child care	2.031	0.999	2.062	1.181	4	4.947	2.360	1.939	2.237	11	.000***
Studying/ academic work	3.358	2.481	1.822	1.443	184	4.236	2.643	1.698	1.024	235	.000***
Relaxing	3.677	2.766	1.685	1.389	216	3.820	2.825	1.429	1.120	281	.206
Watching television	3.300	2.336	1.661	1.470	193	3.549	2.280	1.524	1.083	212	.008**
Computer/ internet/ email	2.872	2.463	1.952	1.608	109	3.160	2.327	1.570	1.268	201	.007**
Attending class	2.664	1.480	1.203	0.744	248	2.800	1.349	1.375	0.650	225	.011*
Eating	2.355	2.138	1.214	1.244	240	2.636	2.073	1.132	1.017	297	.000***
Leisure[b]	2.353	1.722	1.866	1.310	45	2.499	1.980	1.660	1.186	52	.257
Telephone	2.309	2.128	1.562	1.541	98	2.077	1.542	1.324	1.096	72	.029*
Nap/resting	2.294	1.853	1.506	1.373	151	1.937	1.434	1.357	1.208	132	.000***
Intimate relations	2.172	1.804	1.938	1.809	19	1.766	1.327	1.676	1.124	35	.002**
Commuting	1.788	2.447	0.714	0.997	232	1.896	1.712	0.660	0.721	258	.221
Exercising	2.088	1.246	1.537	1.104	43	1.542	0.962	1.290	0.898	50	.000***
Doing housework	1.785	1.349	1.393	1.216	57	1.705	1.317	1.230	1.001	64	.307
Worship/prayer/ meditation	1.591	1.695	1.330	1.504	25	1.711	1.120	1.022	0.720	26	.385
Preparing food	1.326	1.386	1.101	1.053	41	1.594	1.873	1.155	1.017	81	.015*
Shopping	1.339	1.000	1.352	1.118	26	0.916	0.554	0.750	0.600	26	.000***
Other activity[c]	1.261	1.004	0.871	0.793	51	0.753	0.796	0.931	0.704	73	.002**
Personal care[d]	0.970	0.896	0.567	0.573	174	1.002	0.637	0.701	0.427	132	.301

*$p \leq .05$; **$p \leq .01$; ***$p \leq .001$
[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.
[b]=reading for pleasure, playing games, listening to music, etc.
[c]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified
[d]=shower, dressing, personal hygiene, brushing teeth, etc.

Activity Duration, Continued

| | African Americans | | | | | | | | | | p value, AA Men/ AA Women Difference, Activity Duration |
| | African American Men | | | | | African American Women | | | | | |
Activity	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	
Socializing	5.600	3.932	1.925	1.602	149	4.457	3.382	1.565	1.273	173	.000***
Employment	3.747	1.534	2.620	1.877	27	4.084	2.221	2.852	2.026	39	.058
Child care	2.219	0.807	2.291	1.119	2	1.755	1.205	1.833	1.650	2	.168
Studying/academic work	3.364	2.407	1.847	1.466	80	3.354	2.535	1.802	1.431	104	.942
Relaxing	4.276	3.058	1.718	1.534	111	3.211	2.419	1.651	1.224	105	.000***
Watching television	3.730	2.584	1.848	1.792	87	2.992	2.088	1.507	1.126	106	.000***
Computer/ internet/email	3.594	2.707	2.445	1.863	44	2.438	2.195	1.619	1.324	65	.000***
Attending class	2.613	1.276	1.170	0.831	113	2.702	1.613	1.230	0.665	135	.272
Eating	2.523	2.534	1.378	1.415	107	2.226	1.767	1.082	1.075	133	.009**
Leisure[b]	2.909	2.106	2.058	1.470	20	1.978	1.281	1.713	1.175	25	.000***
Telephone	3.111	2.759	1.934	1.794	44	1.831	1.446	1.259	1.235	54	.000***
Nap/resting	2.455	1.815	1.504	1.379	69	2.175	1.872	1.508	1.376	82	.010**
Intimate relations	2.255	1.954	1.712	1.896	11	2.072	1.611	2.250	1.758	8	.461
Commuting	1.957	2.931	0.786	1.128	103	1.665	2.018	0.657	0.879	129	.052
Exercising	2.227	1.343	1.682	1.179	27	1.862	1.033	1.292	0.949	16	.010**
Doing housework	1.740	1.255	1.622	1.493	15	1.803	1.386	1.311	1.109	42	.621
Worship/prayer/ meditation	1.801	1.984	1.691	1.884	10	1.452	1.466	1.089	1.201	15	.115
Preparing food	1.677	1.949	1.213	1.193	18	1.122	0.851	1.014	0.947	23	.000***
Shopping	1.199	0.885	1.318	1.089	11	1.461	1.079	1.378	1.177	15	.025*
Other activity[c]	1.806	0.883	0.969	0.818	19	0.402	0.398	0.812	0.758	32	.000***
Personal care[d]	0.868	0.891	0.518	0.651	68	1.029	0.893	0.599	0.518	106	.002**

*p≤.05; **p≤.01; ***p≤.001
[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.
[b]=reading for pleasure, playing games, listening to music, etc.
[c]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified
[d]=shower, dressing, personal hygiene, brushing teeth, etc.

Activity Duration, Continued

Activity	European American Men					European American Women					p value, EA Men/EA Women Difference, Activity Duration
	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	
Socializing	5.242	3.318	1.611	1.136	184	5.217	3.908	1.477	1.149	188	.897
Employment	3.611	2.185	2.532	1.433	36	3.904	1.880	2.272	1.657	53	.120
Child care	0.000	0.000	0.000	0.000	0	4.947	2.360	1.939	2.237	11	--
Studying/academic work	3.891	2.533	1.736	0.905	104	4.548	2.703	1.667	1.112	131	.000***
Relaxing	3.579	2.368	1.450	1.178	140	4.065	3.207	1.408	1.064	141	.002**
Watching television	3.977	2.369	1.696	1.256	109	3.151	2.121	1.342	0.830	103	.000***
Computer/internet/ email	3.568	2.555	1.829	1.430	101	2.756	1.998	1.309	1.022	100	.000***
Attending class	2.687	1.317	1.379	0.659	116	2.914	1.373	1.371	0.644	109	.002**
Eating	2.707	2.119	1.214	1.102	145	2.570	2.029	1.054	0.925	152	.189
Leisure[b]	2.622	2.244	1.637	1.286	39	2.202	1.054	1.731	0.857	13	.041*
Telephone	2.291	1.757	1.568	1.247	33	1.877	1.282	1.117	0.916	39	.001***
Nap/resting	1.999	1.556	1.372	1.303	69	1.881	1.315	1.341	1.106	63	.159
Intimate relations	2.040	1.335	1.941	1.277	17	1.538	1.280	1.426	0.925	18	.000***
Commuting	1.829	1.797	0.737	0.825	112	1.953	1.635	0.601	0.627	146	.216
Exercising	1.620	1.021	1.296	0.974	29	1.451	0.883	1.282	0.805	21	.050*
Doing housework	1.889	1.391	1.396	0.951	28	1.574	1.249	1.102	1.033	36	.004**
Worship/prayer/ meditation	1.400	0.701	0.855	0.580	15	2.145	1.403	1.250	0.851	11	.000***
Preparing food	1.745	2.090	1.196	0.916	48	1.422	1.574	1.096	1.160	33	.026*
Shopping	1.000	0.746	0.969	0.908	8	0.882	0.448	0.648	0.396	18	.095
Other activity[c]	1.340	0.760	1.167	0.766	16	0.166	0.000	0.865	0.678	57	.000***
Personal care[d]	0.862	0.495	0.697	0.496	54	1.104	0.707	0.703	0.376	78	.000***

*p≤.05; **p≤.01; ***p≤.001

[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.

[b]=reading for pleasure, playing games, listening to music, etc.

[c]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified

[d]=shower, dressing, personal hygiene, brushing teeth, etc.

