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UNDERSTANDING ETHNICITY: THE RELATION AMONG ETHNIC IDENTITY, COLLECTIVISM, AND INDIVIDUALISM IN AFRICAN AMERICANS AND EUROPEAN AMERICANS

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ABSTRACT OF THESIS

UNDERSTANDING ETHNICITY: THE RELATION AMONG ETHNIC IDENTITY, COLLECTIVISM, AND INDIVIDUALISM IN AFRICAN AMERICANS AND EUROPEAN AMERICANS

This study examined the relation among ethnic group membership, ethnic identity, collectivism and individualism in a sample of European American and African American college students. Findings suggest that African Americans are more collectivist than European Americans only in reference to their ethnic group. There were no significant differences between ethnic groups in collectivism toward friends, family, strangers or colleagues. Contrary to findings of previous research, there was no significant moderating effect of gender on collectivism differences between ethnic groups. In congruence with previous research, ethnic identity mediated the relation between ethnic group membership and collectivism toward the ethnic group. African Americans were also significantly higher on overall individualism when compared to European Americans and this relation was not mediated by ethnic identity. In addition to these findings, discussion focuses on issues regarding the measurement of individualism, collectivism, and ethnic identity.

KEYWORDS: Ethnic Identity, Collectivism, Individualism, Cross Cultural Psychology, African American Psychology

Ignacio David Acevedo
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THESIS

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UNDERSTANDING ETHNICITY: THE RELATION AMONG ETHNIC IDENTITY,
COLLECTIVISM, AND IDNVIDIUALSIM IN AFRICAN AMERICANS AND EUROPEAN
AMERICANS

THESIS

A thesis submitted in partial fulfillment
of the requirements for the degree of Master of Science in the
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at the University of Kentucky

By

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2003

To Estelita Antonia Ferris, Enedina Ponce de León Escalante,
Kathryn Collen Korbar, Robert Cyril Polakovich and Ismael Acevedo Paredes,
without whom the completion of this thesis may have been impossible.

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TABLE OF CONTENTS

Appendix

LIST OF TABLES

LIST OF FILES

Chapter One

Introduction

The most recent census of the United States of America (US) provides a snapshot of an increasingly diverse nation. Over the course of the last ten years, White Americans[1] have gone from accounting for over three quarters of the US population (75.7%) to accounting for less than 70% of the population (Grieco & Cassidy, 2001; US Census Bureau, 1990). In the same period of time, Hispanics have surpassed African Americans as the largest US minority group and the number of Asian Americans has nearly doubled (Grieco & Cassidy, 2001). Moreover, projections made by the US Census Bureau (2000) show that by the year 2060 White Americans will account for less than 50% of the total US population. American psychologists have made efforts to adequately consider the effects of the increasing ethnic diversity of the United States. These efforts include the exploration of specific research questions related to ethnic diversity (e.g., Segal, 1992; Westbrook, Buck, Wynn, & Sanford, 1994), and the publication of numerous review articles (e.g., Betancourt & Lopez, 1993; Hall, 2001; Phinney, 1996b) and books (e.g., Castillo, 1997; Sue & Sue, 1999) addressing the topic.

Not only have individual psychologists worked to understand the psychological effects of ethnic diversity, major efforts by important institutions have also been undertaken. In 1993, the American Psychological Association published its "Guidelines for Providers of Psychological Services to Ethnic, Linguistic, and Culturally Diverse Populations," and a short time later recommended that its members include ethnicity in the description of research samples (American Psychological Association, 1994). In 1994, the National Institutes of Health began requiring that ethnic minority persons be included in federally-funded research (Hohmann & Parron, 1996), and the American Psychiatric Association (1994, 2000) has included an "Outline for Cultural Formulation and Glossary of Culture-Bound Syndromes" in the two latest editions of the "Diagnostic and Statistical Manual of Mental Disorders." Clearly, significant efforts to understand and describe the psychological effects of ethnic diversity have taken place at individual as well as institutional levels.

Evolving Understanding of Ethnicity

Early researchers interested in ethnicity considered it to be a categorical variable based

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[1] The term "White" is used in the cited document. The analogous term European American is used throughout this paper.

on an individual's self-described ethnic group membership. The most common way to measure ethnicity was to allow research participants to describe their own ethnic group membership, often within the constraints of the groups the researcher was interested in studying. This approach often rendered contradictory results which in some cases led researchers to question the existence of differences attributable to ethnicity.