Activity Duration, Continued

	Men					Women					p value, Men/Women Difference, Activity Duration
Activity	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	M Total Time Allocated to Activity[a]	SD	M Episode Duration[a]	SD	n Episodes	
Socializing	5.403	3.611	1.752	1.371	333	4.834	3.671	1.519	1.209	361	.000***
Employment	3.698	1.929	2.570	1.624	63	3.979	2.030	2.518	1.834	92	.017*
Studying/academic work	3.651	2.489	1.785	1.179	184	3.934	2.684	1.727	1.262	235	.008**
Relaxing	3.871	2.700	1.569	1.351	251	3.651	2.882	1.512	1.139	246	.052
Watching television	3.862	2.473	1.764	1.515	196	3.067	2.104	1.425	0.993	209	.000***
Computer/internet / email	3.577	2.608	2.016	1.593	145	2.606	2.098	1.431	1.156	165	.000***
Attending class	2.653	1.298	1.276	0.755	229	2.801	1.509	1.293	0.658	244	.006**
Eating	2.624	2.317	1.284	1.245	252	2.398	1.910	1.067	0.996	285	.004**
Leisure[b]	2.717	2.201	1.779	1.354	59	2.059	1.207	1.719	1.065	38	.000***
Telephone	2.698	2.342	1.777	1.584	77	1.849	1.383	1.120	1.109	93	.000***
Nap/resting	2.215	1.698	1.438	1.338	138	2.034	1.635	1.435	1.264	145	.009**
Intimate relations	2.129	1.619	1.851	1.520	28	1.713	1.417	1.679	1.264	26	.001***
Child care	2.219	0.807	2.291	1.119	2	4.308	2.524	1.923	2.097	13	.000***
Commuting	1.887	2.384	0.761	0.980	215	1.810	1.840	0.627	0.755	275	.381
Exercising	1.880	1.207	1.482	1.085	56	1.595	0.957	1.286	0.858	37	.000***
Doing housework	1.831	1.340	1.475	1.156	43	1.694	1.327	1.215	1.073	78	.094
Worship/prayer/ meditation	1.577	1.446	1.190	1.305	25	1.707	1.479	1.157	1.051	26	.349
Preparing food	1.726	2.049	1.201	0.990	66	1.291	1.316	1.062	1.069	56	.000***
Shopping	1.121	0.838	1.171	1.006	19	1.130	0.833	0.980	0.908	33	.902
Other activity[c]	1.674	0.871	1.059	0.790	35	0.311	0.331	0.846	0.715	89	.000***
Personal care[d]	0.865	0.710	0.597	0.592	122	1.064	0.811	0.643	0.465	184	.000***

*p≤.05; **p≤.01; ***p≤.001
[a]=One hour is equivalent to 1.0, half an hour is equivalent to .5, and so on.; [b]=reading for pleasure, playing games, listening to music, etc.
[c]=attending meetings, running errands, preparing/planning, health care, waiting, legal business, pet care, volunteer work, other unspecified
[d]=shower, dressing, personal hygiene, brushing teeth, etc.

REFERENCES

ACE: *Minorities in higher education twenty-second annual status report*. Washington, DC: American Council on Education.

Adan, A.M., & Felner, R.D. (1995). Ecological congruence and adaptation of minority youth during the transition to college. *Journal of Community Psychology, 23,* 256-269.

Allen, W.R. (1985). Black student, White campus: Structural, interpersonal, and psychological correlates of success. *The Journal of Negro Education, 54*(2), 134-147.

Allen, W.R. (1992). The color of success: African-American college student outcomes at predominantly White and historically Black public colleges and universities. *Harvard Educational Review, 62*(1), 26-44.

Allen, J.G., & Haccoun, D.M. (1976). Sex differences in emotionality: A multi-dimensional approach. *Human Relations, 29,* 711-722.

Allen, W.R., & Haniff, N.Z. (1991). Race, gender, and academic performance in U.S. higher education. In W.R. Allen, E. Epps, & N.Z. Haniff (Eds.), *College in black and white: African American students in predominantly White and in historically Black public universities* (pp. 95-109). Albany, NY: State University of New York Press.

American Time Use Survey (2003-2007). Retrieved March 7, 2009, from http://www.bls.gov/tus/home.htm

Andrews, F.M., & Whithey, S.B. (1976). *Social indicators of well-being: Americans' perceptions of life quality.* New York: Plenum.

Antonio, A.L., Chang, M.J., Hakuta, K., Kenny, D.A., Levin, S., & Milem, J.F. (2004). Effects of racial diversity on complex thinking in college students. *Psychological Science, 15*(8), 507-510.

Ariely, D., & Loewenstein, G. (2000). When does duration matter in judgment and decision making? *Journal of Experimental Psychology, 129*(4), 524-529.

Aronson, J. (2002). Stereotype threat: Contending and coping with unnerving expectations. In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors on education* (pp. 279-301). San Diego, CA: Academic Press.Association of American Colleges & Universities (AAC&U). (2002). *Greater Expectations National Panel Report.* Washington, DC: Association of American Colleges & Universities (AAC&U).

Association of American Colleges and Universities. (2002). *Greater expectations: A new vision for learning as a nation goes to college.* Washington, DC: Association of American Colleges and Universities.

Astin, A.W. (1982). *Minorities in American higher education.* San Francisco, CA: Jossey-Bass.

Awad, G.H. (2007). The role of racial identity, academic self-concept, and self-esteem in the prediction of academic outcomes for African American students. *Journal of Black Psychology, 33*(2), 188-207.

Axinn, W.G., Pearce, L.D., & Ghimire, D. (1999). Innovations in life history calendar applications. *Social Science Research, 28,* 243-264.

Banks, K.H., & Kohn-Wood, L.P. (2007). The influence of racial identity profiles on the relationship between racial discrimination and depressive symptoms. *Journal of Black Psychology, 33*(3), 331-354.

Banning, J.H. (1989). Impact of college environments on freshmen students. In M.L. Upcraft & J.N. Gardner (Eds.), *The freshman year experience: Helping students survive and succeed in college* (pp. 53-62). San Francisco: Jossey-Bass.

Battalora, J. (2002). Whiteness: The workings of an ideology in American society and culture. In R.R. Reuther (Ed.), *Gender, ethnicity, and religion: Views from the other side* (pp. 3-23). Minneapolis, MN: Fortress Press.

Baum, S., & Ma, J. (2007). *Education pays: The benefits of higher education for individuals and society.* Washington, DC: College Board.

Baxter Magolda, M. (1992). *Knowing and reasoning in college: Gender-related patterns in students' intellectual development.* San Francisco: Jossey-Bass.

Bean, J.P., & Eaton, S.B. (2000). A psychological model of college student retention. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 48-61). Nashville: Vanderbilt University Press.

271

Beatty, P., & Herrmann, D. (2002). To answer or not to answer: Decision processes related to survey item nonresponse. In R. Groves, D. Dillman, J. Eltinge, & R. Little (Eds.), *Survey nonresponse* (pp. 71-85). New York: Wiley.

Belli, R.F. (1998). The structure of autobiographical memory and the event history calendar: Potential improvements in the quality of retrospective reports in surveys. *Memory, 6*(4), 383-406.

Bennett, C. (1984). Interracial contact experience and attrition among Black undergraduates at a predominantly White university. *Theory and Research in Social Education, 2,* 19-47.

Bernardi, R.A. (2006). Associations between Hofstede's cultural constructs and social desirability response. *Journal of Business Ethics, 65,* 46-56.

Bernardi, R.A., & Guptill, S.T. (2008). Social desirability response bias, gender, and factors influencing organizational commitment. *Journal of Business Ethics, 81,* 797-809.

Bevans, G.E. (1913). *How working men spend their spare time.* New York: Columbia University Press.

Biasco, F., Goodwin, E.A., & Vitale, K.L. (2001). College students' attitudes toward racial discrimination. *College Student Journal, 35*(4), 523-528.

Blanchflower, D.G., & Oswald, A.J. (2004). Well-being over time in Britain and the USA. *Journal of Public Economics, 88*, 1359-1386.

Bonner II, F.A., & Bailey, K.W. (2006). Enhancing the academic climate for African American college men. In M.J. Cuyjet (Ed.), *African American college men* (pp. 24-46). San Francisco: Jossey-Bass.

Booker, K.C. (2007). Perceptions of classroom belongingness among African American college students. *College Student Journal, 41*(1), 178-186.

Borkenau, P., & Amelang, M. (1985). The control of social desirability in personality inventories: A study using the principal-factor deletion technique. *Journal of Research in Personality, 19,* 44-53.

Botts, T. M. (2001). *The effects of psychosocial factors on the academic performance of African American students attending a predominantly White regional university.* Unpublished dissertation, University of Kentucky, Lexington, KY.

Bowen, H.R. (1997). *Investment in learning: The individual and social value of American higher education.* Baltimore: Johns Hopkins Press.

Brewer, W.F. (1994). Autobiographical memory and survey research. In S. Sudman (Ed.), *Autobiographical memory and the validity of retrospective reports* (pp. 11-20). New York: Springer-Verlag.

Brickman, P., & Campbell, D.T. (1971). Hedonic relativism and planning the good society. In M.H. Appley (Ed.), *Adaptation-level theory* (pp. 281-305). New York: Academic Press.

Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology, 36*(8), 917-927.

Brody, L.R., & Hall, J.A. (1993). Gender and emotion. In M. Lewis & J.M. Haviland (Eds.), *Handbook of emotions* (pp. 447-460). New York: Guilford Press.

Bronfenbrenner, U. (1979). *The ecology of human development.* Cambridge, MA: Harvard University Press.

Cabrera, A.F., Nora, A., Terenzini, P.T., Pascarella, E., & Hagedorn, L.S. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African-American students. *The Journal of Higher Education, 70*(2), 134-160.

Cannell, C.F., Fisher, G., & Bakker, T. (1965). *Reporting of hospitalization in the Health Interview Survey.* Washington, DC: U.S. Government Printing Office.

Carstensen, L.L., Pasupathi, M., Mayr, U., & Nesselroade, J.R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality and Social Psychology, 79*(4), 644-655.

Carter, D.F. (1999). The impact of institutional choice and environments on African American and White students' degree expectations. *Research in Higher Education, 40*(1), 17-41.

Carter, D.F. (2002). College students' degree aspirations: A theoretical model and literature review with a focus on African American and Latino students. In J.C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 17, pp. 129-172). New York: Agathon Press.

Carter, D.F. (2006). Key issues in the persistence of underrepresented minority students. *New Directions for Institutional Research, 130*, 33-46.

Cattell, R.B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research, 1,* 245-276.

Chang, M.J. (1996). *Racial diversity in higher education: Does a racially mixed student population affect educational outcomes?* Unpublished dissertation. Los Angeles: University of California.

Chang, M.J. (2001). Is it more than about getting along? The broader educational relevance of reducing students' racial biases. *Journal of College Student Development, 42*(2), 93-105.

Chang, M.J. (2005). Reconsidering the diversity rationale. *Liberal Education, 91*(1), 6-13.

Chang, M.J., Witt, D., Jones, J., & Hakuta, K. (Eds.). (2003). *Compelling interest: Examining the evidence on racial dynamics in colleges and universities.* Stanford, CA: Stanford University Press.

Charles, S.T., & Pasupathi, M. (2003). Age-related patterns of variability in self-descriptions: Implications for everyday affective experience. *Psychology and Aging, 18*(3), 524-536.

Chavous, T.M. (2005). An intergroup contact-theory framework for evaluating racial climate on predominantly white college campuses. *American Journal of Community Psychology, 36*(3/4), 239-257.

Chavous, T. M., Bernat, D. H., Schmeelk-Cone, K., Caldwell, C. H., Kohn-Wood, L., & Zimmerman, M. A. (2003). Racial identity and academic attainment among African American adolescents. *Child Development, 74*(4), 1076-1090.

Chavous, T.M., Green, L., Helaire, L., & Rivas, D. (2002). Role of student background, perceptions of ethnic fit, and racial identification in the academic adjustment of African American students at a predominantly White university. *The Journal of Black Psychology, 28*(3), 234-260.

Cheatham, H.E. (1991). Identity development in a pluralistic society. In H.E. Cheatham (Ed.), *Cultural pluralism on campus* (pp. 23-38). Lanham, MD: University Press of America.

Chen, P.Y., & Spector, P.E. (1991). Negative affectivity as the underlying cause of correlations between stressors and strains. *Journal of Applied Psychology, 7,* 398-407.

Chickering, A.W., & Reisser, L. (1993). *Education and identity* (2nd ed.). San Francisco: Jossey-Bass.

Church, A.H. (1993). Estimating the effect of incentives on mail survey response rates: A meta-analysis. *Public Opinion Quarterly, 57,* 62-79.

Clark, L.F., Collins, J.E., & Henry, S.M. (1994). Biasing effects of retrospective reports on current self-assessments. In S. Sudman (Ed.), *Autobiographical memory and the validity of retrospective reports* (pp. 291-304). New York: Springer-Verlag.

Cokley, K.O. (2001). Gender differences among African American students in the impact of racial identity on academic psychosocial development. *Journal of College Student Development, 42*(5), 480-487.

Cokley, K.O., & Moore, P. (2007). Moderating and mediating effects of gender and psychological disengagement on the academic achievement of African American college students. *Journal of Black Psychology, 33*(2), 169-187.

Constantine, M. G., Richardson, T. Q., Benjamin, E. M., & Wilson, J. W. (1998). An overview of Black racial identity theories: Limitations and considerations for future theoretical conceptualizations. *Applied & Preventive Psychology, 7*, 95-99.

Cooley, C.H. (1902). *Human nature and the social order.* New York: Scribners.

Crocker, J. (2002). Contingencies of self-worth: Implications for self-regulation and psychological vulnerability. *Self and Identity, 1*, 143-149.

Crocker, J., Karpinski, A., Quinn, D.M., & Chase, S.K. (2003). When grades determine self-worth: Consequences of contingent self-worth for male and female engineering and psychology majors. *Journal of Personality and Social Psychology, 85*(3), 507-516.

Crocker, J., Luhtanen, R.K., Cooper, M.L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology, 85*(5), 894-908.

Crocker, J., & Park, L.E. (2004). The costly pursuit of self-esteem. *Psychological Bulletin, 130*(3), 392-414.

Cross, W.E. (1971). Negro-to-Black conversion experience. *Black World, 20,* 13-26.

Cross, W. E., Parham, T. A., & Helms, J. E. (1998). Nigrescence revisited: Theory and research. In R. L. Jones (Ed.), *African American identity development* (pp. 3-71). Hampton, VA: Cobb & Henry Publishers.

Cuyjet, M.J. (2006). African American college men: Twenty-first century issues and concerns. In M.J. Cuyjet (Ed.), *African American men in college* (pp. 3-23). San Francisco: Jossey-Bass.

D'Augelli, A.R.D., & Herschberger, S.L. (1993). African American undergraduates on a predominantly White campus: Acadamic factors, social networks, and campus climate. *The Journal of Negro Education, 62*(1), 67-81.

Davis, J.E. (1994). College in Black and White: Campus environment and academic achievement of African American males. *The Journal of Negro Education, 63*(4), 620-633.

Davis, J.E. (1998). *Campus climate, gender, and achievement of African American college students* [online journal]. University of Michigan. Retrieved January 26, 2004, from the World Wide Web: http://rcgd.isr.umich.edu/prba/perspectives/index.htm.

Davis, R.D. (2004). *Black students' perceptions: The complexity of persistence to graduation at an American university.* New York: Peter Lang.

DeSousa, D.J., & Kuh, G.D. (1996). Does institutional racial composition make a difference in what Black students gain from college? *Journal of College Student Development, 37*(3), 257-267.

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*(1), 34-43.

Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75.

Diener, E., & Lucas, R.E. (1999). Personality and subjective well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 213-229). New York: Russell Sage Foundation.

Diener, E., & Oishi, S. (2005). The nonobvious social psychology of happiness. *Psychological Inquiry, 16*(4), 158-161.

Diener, E., Sandvik, E., & Larsen, R.J. (1985). Age and sex effects for emotional intensity. *Developmental Psychology, 21,* 542-546.

Diener, E., Sandvik E., Pavot W., & Fujita, F. (1992). Extraversion and subjective well-being in a U.S. national probability sample. *Journal of Research in Personality, 26,* 205-215.

Diener, E., Suh, E., Lucas, R.E., & Smith, H.L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276-302.

Douglass, J.A. (2007). *The conditions for admission: Access, equity, and the social contract of public universities.* Stanford, CA: Standard University Press.

Dow, G.K., & Juster, F.T. (1985). Goods, time, and well-being: The joint dependence problem. In F.T. Juster & F.P. Stafford (Eds.), *Time, goods, and well-being* (pp. 397-413). Ann Arbor, MI: University of Michigan.

Duncan, O. (1975). Does money buy satisfaction? *Social Indicators Research, 2,* 267-274.

Easterlin, R.A. (1974). Does economic growth improve the human lot? Some empirical evidence. In P.A. David & M.W. Reder (Eds.), *Nations and households in economic growth* (pp. 89-125). New York: Academic Press.

Easterlin, R.A. (2000). Life cycle welfare: Trends and differences. *Journal of Happiness Studies, 2,* 1-12.

Edgeworth, F. (1881/1967). *Mathematical psychics: An essay on the application of mathematics to the moral sciences.* New York: M. Kelly.