It is now generally accepted that ethnicity is best understood as a complex multidimensional construct rather than a categorical variable based on self-described group membership (Betancourt & Lopez, 1993; Hall, 2001; Phinney, 1996a). Certain components/dimensions of ethnicity are of particular importance in explaining its effects. These include, but are not limited to, ethnic identity, culture, the experience of discrimination (Phinney, 1996a) and adherence to the group (Hall, 2001). In most instances, effects that appear to be related to differences in ethnic group membership are best explained by variation across one of these component variables. For instance, Lopez and colleagues (Betancourt & Lopez, 1993) discovered that Latinos report significantly more auditory hallucinations than European Americans. However, because the researchers probed for differences across theoretically important components of ethnicity, they discovered that these differences are primarily attributable to religious differences. Importantly, participation in religious activities is a cultural variable that is a subcomponent of ethnic identity (Phinney, 1996b). Once the effects of religion were controlled, there were no differences between Latino and European American reports of auditory hallucinations. Thus, the use of a multidimensional understanding of ethnicity makes it possible to identify the specific mechanism through which ethnicity operates on psychologically important outcomes, in this case auditory hallucinations.

The exploration of the relations among key components of ethnicity has recently become a focus of attention (e.g., Gaines et al., 1997; Oyserman & Harrison, 1998; Wink, 1997). A clearer understanding of the relations among components of ethnicity should enable researchers to better explain the mechanisms through which ethnicity operates on other psychologically important variables. Besides improving the theoretical understanding of ethnicity, this type of research offers practical benefits. A refined theoretical understanding of ethnicity can be used to improve the effectiveness of intervention programs that aim to make changes in important psychological variables such as mental illness, locus of control, or subjective well-being. This is

2

achieved by focusing interventions on the components of ethnicity identified as both having the greatest relation to these variables and being amenable to modification.

The current study extends the empirical literature on the components of ethnicity by examining the relation among ethnic identity and two important aspects of culture: individualism and collectivism. The following literature review first includes a section on the current understanding of ethnic identity. Next is a section that presents what is known about collectivism and individualism. Third, a discussion of the nature of the relation among ethnic identity, collectivism and individualism is presented. The fourth section outlines the goals of the current study.

Ethnic Identity

Ethnic identity is "an enduring, fundamental aspect of the self that includes a sense of membership in an ethnic group and the attitudes and feelings associated with that membership" (Phinney, 1996b, p. 923). Although it is often studied using samples from specific ethnic groups, it is believed that ethnic identity is a phenomenon common to all humans (Phinney, 1990). It appears that ethnic identity may play a greater role than ethnic membership in understanding the psychological implications of ethnicity (Phinney, 1996b).

Multidimensional nature of ethnic identity

Theoretically, ethnic identity is constituted by a variety of components. These include identification with a specific group, a sense of belonging in the group, attitudes toward the group, and involvement in activities associated with the group (Phinney, 1996b; Phinney, 1990). It is important to distinguish these components because each of them relates uniquely to psychological outcomes (Bat-Chava & Steen, 1995), and because they may combine differently across individuals (Gurin, Hurtado, & Peng, 1994).

In many cases, the first component, identification with a specific group, involves some degree of conscious choice. Caucasians who identify as Italian American or Polish American while living in the US provide a good example. However, for many ethnic groups the physical characteristics of its members clearly distinguish them from members of other groups. Such is the case with most African Americans and Asian Americans living in the US. In such instances, identification with a specific group may become a recognition of socially-imposed distinctions rather than a conscious choice (Phinney, 1990). For instance, individuals whose immediate cultural ancestry may be described as Caribbean (e.g. Haitian), African (e.g., Zulu), Garifuna,

Latin-American (e.g., Dominican), Afro-Galic (e.g., Argelian, Moroccan), or perhaps even European (e.g., Spanish, Dutch, British), may be forced by US demographic nomenclature to accept the label African American. This despite the fact that the psychological implications of this label may be wholly inaccurate in the description of these individuals. Regardless of the mechanism through which individuals come to identify with an ethnic group, it is the individual's recognition of group membership that constitutes the basis for their ethnic identity.

A second component of ethnic identity involves a sense of belonging to the group. Beyond choosing a group membership or recognizing one imposed by society, individuals differ in the degree to which they have a sense of belonging to the group with which they are identified. For instance, certain individuals may accept an ethnic label and yet not feel a sense of belonging to that group (Phinney, 1990). Such is the case for many individuals in the United States who, while recognizing their socially-imposed group membership, such as African American or Latino, report feelings of belonging in the European American culture and not to the group to which they have been assigned (Sue & Sue, 1999). For example, there are individuals, who while recognizing their socially-imposed group membership as Latino, primarily identify with European American culture and would prefer to be considered Caucasian.

The next component of ethnic identity has to do with attitudes toward the group to which an individual has chosen to belong or is recognized as belonging. Be they positive or negative, attitudes toward the group are an important component of ethnic identity. Thus, two individuals may accept the same ethnic label and feel equally a part of that ethnic group. However, one may feel positively about this group membership while for the other it may have negative connotations.

The final component of ethnic identity is involvement in activities associated with one's group. Activities that have been used to study ethnic involvement include language, choice of friendship, religious affiliation and practice, political ideology and activity, area of residence, participation in structured ethnic social groups, and miscellaneous ethnic/cultural activities and attitudes (Phinney, 1990). The exact nature and relative importance of each of the above activities will vary from group to group. For instance, Phinney, Romero, Nava, and Huang (2001) recently studied the role of ethnic language proficiency, in-group peer social interaction and parental cultural maintenance as predictors of ethnic identity in adolescents from three different immigrant ethnic groups (Mexican, Armenian, and Vietnamese). While there were

some consistent findings across groups, the most accurate prediction of ethnic identity required the use of separate statistical models for each ethnic group.

As stated previously, the components of ethnic identity may combine differently for different individuals. For instance, individuals may identify strongly with their ethnic group, feel a strong sense of belonging, have positive attitudes toward the group, and yet fail to share in any behaviors or attitudes that differentiate this group from others. Individuals who fit into this category are thought to have what is called symbolic ethnicity or ethnic loyalty (Bernal & Knight, 1993; Phinney 1990). Importantly, the particular way these dimensions of ethnic identity combine for different individuals may influence the way in which ethnicity is (or is not) related to psychological variables (e.g., well-being, treatment outcomes, etc.).

Development of Ethnic Identity

It is generally thought that the process of ethnic identity development progresses through a series of steps. These steps have been described for a variety of ethnic groups including African Americans (e.g., Cross, 1995; Jackson, 1975), Asian Americans (e.g., Sodowsky, Kwan, & Pannu, 1995), and Latinos (e.g., Ruiz, 1990). Noting the similarities among many of the previous models, some researchers (e.g., Atkinson, Morten, & Sue, 1989; Phinney, 1989; Sue & Sue 1990) have proposed general models of ethnic identity development which aim to represent the process as it occurs in all individuals regardless of their specific ethnicity.

One of the first ethnic identity development models to take an approach that was inclusive of all ethnic groups was proposed by Phinney (1989). In Phinney's model, ethnic identity development occurs in three general steps. These three steps are not stages in the strictest of senses, as "they do not necessarily show an invariant sequence, and they may not be experienced by all people" (Phinney, 1996a, p. 145). Rather, they can be considered as markers of the relative importance of ethnicity in the subjective composition of an individual's identity. This conceptualization of steps is consistent with Parham's (1989) suggestion that the process of ethnic identity development does not end in definite achievement of ethnic identity. Instead, development may continue in a cyclical fashion as the individual rethinks the role ethnicity plays in defining identity. A particular advantage of Phinney's model is its relation to the Multigroup Ethnic Identity Measure (MEIM, Phinney, 1992), a psychometrically sound tool for the measurement of ethnic identity that can be used with individuals from a variety of ethnic groups.

During the first step of Phinney's model, the individual is assumed to have an

unexamined ethnic identity. At this point, relationships with people of other ethnic groups and of one's own ethnic group are primarily determined by attitudes and values acquired through early socialization. In the case of people born and raised in the US, it is possible that at this stage most individuals will identify primarily with the predominant European American culture, even if they are not members of a European American ethnic group.

The second step is considered an exploratory one. Individuals who are at this step will typically show an elevated involvement in activities related to an ethnic group with which they have begun to identify. For ethnic minorities in the US, this increased involvement may be accompanied by the development of more positive attitudes towards the in-group, possible anger toward European Americans, and empathy toward other ethnic minority groups. European Americans who are at this step may begin questioning their own racism as well that of the society that surrounds them. For European Americans, there may be considerable anger at the society which has falsely portrayed a lack of racism.