Edwards, A.L. (1957). *The social desirability variable in personality assessment and research.* New York: Dryen Press.

Engberg, M.E. (2004). *Educating the workforce for the 21st century: The impact of diversity on undergraduate students' pluralistic orientation.* Ann Arbor, MI: University of Michigan.

Erikson, E. (1946). Ego development and historical change. *Psychoanalytic Study of the Child, 2,* 359-396.

Erikson, E. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association, 4,* 56-121.

Erikson, E. (1978). *Adulthood.* New York: Norton.

Feagin, J.R. (1992). The continuing significance of racism: Discrimination against Black students in White colleges. *Journal of Black Studies, 22*(4), 546-578.

Feagin, J.R., Vera, H., & Imani, N. (1996). *The agony of education: Black students at White colleges and universities.* New York: Routledge.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Sage: London.

Feldman Barrett, L., Robin, L., Pietromonaco, P.R., & Eyssell, K.M. (1998). Are women the "more emotional" sex? Evidence from emotional experiences in social context. *Cognition and Emotion, 12,* 555-578.

Fischer, M.J. (2007). Settling into campus life: Differences by race/ethnicity in college involvement and outcomes. *Journal of Higher Education, 78*(2), 125-161.

Fleming, J. (1984). *Blacks in college: A comparative study of students' success in Black and White institutions.* San Francisco: Jossey-Bass.

Fleming, J. (1996). Black women in black and white college environments: The making of a matriarch. In C. Turner, M. Garcia, A. Nora, & L.I. Rendón (Eds.), *Racial and ethnic diversity in higher education* (pp. 223-232). Needham Heights, MA: Simon & Schuster.

Foster, K.M. (2005). Diet of disparagement: The racial experiences of black students in a predominantly white university. *International Journal of Qualitative Studies in Education, 18*(4), 489-505.

Frable, D.E.S., Platt, L., & Hoey, S. (1998). Concealable stigmas and positive self-perceptions: Feeling better around similar others. *Journal of Personality and Social Psychology, 74*(4), 909-922.

Frazis, H., & Stewart, J. (2004). What can time-use data tell us about hours of work? *Monthly Labor Review, 127*(12), 3-9.

Fredrickson, B.L., & Kahneman, D. (1993). Duration neglect in retrospective evaluations of affective episodes. *Journal of Personality and Social Psychology, 65,* 45-55.

Fujita, F., Diener, E., & Sandvik, E. (1991). Gender differences in negative affect and well-being: The case for emotional intensity. *Journal of Personality and Social Psychology, 61,* 427-434.

Gershuny, J., & Halpin, B. (1996). Time use, quality of life, and process benefits. In A. Offer (Ed.), *In pursuit of the quality of life* (pp. 188-210). Oxford, UK: Oxford University Press.

Gilbert, D. (2006). *Stumbling on happiness.* New York: Knopf.

Gilliard, M.D. (1996). *Racial climate and institutional support factors affecting success in predominantly White institutions: An examination of African American and White student experiences.* Unpublished dissertation. University of Michigan, Ann Arbor, MI.

278

Gloria, A.M., Kurpius, S.E.R., Hamilton, K.D., & Wilson, M.S. (1999). African American students' persistence at a predominantly White university: Influences of social support, university comfort, and self-beliefs. *Journal of College Student Development, 40*(3), 257-268.

Gorin, A.A., & Stone, A.A. (2001). Recall biases and cognitive errors in retrospective self-reports: A call for momentary assessments. In J.E. Singer (Ed.), *Handbook of health psychology* (pp. 405-413). Mahwah, NJ: Erlbaum.

Graham, C., Baker, R.W., & Wapner, S. (1985). Prior interracial experience and Black student transition into predominantly White colleges. *Journal of Personality and Social Psychology, 47*(5), 1146-1154.

Greenberg, L. L. (1997). *Racial identity development and academic achievement in black and white college students.* Unpublished dissertation, Rutgers University, New Brunswick, NJ.

Grutter v. Bollinger. 2003. 539 U.S. 306.

Gudeman, R.H. (2000). Does diversity make a difference? *Three research studies on diversity in college classrooms* (pp. 37-60). Washington, DC: American Council on Education and American Association of University Professors.

Gurin, P. (1999). Expert report of Patricia Gurin. In *The Compelling Need for Diversity in Higher Education, Gratz et al. v. Bollinger, et al.,* No. 97-7321 (E.D. Mich) *Grutter et al. v. Bollinger, et al.,* No. 97-75928 (E.D. Mich). Ann Arbor: University of Michigan.

Gurin, P., Dey, E.L., Gurin, G., & Hurtado, S. (2003). How does racial/ethnic diversity promote education? *Western Journal of Black Studies, 27*(1), 20-29.

Gurin, P., Dey, E.L., Gurin, G., & Hurtado, S. (2004). The educational value of diversity. In P.Gurin et al., *Defending diversity: Affirmative action at the University of Michigan* (pp. 97-188.

Gurin, P., Dey, E.L., Hurtado, S., & Gurin, G. (2002). Diversity and higher education: Theory and impact on educational outcomes. *Harvard Educational Review, 72*(3), 330-366.

Gurin, P., Gurin, G., Matlock, J., & Wade-Golden, K. (2008). Sense of commonality in values among racial-ethnic groups: An opportunity for a new conception of integration. In G. Adams, M. Biernat, N.R. Branscombe, C.S. Crandall, & L.S. Wrightsman (Eds.), *Commemorating Brown: The social psychology of racism and discrimination* (pp. 115-132). Washington, DC: American Psychological Association.

Gurin, P., Lehman, J.S., Lewis, E., Dey, E.L., Hurtado, S., & Gurin, G. (2004). *Defending diversity: Affirmative action at the University of Michigan.* Ann Arbor, MI: The University of Michigan Press.

Gurin, P., Miller, A.H., & Gurin, G. (1980). Stratum identification and consciousness. *Social Psychology Quarterly, 43*(1), 30-47.

Hackett, G., Betz, N.E., Casas, J.M., & Rocha-Singh, I.A. (1992). Gender, ethnicity, and social cognitive factors predicting the academic achievement of students in engineering. *Journal of Counseling Psychology, 39*(4), 527-538.

Hamrick, F.A., Evans, N.J., & Schuh, J.H. (2002). *Foundations of student affairs practice: How philosophy, theory, and research strengthen educational outcomes.* San Francisco: Jossey-Bass.

Harper, S.R., & Quaye, S.J. (2007). Student organizations as venues for black identity expression and development among African American male student leaders. *Journal of College Student Development, 48*(2), 127-144.

Harris, S.M., & Nettles, M.T. (1996). Ensuring campus climates that embrace diversity. In L.I. Rendón & R.O. Hope (Eds.), *Educating a new majority: Transforming America's educational system for diversity* (pp. 330-371). San Francisco: Jossey-Bass.

Harvey, A.S., & Pentland, W.E. (1999). Time use research. In W.E. Pentland, A.S. Harvey, M.P. Lawton, & M.A. McColl (Eds.), *Time use research in the social sciences* (pp. 3-18). New York: Kluwer Academic/Plenum Publishers.

Hattery, A., & Smith, E. (2007). *African American families.* Los Angeles: Sage Publications.

Henry, A. (2001). Researching curriculum and race. In W.H. Watkins, J.H. Lewis, & V. Chou (Eds.), *Race and education: The roles of history and society in educating African American students* (pp. 66-72). Boston: Allyn and Bacon.

Herrnstein, R.J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life.* New York: Simon & Schuster.

Hill, S.A. (2002). Teaching and doing gender in African American families. *Sex Roles, 47*(11), 493-507.

Hilliard, A.G. (2001). "Race," identity, hegemony, and education: What do we need to know now? In W.H. Watkins, J.H. Lewis, & V. Chou (Eds.), *Race and education: The roles of history and society in educating African American students* (pp. 7-33). Boston: Allyn and Bacon.

Hochschild, J.L. (1995). *Facing up to the American Dream: Race, class, and the soul of the nation.* Princeton, NJ: Princeton University Press.

Holland, J.L. (1966). *The psychology of vocational choice.* Waltham, MA: Blaisell.

Hood, D.W. (1992). Academic and noncognitive factors affecting the retention of Black men at a predominantly White university. *The Journal of Negro Education, 61*(1), 12-23.

Houston, M., & Davis, O.I. (Eds.). (2002). *Centering ourselves: African American feminist and womanist studies of discourse.* Cresskill, NJ: Hampton Press.