Individuals in the third step of Phinney's model tend to have a secure sense of group membership and a realistic characterization of their own group. Attitudes toward other groups are varied and can range from acceptance of other groups to voluntary segregation. It is worth noting that while attitudes toward other groups are a theoretically important part of ethnic identity development, there is little empirical research confirming the attitudes that are assumed to be present during the steps of ethnic identity development (Phinney, 1990).

In summary, ethnic identity, a concept used to describe the subjective feeling of membership to a specific ethnic group, is multidimensional and its components include ethnic group identification, subjective feelings of belonging, attitudes toward the group, and participation in group activities. While the relative importance of these components in establishing overall ethnic identity may vary across individuals, ethnic identity is thought to follow a similar developmental process in all individuals. Although certain parts of the process may differ according to ethnic group, there are important similarities that occur in all groups and have allowed for the creation of general ethnic identity development models.

Collectivism and Individualism

Collectivism is a personal pattern of behavior and attitudes that involves the deferment of individual goals in favor of group goals. In other words, when faced with a situation that involves a choice between benefit of the self and benefit of the group, people who are collectivist

will tend to choose that which is of greater benefit to their group. In contrast, individualism is a pattern of behavior and attitudes that places greater importance on individual goals than it does on group goals. Although collectivism and individualism have been constructs of interest in the social sciences since the 1940s (e.g., Parsons, 1949), they have been of particular importance in the field of cross-cultural psychology during the last two decades. The rise to prominence of collectivism and individualism as constructs of interest in cross-cultural psychology was sparked by the work of Gert Hofstede (1980), first published in his book *Culture's Consequences*. By conducting factor-analyses of close to 117,000 protocols obtained from IBM employees across the world, Hofstede obtained four reliable factors that could account for differences in work attitudes among national cultures: power distance, uncertainty avoidance, individualism-collectivism, and masculinity-femininity.

While all of these factors have since been the focus of considerable attention in the cross-cultural literature (e.g., Clugston et al., 2000; Lippa, 2001; Shackleton & Ali, 1990; vonOudenhoven, 2001), perhaps none have achieved more preeminence as variables of interest than individualism and collectivism (Kagitcibasi & Berry, 1989; Triandis & Chen, 1998). Some scholars have even made the claim that "the individualism versus collectivism distinction has become the main challenge to the universal applicability of Western psychological theories" (Triandis 1995, p. 264).

Development of collectivism and individualism

Collectivism and individualism are often described as cultural syndromes (Triandis, 1995). A cultural syndrome occurs when the shared beliefs, attitudes, norms, roles and values of a particular culture become organized around a central theme. In the case of collectivism, the central theme is the preservation and advancement of the group as defined by its members. Correspondingly, the central theme of individualism is the preservation and advancement of the individual.

Cultural syndromes are acquired as the individual learns the behaviors, ideas, attitudes, and traditions that are representative of his or her culture. Social learning theory (Bandura & Walters, 1963) provides a framework for understanding the acquisition of culture. According to this theory, individuals learn behaviors by observing the way others behave around them and then imitating the behaviors they witness. Imitated behaviors that are punished will be less likely to be repeated than those that are rewarded. For instance, while mothers in Japan, a collectivist

culture, tend to focus their infants' attention toward the mother more often than on the environment, the reverse seems to be true for mothers in the US, which is an individualist culture (Rothbaum et al., 2001). The focus of attention toward the mother is a behavior that encourages dependency and accommodation (Rothbaum et al., 2001) which are both characteristics associated with collectivism (Triandis, 1995). The focus on the environment encourages exploration and individuation (Rothbaum et al., 2001) and these are characteristics associated with individualism (Triandis, 1995). This culturally-determined punishment and reinforcement of behaviors at a very early age contributes to the later development of individualism or collectivism.

It is thought that the prevalence of such instances of social learning will eventually create in the individual expectations of reward and punishment. Because rewards are more likely to be provided in the context of the group in collectivist cultures, expectations of reward in these cultures will lead to psychological attachment (Yamaguchi, 1994). Similarly, because in collectivist cultures reinforcement is less likely outside of the group setting, in these cultures expectations of punishment will lead to fear of rejection (Yamaguchi, 1994). By continuously refocusing the individual toward group-oriented behaviors, psychological attachment and fear of rejection play important roles in the further development and maintenance of collectivism. Although the theoretical work on individualism is not as advanced, it can be presumed that a similar process occurs such that expectations of reward and punishment in individualist cultures will lead to the development of psychological characteristics that are of importance for the strengthening and maintenance of individualism.

Independence of individualism and collectivism and the importance of context

Hofstede (1980) originally conceptualized individualism and collectivism as opposing anchors on a continuum. While this conceptualization is reflected in much of the early empirical literature (e.g., Hui & Triandis, 1986), more recent research findings have led researchers to suggest that collectivism and individualism are instead independent of each other (Bhawuk and Brislin, 1992; Gaines et al., 1997; Triandis, 1995) and influenced by social context. Thus, individuals can potentially be both highly individualist and highly collectivist. As will be explained shortly, for these individuals it may be the context that best predicts whether individualist or collectivist orientations will be displayed.

It is generally accepted that collectivism and individualism are contextually dependent

(Lay, Fairlie, et al., 1998; Matsumoto et al., 1997; Sinha & Tripathi, 1994; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Triandis, 1995; Yamaguchi & Kuhlman, 1995). This means that for any given individual, collectivism may be prevalent in some social environments and situations but not in others. For instance, a mother may sacrifice individual benefit so that sufficient nourishment and an acceptable dwelling are available to her family, thereby displaying collectivist behavior in a family context. However, the same woman may seek to improve her working condition in terms of payment and hours of work with almost complete disregard for the effect these efforts have on her co-workers, thereby displaying individualist behavior in the context of her workplace. In this example, the woman displays both collectivism and individualism and it is the context that primarily determines which of these patterns will be manifested.

In summary, collectivism is a pattern of attitudes and behaviors that places higher importance on group goals and needs than on those of the individual, whereas individualism is a pattern of attitudes and behaviors that places higher importance on individual goals and needs than on those of the group. Collectivism and individualism are thought to be the result of the organization of cultural beliefs, attitudes, norms, roles and values around specific themes. In collectivism the theme is the development and preservation of the group, while in individualism it is the development and preservation of the individual. The development of collectivism and individualism is perhaps best understood from a social learning perspective which states that social behaviors are learned by observation and maintained or extinguished under the principles of behaviorism, specifically operant conditioning. Though in the past researchers thought of individuals as either individualist or collectivist, the two constructs are in fact independent of each other. Thus, a person may be both highly individualist and highly collectivist. It is possible that it is the context which is most responsible for determining whether a person displays collectivist or individualist behavior.

The Relation Among Ethnic Identity, Individualism, and Collectivism

The study of the relation among ethnic identity, individualism, and collectivism is of particular significance given the importance of these variables in explaining cross-cultural differences in behavior (e.g., Phinney, 1996b; Phinney & Kohatsu, 1997; Triandis, 1994, 1995; Yamaguchi & Kuhlman, 1995). For instance, ethnic identity has been shown to predict cross-cultural differences in important behaviors such as use of psychological services (Delphin &

Rollock, 1995), fighting (Arbona et al., 1999) and communication patterns (Springer, 2000). Triandis (1995) identified a large number of important attributes that differentiate individualism from collectivism including differences in conflict resolution approaches, professional behavior, and social behavior.

Despite the importance of these variables, to date there has only been one empirical study that seeks to clarify their relation. This study was carried out by Gaines and colleagues (1997) who hypothesized that ethnic identity serves as a mediator in the relation between ethnicity and both individualism and collectivism. To test this hypothesis, Gaines and colleagues used a sample of 71 individuals. The average age of participants in this sample was 28.61 (SD = 10.51 years). The ethnic composition of the sample as described by the authors was 51% Anglo, 7% African American, 17% Latina/Latino, 21% Asian American, and 1% Mixed. Two percent of participants did not report their ethnicity. Participants in this study completed the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) and three scales designed by the authors to measure individualism, collectivism, and familism[2].

Regarding the relation among ethnic identity, collectivism, and individualism, Gaines and colleagues reported the following findings. First, planned comparisons revealed that persons of color scored significantly higher on ethnic identity than did Anglos, a finding that is consistent with much of the previous literature (Phinney, 1996a). Second, ethnic identity was significantly and positively correlated with collectivism ($r = .46$, $p < .01$) and familism ($r = .54$, $p < .01$). Third, men of color, but not women, scored higher on collectivism than did Anglos. Finally, the influence of ethnic-group membership on collectivism and familism becomes nonsignificant when the effects of ethnic identity are controlled by use of analysis of covariance. In this same analysis, ethnic identity emerged as a significant predictor of individualism, collectivism, and familism. The authors interpreted these results as confirming the hypothesis that ethnic identity is a mediator in the relation among ethnicity, individualism, and collectivism.