Hurtado, S. (1996). The campus racial climate: Contexts of conflict. In C. Turner, M. Garcia, A. Nora, & L.I. Rendón (Eds.), *Racial and ethnic diversity in higher education* (pp. 485-506). Needham Heights, MA: Simon & Schuster.

Hurtado, S. (2005). The next generation of diversity and intergroup relations research. *Journal of Social Issues, 61*(3), 595-610.

Hurtado, S., Carter, D.F., & Kardia, D. (1998). The climate for diversity: Key issues for institutional self-study. In K.W. Bauer (Ed.), Campus climate: Understanding the critical components of today's colleges and universities (pp. 53-64) *New Directions for Institutional Research, 98.*

Hurtado, S., Milem, J.F., Clayton-Pedersen, A.R., & Allen, W.R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education, 21*(3), 279-302.

Hyun, J.Y. (1986). *Time use, neighborhood quality of life, and sense of well-being of Americans.* Unpublished dissertation. Ann Arbor, MI: University of Michigan.

Igou, E.R., Bless, H., & Schwarz, N. (2002). Making sense of standardized survey questions: The influence of reference periods and their repetition. *Communication Monographs, 69*(2), 179-188.

Inglehart, R., & Klingemann, H. (2000). Genes, culture, democracy, and happiness. In E. Diener & E.M. Suh (Eds.), *Culture and subjective well-being* (pp. 165-183). Cambridge, MA: The MIT Press.

Jackson, B. W. (1976). *The functions of Black identity development theory in achieving relevance in education.* Unpublished dissertation, University of Massachusetts, Amherst, MA.

Jackson, K.W., & Swan, L.A. (1991). Institutional and individual factors affecting Black undergraduate student performance: Campus race and student gender. In W.R. Allen, E. Epps, & N.Z. Haniff (Eds.), *College in black and white: African American students in predominantly White and in historically Black public universities* (pp. 127-141). Albany, NY: State University of New York Press.

Jacobs, J.E., Vernon, M.K., & Eccles, J.S. (2004). Relations between social self-perceptions, time use, and prosocial or problem behaviors during adolescence. *Journal of Adolescent Research, 19*(1), 45-63.

Jayakumar, U. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review, 78*(4), 615-653.

Jensen, A.R. (1969). How much can we boost IQ and scholastic achievement? *Harvard Educational Review, 39*(1), 1-123.

Johnson, V.D. (2003). A comparison of European and African-based psychologies and their implications for African American college student development. *Journal of Black Studies, 33*(6), 817-829.

Jones, S.R. (1997). Voices of identity and difference: A qualitative exploration of the multiple dimensions of identity development in women college students. *Journal of College Student Development, 38,* 376-386.

Jones, S.R., & McEwen, M.K. (2000). A conceptual model of multiple dimensions of identity. *Journal of College Student Development, 41*(4), 405-414.

Juster, F.T. (1985). Conceptual and methodological issues involved in the measurement of time use. In F.T. Juster & F.P. Stafford (Eds.), *Time, goods, and well-being* (pp. 19-31). Ann Arbor, MI: University of Michigan.

Kahneman, D. (1999). Objective happiness. In D. Kahneman, E. Diener, & N. Schwarz (Ed.), *Well-being: The foundations of hedonic psychology* (pp. 3-25). New York: Russell Sage Foundation.

Kahneman, D., Diener, E., & Schwarz, N. (Eds.). (1999). *Well-being: The foundations of hedonic psychology.* New York: Russell Sage Foundation.

Kahneman, D., Fredrickson, B.L., Schreiber, C.A., & Redelmeier, D.A. (1993). When more pain is preferred to less: Adding a better end. *Psychological Science, 4,* 401-405.

Kahneman, D., & Krueger, A.B. (2006). Developments in the measurement of subjective well-being. *Journal of Economics Perspectives, 20*(1), 3-24.

Kahneman, D., Krueger, A.B., Schkade, D.A., Schwarz, N., & Stone, A.A. (2004a). A survey method for characterizing daily life experience: The Day Reconstruction Method (DRM). *Science, 306*(5702), 1776-1781.

Kahneman, D., Krueger, A.B., Schkade, D.A., Schwarz, N., & Stone, A.A. (2004b). Toward national well-being accounts. *AEA Papers and Proceedings, 94*(2), 429-434.

Kahneman, D., Krueger, A.B., Schkade, D.A., Schwarz, N., & Stone, A.A. (2006). Would you be happier if you were richer? A focusing illusion. *Science, 312,* 1908-1910.

Kahneman, D., & Riis, J. (2005). Living, and thinking about it: Two perspectives on life. In F. Huppert, B. Keverne, & N. Baylis (Eds.), *The science of well-being* (pp. 285-306). New York: Oxford University Press.

Kahneman, D., & Sugden, R. (2005). Experienced utility as a standard of policy evaluation. *Environmental and Resource Economics, 32*(1), 161-181.

Kaiser, H.F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement, 20,* 141-151.

Kaiser, C.R., Major, B., & McCoy, S.K. (2004). Expectations about the future and the emotional consequences of perceiving prejudice. *Personality and Social Psychology Bulletin, 30*(2), 173-184.

Kammann, R. & Flett, R. (1983). Affectometer 2: A scale to measure current level of happiness. *Australian Journal of Psychology, 35,* 259-265.

Kasser, T. (2002). *The high price of materialism.* Cambridge, MA: The MIT Press.

Kegan, R. (1994). *In over our heads: The mental demands of modern life.* Cambridge, MA: Harvard University Press.

Kelly, W.E., & Johnson, J.L. (2005). Time use efficiency and the five-factor model of personality. *Education, 125*(3), 511-515.

KewalRamani, A., Gilbertson, L., Fox, M., & Provasnick, S. (2007). *Statistics and trends in the education of racial and ethnic minorities* (NCES 2007-039). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.

Kim-Prieto, C., Diener, E., Tamir, M., Scollon, C., & Diener, M. (2005). Integrating the diverse definitions of happiness: A time-sequential framework of subjective well-being. *Journal of Happiness Studies, 6,* 261-300.

Kimball, M., & Willis, R. (2006). *Utility and happiness.* Manuscript in preparation.

King, P.M., & Baxter Magolda, M. (2001). *The development of intercultural maturity: Examining how facets of development are interrelated.* Paper prepared for the Annual Conference of the Association for the Study of Higher Education, November 16, 2001, Richmond, VA.

King, P.M., & Baxter Magolda, M. (2002). *Toward a developmental model of intercultural maturity: An holistic approach to collegiate education.* Paper prepared for the 10th International Improving Student Learning Symposium, September 5, 2002, Brussels, Belgium.

King, P.M., & Baxter Magolda, M. (2005). A developmental model of intercultural maturity. *Journal of College Student Development, 46*(6), 571-592.

King, P.M., & Kitchener, K.S. (1994). *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults.* San Francisco: Jossey-Bass.

King, P.M., & Shuford, B.A. (1996). A multicultural view is a more cognitively complex view. *The American Behavioral Scientist, 40*(2), 153-164.

Klein, S.B., German, T.P., Cosmides, L., & Gabriel, R. (2004). A theory of autobiographical memory: Necessary components and disorders resulting from their loss.

Knapp, L.G., Kelly, J.E., Whitmore, R.W., Wu, S., & Gallego, L.M. (2003). Postsecondary institutions in the United States: Fall 2001 and degrees and other awards conferred: 2000-01. *Educational Statistics Quarterly, 5*(2), 140-146.

Kneeland, H. (1929). Women's economic contribution in the home. *Annals of the American Academic of Political and Social Science, 143,* 33-40.

Krueger, A.B., Kahneman, D., Schkade, D., Schwarz, N., & Stone, A.A. (in press).*National time accounting: The currency of life.* Manuscript submitted for publication.

Krueger, A.B., & Schkade, D.A. (2007). The reliability of subjective well-being measures. *CEPS Working Paper No. 138.* Princeton, NJ: Princeton University.

Kuh, G.D., & Hall, J.E. (1993). Using cultural perspectives in student affairs. In G.D. Kuh (Ed.), *Cultural perspectives in student affairs work* (pp. 1-20). Lanham, MD: University Press of America.

Kuh, G.D., & Umbach, P.D. (2005). Experiencing diversity: What can we learn from liberal arts colleges? *Liberal Education, 91*(1), 14-21.

Landrine, H., & Klonoff, E.A. (1996). *African American acculturation: Deconstructing race and reviving culture.* Thousand Oaks, CA: SAGE.

Lang, M. (1992). Barriers to Blacks' educational achievement in higher education: A statistical and conceptual review. *Journal of Black Studies, 22*(4), 510-522.