Despite the potential of this study to increase our understanding of the relation among ethnicity, individualism and collectivism, significant shortcomings limit the importance of its findings. For instance, the sample used by these investigators was recruited primarily from graduate students with no attempts made by the researchers to assess whether this sampling

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[2] Familism is collectivism in the context of the family.

procedure introduced some systematic source of variance. This procedure may have resulted in a restricted range problem. However, no attempts at checking for bias in sampling were reported. In addition, the study seems to lack statistical or methodological controls that would minimize or correct sampling biases.

The researchers' decision to lump together individuals from several ethnic groups in order to form a "persons of color" group is particularly problematic. It can be speculated that this new group was formed to overcome the threats to statistical power posed by the low numbers of individuals from specific ethnic groups (23 African Americans, 15 Latinos, 20 Asian Americans). However, in creating this new group, the variability existing between ethnic groups and that existing within ethnic groups is obscured, thereby hindering rather than facilitating our understanding. The resulting heterogeneity makes it difficult to ascertain what exactly is accounting for the researchers' findings or, more importantly, what population these results should be generalized to. For instance, their findings could easily be due to the effect of differences in socioeconomic indicators such as family income or occupational status which are known to co-vary with ethnic group membership, or the correlations between variables could be carried by the more strongly represented ethnic groups. By creating a heterogeneous group and failing to account either statistically or experimentally for the effects of theoretically relevant variables, the authors leave the door open for ample speculation with regards to alternative mechanisms that can account for their findings. More importantly, the findings cannot be generalized to a given ethnic group with any degree of confidence.

Furthermore, the psychometric properties and validation of the scales Gaines created to measure collectivism and individualism leave much to be desired. None of the scales created by the primary author underwent any form of external validation. Moreover, the internal consistency of the individualism scale is unacceptably low ($\alpha = .57$). In addition, the factor loadings of the ten items on the individualism scale are quite low by traditional standards, ranging from .24 to .46. The item loadings for the collectivism scale are somewhat better, however, only three of the ten items exceed .60. In defense of their scales, the authors cite the poor psychometric qualities that they claim are characteristic of others' efforts to measure individualism and collectivism, however, these arguments are flawed on two counts. First, the existence of multiple measures with poor psychometric properties does not justify the creation of yet another poor measure, and second, the argument is simply not true. Well before the time of

the article's publication, scales were available for the measurement of collectivism and individualism that had acceptable psychometric properties and better external validation than those used by the authors (e.g., Schwartz' (1992, 1994) Value Survey; Yamaguchi's (1994) Collectivism Scale).

Finally, the researchers fail to test for alternate explanations for their findings. For instance, in order to support the conclusion that ethnic identity mediates the relation between ethnicity and individualism, collectivism and familism, the researchers interpret the positive correlation between ethnic identity and individualism found in their data as the result of the great prevalence of individualism in the US. According to the authors, this prevalence allows for minority individuals to hold both collectivist and individualist orientations. However, the possibility that ethnic group membership may in fact moderate the effects of ethnic identity was never tested. Specifically, it is possible that ethnic identity is differentially related to collectivism and individualism in different ethnic groups. For instance, theory would support the contention that for European Americans, who are known to be individualist, ethnic identity may in fact correlate positively with individualism and negatively with collectivism, while for other American ethnic groups the reverse may be true. However, the researchers do not report testing for this or any other alternative hypothesis.

To summarize, there have been recent efforts to empirically study the relation among important components of ethnicity. Findings from this type of research serve to further develop the theoretical understanding of ethnicity and the mechanisms through which it operates on other psychologically important variables. Given the documented importance of ethnic identity, individualism, and collectivism in explaining cross-cultural differences in behavior, the study of the relation among these variables as components of ethnicity is of particular significance. To date, the only research effort to focus on these variables is that of Gaines and his colleagues (1997) who concluded that men of color but not women score higher than Anglos on collectivism and familism, and that ethnic identity mediates these relations. Unfortunately, methodological and theoretical flaws (e.g., method of sampling, failure to use adequate controls, use of poorly validated instruments, and failure to test alternate explanations for their findings) limit the utility of this study. Although the Gaines et al. (1997) study is a noteworthy first step in the right direction, future attempts to study the relation among these important variables must show greater methodological rigor.