Langston, C.A. (1990). *The dynamics of daily life: Responses to positive and negative events, life-task activity, mood, and well-being.* Unpublished dissertation. University of Michigan, Ann Arbor, MI.

Larsen, R.J., & Fredrickson, B.L. (1999). Measurement issues in emotion research. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 40-60). New York: Russell Sage Foundation.

Leslie, L.L., & Brinkman, P.T. (1988). *The economic value of higher education.* Phoenix, AZ: The American Council on Education and Oryx Press.

Lewin, K. (1936). *Principles of topological psychology.* New York: McGraw-Hill.

Loo, C., & Rolison, G. (1986). Alienation of ethnic minority students at a predominantly White university. *The Journal of Higher Education, 57*(1), 58-77.

Lucas, R.E., & Gohm C.L. (2000). Age and sex differences in subjective well-being across cultures. In E. Diener & E.M. Suh (Eds.), *Culture and subjective well-being* (pp. 291-317). Cambridge, MA: The MIT Press.

Lydon, J.E., & Zanna, M.P. (1990). Commitment in the face of adversity: A value-affirmation approach. *Journal of Personality and Social Psychology, 58,* 1040-1047.

Majors, R., & Billson, J. (1992). *Cool pose: The dilemmas of Black manhood in America.* New York: Lexington.

Mallinckrodt, B. (1988). Student retention, social support, and dropout intention: Comparison of Black and White students. *Journal of College Student Development, 29,* 60-64.

Manstead, A.S.R. (1992). Gender differences in emotion. In A. Gale & M.W. Eysenck (Eds.), *Handbook of individual differences: Biological perspectives* (pp. 355-387). New York: Wiley.

Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224-253.

Martinez, R., & Dukes, R.L. (1991). Ethnic and gender differences in self-esteem. *Youth and Society, 22*(3), 318-338.

Mathiowetz, N. (1986). *The problem of omissions and telescoping error: New evidence from a study of unemployment.* Washington, DC: American Statistical Association.

McEwen, M.K. (2003). New perspectives on identity development. In S.R. Komives & D.B. Woodard, Jr. (Eds.), *Student services: A handbook for the profession* (4th ed., pp. 203-233). San Francisco: Jossey-Bass.

Mead, G.H. (1934). *Mind, self, and society.* Chicago: University of Chicago Press.

Mendoza-Denton, R., Downey, G., Davis, A., Purdie, V.J., & Pietrzak, J. (2004). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Personality and Social Psychology, 83*(4), 896-918.

Menon, G. (1994). Judgments of behavioral frequencies: Memory search and retrieval strategies. In S. Sudman (Ed.), *Autobiographical memory and the validity of retrospective reports* (pp. 161-172). New York: Springer-Verlag.

Milem, J.F., Chang, M.J., & Antonio, A.L. (2005). *Making diversity work on campus: A research-based perspective.* Washington, DC: Association of American Colleges and Universities.

Milliones, J. (1973). *Construction of the developmental inventory of Black consciousness.* Unpublished dissertation, University of Pittsburgh, Pittsburgh, PA.

Moos, R.H. (1976). *The human context: Environmental determinants of behavior.* New York: Wiley.

Nasim, A., Roberts, A., Harrell, J.P., & Young, H. (2005). Non-cognitive predictors of academic achievement for African Americans across cultural contexts. *Journal of Negro Education, 74*(4), 344-358.

Nettles, M.T. (1988). *Toward Black undergraduate student equality in American higher education.* New York: Greenwood Press.

Nettles, M.T. (1990). Success in doctoral programs: Experiences of minority and White students. *American Journal of Education, 98,* 494-522.

Nettles, M.T. (1991). Racial similarities and differences in the predictors of college student achievement. In W.R. Allen, E. Epps, & N.Z. Haniff (Eds.), *College in black and white: African American students in predominantly White and in historically Black public universities* (pp. 75-94). Albany, NY: State University of New York Press.

Nobles, W.W. (1972). African philosophy: Foundations for Black psychology. In R.L. Jones (Ed.), *Black psychology* (pp. 18-32). New York: Harper & Row.

Nobles, W.W. (1973). Psychological research and the Black self-concept: A critical review. *Journal of Social Issues, 29*(1), 11-31.

Nolen-Hoeksema, S., & Rusting, C.L. (1999). Gender differences in well-being. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 330-350). New York: Russell Sage Foundation.

Ogbu, J.U. (1994). From cultural differences to differences in cultural frame of reference. In P. Greenfield & R. Cocking (Eds.), *Cross-cultural roots of minority child development* (pp. 365-391). Hillsdale, NJ: Erlbaum.

Oishi, S., Diener, E., Scallon, C.N., & Biswas-Diener, R. (2004). Cross-situational consistency of affective experiences across cultures. *Journal of Personality and Social Psychology, 86*(3), 460-472.

Orr, A.J. (2003). Black-White differences in achievement: The importance of wealth. *Sociology of Education, 76*(4), 281-304.

Ortiz, A.M. (1995). *Promoting racial understanding: A study of educational and developmental interventions.* Paper presented at the annual meeting of the Association for the Study of Higher Education in Orlando, FL, November 1995.

Ortiz, A.M., & Rhoads, R.A. (2000). Deconstructing Whiteness as part of a multicultural education framework: From theory to practice. *Journal of College Student Development, 41*(1), 81-93.

Osborne, J.W. (2002). Notes on the use of data transformations. *Practical Assessment, Research, and Evaluation, 8*(6), 1-8.

Oyserman, D., Gant, L., & Ager, J. (1995). A socially contextualized model of African American identity: Possible selves and school persistence. *Journal of Personality and Social Psychology, 69*(6), 1216-1232.

Oyserman, D., & Harrison, K. (1999). *African American identity in adolescence.* University of Michigan. Retrieved January 26, 2004, from the World Wide Web: http://rcgd.isr.umich.edu/prba/perspectives/index.htm.

Oyserman, D., Koon, H.M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, *128*(1), 3-72.

Pace, C.R., & Stern, G.G. (1958). An approach to the measurement of psychological characteristics of college environments. *Journal of Educational Psychology, 49,* 269-277.

Parham, T.A., White, J.L., & Ajamu, A. (1999). *The psychology of Blacks: An African centered perspective.* Upper Saddle River, NJ: Prentice Hall.

Pascarella, E.T., Edison, M., Nora, A., Hagedorn, L.S., & Terenzini, P.T. (1996). Influences on students' openness to diversity and challenge in the first year of college. *Journal of Higher Education, 67*(2), 174-195.

Pascarella, E.T., Palmer, B., Moye, M., & Pierson, C.T. (2001). Do diversity experiences influence the development of critical thinking? *Journal of College Student Development, 42*(3), 257-271.

Pascarella, E.T., Smart, J.C., Ethington, C.A., & Nettles, M.T. (1987). The influence of college on self-concept: A consideration of race and gender differences. *American Educational Research Journal, 24*(1), 49-77.

Pascarella, E.T., & Terenzini, P.T. (2005). *How college affects students: A third decade of research.* San Francisco: Jossey-Bass.

Pascarella, E.T., Whitt, E.J., Nora, A., Edison, M., Hagedorn, L.S., & Terenzini, P.T. (1996). What have we learned from the first year of the National Study of Student Learning? *Journal of College Student Development, 37*(2), 182-192.

Patterson-Stewart, K.E., Ritchie, M.H., & Sanders, E.T.W. (1997). Interpersonal dynamics of African American persistence in doctoral programs at predominantly White universities. *Journal of College Student Development, 38*(5), 489-498.

Pember-Reeves, M. (1913). *Round about a pound a week.* London: Bell.

Perna, L.W. (2005). The benefits of higher education: Sex, racial/ethnic, and socioeconomic group differences. *The Review of Higher Education, 29*(1), 23-52.

Perna, L.W. (2007). The sources of racial-ethnic group differences in college enrollment: A critical examination. *New Directions for Institutional Research, 133*, 51-66.

Perna, L.W., Milem, J., Gerald, D., Baum, E., Rowan, H., & Hutchens, N. (2006). The status of equity for black undergraduates in public higher education in the south: Still separate and unequal. *Research in Higher Education, 47*(2), 197-228.

Perry, B.A. (2007). *The Michigan affirmative action cases.* Lawrence, KS: The University Press of Kansas.

Perry, W.G. (1968). *Forms of intellectual and ethical development in the college years: A scheme.* New York: Rinehart and Winston, Inc.

Pervin, L. (1968). Performance and satisfaction as a function of individual-environment fit. *Psychological Bulletin, 69,* 56-68.

Peters, J.F. (1994). Gender socialization of adolescents in the home. *Adolescence, 29*(116), 913-934.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*(3), 499-514.

Prelow, H.M., Mosher, C.E., & Bowman, M.A. (2006). Perceived racial discrimination, social support, and psychological adjustment among African American college students. *Journal of Black Psychology, 32*(4), 442-454.

Ratzlaff, C., Matsumoto, D., Kouznetsova, N., Raroque, J., & Ray, R. (2000). Individual psychological culture and subjective well-being. In E. Diener & E.M. Suh (Eds.), *Culture and subjective well-being* (pp. 37-59). Cambridge, MA: The MIT Press.

Reed, L. (1989). Beeping children and adolescents: A method for studying time use and daily experience. *Journal of Youth and Adolescence, 18*(6), 511-517.

Regents of the University of California v. Bakke. (1978). 438 U.S. 265.

Rennie, K. (1997, January). *Exploratory and confirmatory rotation strategies in exploratory factor analysis.* Paper presented at the annual meeting of the Southwest Educational Research Association, Austin.

Reynolds, A.L., & Pope, R.L. (1991). The complexities of diversity: Exploring multiple oppressions. *Journal of Counseling and Development, 70*, 174-180.

Rhodes, F.H.T. (2001). *The creation of the future: The role of the American university.* Ithaca, NY: Cornell University Press.

Robinson, J.P. (1985). The validity and reliability of diaries versus alternative time use measures. In F.T. Juster & F.P. Stafford (Eds.), *Time, goods, and well-being* (pp. 33-62). Ann Arbor, MI: Institute for Social Research, University of Michigan.

Robinson, J.P. (1999). The time-diary method: Structure and uses. In W.E. Pentland, A.S. Harvey, M. P. Lawton, & M.A. McColl (Eds.), *Time use research in the social sciences* (pp. 47-89). New York: Kluwer Academic/Plenum Publishers.

Robinson, J.P., & Godbey, G. (1997). *Time for life: The surprising ways Americans use their time.* University Park, PA: The Pennsylvania State University Press.

Robinson, M.D., & Clore, G.L. (2002). Episodic and semantic knowledge in emotional self-report: Evidence for two judgment processes. *Journal of Personality and Social Psychology, 83*(1), 198-215.

Robinson, M.D., Johnson, J.T., & Shields, S.A. (1998). The gender heuristic and the database: Factors affecting the perception of gender-related differences in the experience and display of emotions. *Basic and Applied Social Psychology, 20,* 206-219.

Rothstein, J., & Yoon, A. (2006). Mismatch in law school. *CEPS Working Paper No. 123.* Princeton, NJ: Princeton University.

Rowley, S. A., Sellers, R. M., Chavous, T. M., & Smith, M. A. (1998). The relationship between racial identity and self-esteem in African American college and high school students. *Journal of Personality and Social Psychology, 74*(3), 715-724.

Saenz, V.B., Ngai, H.N., & Hurtado, Sl. (2007). Factors influencing positive interactions across race for African American, Asian American, Latino, and White college students. *Research in Higher Education, 48*(1), 1-38.

Sander, R. (2004). A systematic analysis of affirmative action in American law schools. *Stanford Law Review, 57*(2), 367-447.

Sandoval, S. R., Gutkin, T. B., & Naumann, W. C. (1997). Racial identity attitudes and school performance among African American high school students: An exploratory study. *Research in the Schools, 4*(2), 1-8.

Sanford, N. (1966). *Self and society.* New York: Atherton.

Schilling, K.M., & Schilling, K. L. (1999). Increasing expectations for student effort. *About Campus, 4*(2), 4-10.

Schimmack, U. (2003). Affect measurement in experience sampling research. *Journal of Happiness Studies, 4,* 79-106.

Schoem, D., & Hurtado, S. (2001). *Deliberative democracy in school, college, community, and workplace.* Ann Arbor, MI: University of Michigan Press.

Schuman, H., & Presser, S. (1981). *Questions and answers in attitude surveys.* New York: Academic Press.

Schuman, H., Walsh, E., Olson, C., & Etheridge, B. (1985). Effort and reward: The assumption that college grades are affected by quantity of study. *Social Forces, 63*(4), 945-966.

Schwartz, R.A., & Washington, C.M. (1999). Predicting academic success and retention for African American women in college. *Journal of College Student Retention, 1*(2), 177-191.

Schwarz, N. (1992). Feelings as information: Moods influence judgments and processing strategies. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 534-547). New York: Cambridge University Press.

Schwarz, N. (1996). *Cognition and communication: Judgmental biases, research methods and the logic of conversation.* Hillsdale, NJ: Erlbaum.

Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist, 54*(2), 93-105.

Schwarz, N., Hippler, J.-J., & Noelle-Neumann, E. (1994). Retrospective reports: The impact of response formats. In S. Sudman (Ed.), *Autobiographical memory and the validity of retrospective reports* (pp. 187-199). New York: Springer-Verlag.

Schwarz, N., & Oyserman, D. (2001). Asking questions about behavior: Cognition, communication, and questionnaire construction. *American Journal of Evaluation, 22*(2), 127-160.

Schwarz, N., & Strack, F. (1999). Reports of subjective well-being: Judgmental processes and their methodological implications. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 61-84). New York: Russell Sage Foundation.

291

Schwarz, N., Strack, F., & Mai, H.P. (1991). Assimilation and contrast effects in part-whole question sequences: A conversational logic analysis. *Public Opinion Quarterly, 55,* 3-23.

Schwarz, N., & Sudman, S. (Eds.). (1994). *Autobiographical memory and the validity of retrospective reports.* New York: Springer-Verlag.

Schwitzer, A.M., Griffin, O.T., Ancis, J.R., & Thomas, C.R. (1999). Social adjustment experiences of African American college students. *Journal of Counseling & Development, 77,* 189-197.

Seaton, E.K., Caldwell, C.H., Sellers, R.M., & Jackson, J.S. (2008). The prevalence of perceived discrimination among African American and Caribbean Black youth. *Developmental Psychology, 44*(5), 1288-1297.

Sellers, R. M., Chavous, T. M., & Cooke, D. Y. (1998). Racial ideology and racial centrality as predictors of African American college students' academic performance. *The Journal of Black Psychology, 24*(1), 8-27.

Sellers, R. M., Rowley, S. A., Chavous, T. M., Shelton, J. N., & Smith, M. A. (1997). Multidimensional Inventory of Black Identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73*(4), 805-815.

Sellers, R.M., & Shelton, N.J. (2003). The role of racial identity in perceived discrimination. *Journal of Personality and Social Psychology, 84*(5), 1079-1092.

Shadrick, B.P. (1995). *Academically successful African American students on a predominantly White campus: A question of identity.* Unpublished dissertation. State University of New York, Albany, NY.

Shavelson, R.J. (1996). *Statistical reasoning for the behavioral sciences* (3rd ed.). Boston: Allyn and Bacon.

Sidanius, J., Levin, S., van Laar, C., & Sears, D.O. (2008). *The diversity challenge: Social identity and intergroup relations on the college campus.* New York: Russell Sage.

Singer, E., Van Hoewyk, J., Gebler, N., Raghunathan, T., & McGonagle, K. (1999). The effect of incentives on response rates in interviewer-mediated surveys. *Journal of Official Statistics, 15*(2), 217-230.

Slater, R.B. (1994). The growing gender gap in Black higher education. *The Journal of Blacks in Higher Education, 3,* 52-57.

Smart, J.C., Feldman, K.A., & Ethington, C.A. (2000). *Academic disciplines: Holland's theory and the study of college students and faculty.* Nashville, TN: Vanderbilt University Press.

Smith, E. J. (1991). Ethnic identity development: Toward the development of a theory within the context of majority/minority status. *Journal of Counseling and Development, 70,* 181-188.

Smith, P.B., & Fischer, R. (2008). Acquiescence, extreme response bias, and culture. In F.J.R. Van deVijver, D.A. Van Hemert, & Y.H. Poortinga (Eds.), *Multilevel analysis of individuals and cultures* (pp. 285-314). New York: Lawrence Erlbaum Associates.

Smith, R.E., Leffingwell, T.R., & Ptacek, J.R. (1999). Can people remember how they coped? Factors associated with discordance between same-day and retrospective reports. *Journal of Personality and Social Psychology, 76*(6), 1050-1061.

Smith, S.S., & Moore, M.R. (2002). Expectations of campus racial climate and social adjustment among African American college students. In W.R. Allen, M.B. Spencer, & C. O'Connor (Eds.), *African American education: Race, community, inequality and achievement* (pp. 93-118). Oxford, UK: Elsevier Science.

Smith, T.E. (1992). Time use and change in academic achievement: A longitudinal follow-up. *Journal of Youth and Adolescence, 21*(6), 725-747.

Solorzano, D.G. (1992). An exploratory analysis of the effects of race, class, and gender on student and parent mobility aspirations. *The Journal of Negro Education, 61*(1), 30-44.

Stafford, F.P. (1980). Women's use of time converging with men's. *Monthly Labor Review, 103,* 57-59.

Steele, C.M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52,* 613-629.

Steele, C.M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*(5), 797-821.

Steptoe, A. Wardle, J., & Marmot, M. (2005). Positive affect and health-related neuroendocrine, cardiovascular, and inflammatory processes. *Proceedings of the National Academy of Sciences, 102*(18), 6508-6512.

Stern. (1970). *People in context.* New York: Wiley.

Stevens, J.P. (1992). *Applied multivariate statistics for the social sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Stinebrickner, R., & Stinebrickner, T.R. (2004). Time-use and college outcomes. *Journal of Econometrics, 121*(1/2), 243-256.

Stone, A.A., Shiffman, S.S., & DeVries, M. (1999). Ecological momentary assessment. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 61-84). New York: Russell Sage Foundation.

Stone, A.A., Schwartz, J.E., Neale, J.M., Shiffman, S., Marco, C.A., Hickcox, M., Paty J., Porter, L.S., & Cruise, L.J. (1998). How accurate are current coping assessments? A comparison of momentary versus end-of-day reports of coping efforts. *Journal of Personality and Social Psychology, 74,* 1670-1680.

Strange, C.C. (1991). Managing college environments: Theory and practice. In J. Winston (Ed.), *Administration and leadership in student affairs: Actualizing student development in higher education* (2nd ed., pp. 159-199). Muncie, IN: Accelerated Development.

Strange, C.C., & Banning, J.H. (2001). *Educating by design: Creating campus learning environments that work.* San Francisco: Jossey-Bass.

Sudman, S., & Bradburn, N.M. (1982). *Asking questions: A practical guide to questionnaire design.* San Francisco: Jossey-Bass.

Sudman, S., Bradburn, N.M., & Schwarz, N. (1996). *Thinking about answers: The application of cognitive processes to survey methodology.* San Francisco: Jossey-Bass.

Suh, E.M. (1999). *Culture, identity consistency, and subjective well-being.* Unpublished doctoral dissertation. Champagne, IL: University of Illinois.

Suhr, D.D. (2005). *Principal component analysis vs. exploratory factor analysis.* Retrieved July 20, 2008, from SAS web site: http://www2.sas.com/proceedings/sugi30/203-30.pdf.

Swail, W.S., & Perna, L.W. (2002). Pre-college outreach programs: A national perspective. In W.G. Tierney (Ed.), *Increasing access to college: Extending possibilities for all students* (pp. 15-34). Albany, NY: State University of New York Press.

Swendsen, J.D. (1998). The helplessness-hopelessness theory and daily mood experience: An idiographic and cross-situational perspective. *Journal of Personality and Social Psychology, 74*(5), 1398-1408.

Szalai, A. (1966). Trends in comparative time-budget research. *American Behavioral Scientist, 9*(9), 3-9.

Szalai, A. (Ed.). (1972). *The use of time: Daily activities of urban and suburban populations in twelve countries.* The Hague, Netherlands: Mouton & Co.

Tatum, B.D. (1997). *Why are all the Black kids sitting together in the cafeteria? And other conversations about race.* New York: Basic Books.

A Ten-Year Review of Black Freshman Enrollments at the Nation's Highest-Ranked Universities. (Winter, 2007/2008). *Journal of Blacks in Higher Education, 58,* 17-18.

Thomas, C.W. (1971). *Boys no more*. Beverly Hills, CA: Glencoe Press.

Thomas, G.E. (1992). Participation and degree attainment of African-American and Latino students in graduate education relative to other racial and ethnic groups: An update from Office of Civil Rights data. *Harvard Educational Review, 62*(1), 45-65.

Thompson, C.E., & Carter, R.T. (1997). Race, socialization, and contemporary racism manifestations. In C.E. Thompson & R.T. Carter (Eds.), *Racial identity theory: Applications to individual, group, and organizational interventions* (pp. 1-14). Mahwah, NJ: Erlbaum.

Tierney, W.G. (1992). An anthropological analysis of student participation in college. *The Journal of Higher Education, 63*(6), 603-618.

Ting, S.R., & Robinson, T.L. (1998). First-year academic success: A prediction combining cognitive and psychosocial variables for Caucasian and African American students. *Journal of College Student Development, 39*(6), 599-610.

Tinto, V. (2000). Linking learning and leaving: Exploring the role of the college classroom in student departure. In J.M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 81-94). Nashville: Vanderbilt University Press.

Tkach, C., & Lyubomirsky, S. (2006). How do people pursue happiness? Relating personality, happiness-increasing strategies, and well-being. *Journal of Happiness Studies, 7,* 183-225.

Tourangeau, R., Conrad, F., Arens, Z., Fricker, S., Lee, S., & Smith, E. (2006). Everyday concepts and reporting errors. *Journal of Official Statistics, 22*(3), 385-418.

Tourangeau, R., Rips, L.J., & Rasinski, K. (2000). *The psychology of survey response.* Cambridge, UK: Cambridge University Press.

Tourangeau, R., & Yan, T. (2008). Sensitive questions in surveys. *Psychological Bulletin, 133*(5), 859-883.

Transitions to College Project. (2005). *Questions that matter.* Retrieved November 28, 2005, from Social Science Research Council at http://edtransitions.ssrc.org.

Triandis, H.C. (1989a). *Cross-cultural studies of individualism and collectivism.* Paper presented at the Nebraska Symposium on Motivation, Lincoln, NE.

Triandis, H.C. (1989b). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506-520.

Triandis, H.D. (2000). Cultural syndromes and subjective well-being. In E. Diener & E.M. Suh (Eds.), *Culture and subjective well-being* (pp. 13-36). Cambridge, MA: The MIT Press.

Tulving, E. (1972). Episodic and semantic memory. In E. Tulving & W. Donaldson (Eds.), *Organization of memory* (pp. 381-403). New York: Academic Press.

Turner, C.B., & Turner, B.F. (1982). Gender, race, social class, and self-evaluations among college students. *The Sociological Quarterly, 23,* 491-507.

Turner, C.S.V., Myers, S.L., & Creswell, J.W. (1999). Exploring underrepresentation: The case of faculty of color in the Midwest. *(The Journal of Higher Education, 70*(1), 27-60.

Updegraff, J.A., Gable, S.L., & Taylor, S.E. (2004). What makes experiences satisfying? The interaction of approach-avoidance motivations and emotions in well-being. *Journal of Personality and Social Psychology, 86*(3), 496-504.

Walsh, W.B. (1978). Person/environment interaction. In J.H. Banning (Ed.), *Campus ecology: A perspective for student affairs* (pp. 6-16). Los Angeles: NASPA.

Warr, P.B. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology, 63,* 193-210.

Watkins, D.C., Green, B.L., Goodson, P., Guidry, J., & Stanley, C. (2007). Using focus groups to explore the stressful life events of black college men. *Journal of College Student Development, 48*(1), 105-118.

Watson, D., & Clark, L.A. (1997). The measurement and mismeasurement of mood: Recurrent and emergent issues. *Journal of Personality Assessment, 86,* 267-296.

White, C.L., & Burke, P.J. (1987). Ethnic role identity among Black and White college students. *Sociological Perspectives, 30*(3), 310-331.

Whitt, E.J., Nora, A., Edison, M.I., Terenzini, P.T., & Pascarella, E.T. (1999). Women's perceptions of a "chilly climate" and cognitive outcomes in college: Additional evidence. *Journal of College Student Development, 40*(2), 163-177.

Wilson, W.J. (1979). The declining significance of race: Myth or reality? In J.R. Washington (Ed.), *The declining significance of race? A dialogue among Black and White social scientists* (pp. 1-20). Pittsburgh, PA: University of Pennsylvania, Afro-American Studies Program.

Winkielman, P., & Schwarz, N. (2001). How pleasant was your childhood? Beliefs about memory shape inferences from experienced difficulty of recall. *Psychological Science, 12*(2), 176-179.

Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: A consideration of emotional style and marital status. *Psychological Bulletin, 106,* 249-264.