<u>Goals of this Study</u>

The first goal of the current study is to provide a methodologically rigorous test of the assumption that African Americans are more collectivist than European Americans and whether, as suggested by Gaines and colleagues, these differences are moderated by gender. Despite the fact that there is ample theoretical and anecdotal support for the contention that African Americans are more collectivist, empirical tests of this assumption have been characterized by less than acceptable methodological rigor. As mentioned above, Gaines and colleagues (1997) grouped African Americans with other ethnic groups and used poorly validated instruments. Although a study by Matsumoto and colleagues (1997) used better validated instruments and did not group African Americans with other ethnic groups, their sample of African Americans was too small (N=21) which increases the probability that results are due to error. Finally, both of these studies failed to control for the effects of demographic variables that have been shown to be important antecedents of collectivism and individualism such as socioeconomic status (Marshal, 1997).

A second goal of the current study is to provide a methodologically rigorous test of the relation between ethnic identity and both collectivism and individualism. Specifically, the current study examines two hypotheses regarding this relation. The first hypothesis, developed by Gaines and colleagues, proposes that ethnic identity serves as a mediator in the relation between ethnicity and both collectivism and individualism. In other words, it is hypothesized that collectivism and individualism are only related to ethnicity in as much as they are related to ethnic identity. The second hypothesis suggests that ethnicity plays a moderating role in the relation between ethnic identity and both individualism and collectivism. In other words, it is hypothesized that the relation between ethnic identity and collectivism or individualism is different for each ethnic group. Methodological rigor is ensured by recruiting a homogeneous sample in terms of ethnic group membership and statistically controlling for theoretically relevant variables such as family income, education, and occupational status. These methodological precautions allow for a more direct interpretation of results, and permit greater confidence in generalizing the findings to populations of older African American adolescents and young adults.

In summary, the proposed study has two important goals. First, to test the assumption that African Americans are more collectivist than European Americans, and second, to compare

and contrast two hypotheses of the relation among ethnic identity, collectivism, and individualism. An overriding goal of this study is to conduct these tests in a context of strict methodological and theoretical rigor that allows for the direct interpretation of results and greater confidence in the generalizability of results.

Chapter Two

Method

<u>Participants</u>

The current sample is comprised of 154 undergraduate students at a large university in the Midwestern region of United States. This sample provides .95 power (alpha=.05) to detect a medium effect size for the analyses testing moderation, and .96 power (alpha=.05) to detect a medium effect size for the analyses testing mediation. In accordance with the goals of the current research, the sample was divided into two groups based on ethnic group membership. The first group includes 50 European American females and 50 European American males. The second group is made up of 44 African American females and 10 African American males. The average age of the full sample was 20.51 years (SD=2.74) and was not significantly different between ethnic group samples. On average, European Americans in the sample came from families with higher socioeconomic status. Compared to the African American participants, European Americans in the sample came from families with larger per-capita incomes where the head of household had received more education and held a higher status job.

<u>Measures</u>

<u>Demographic information questionnaire</u>

Participants completed a demographic information form designed specifically for this study. This form included questions that collect information on family size, zip code, age, gender and ethnic group membership. Also included were three indicators of SES (i.e., head of household occupation, head of household education, family income). Importantly, a multi-variable assessment of SES is consistent with the theoretical structure of SES and current recommendations on the measurement of this construct (Entwisle and Astone, 1994; Liberatos et al., 1988). Additionally, research indicates that adolescents' reports of SES variables, such as the ones collected in this study, tend to be accurate, and that accuracy improves with the age of the adolescent (Ensminger et al., 2000).

Based on participant reports of head of household occupation, an occupational status score was determined for each participant using the Nakao and Treas Indices (1992). Occupational status scores range from 0 to 100 and are based on the levels of educational attainment and income associated with each of the 503 occupational codes used in the 1980 US census. In the current study, a trained research assistant used the information provided by

participants to ascertain the occupational status of each head of household. The vast majority of occupations provided by the participants (95.5%) could be easily classified into one occupational code. The few discrepancies in rating were discussed between researchers and a consensus value was attained. For this set of ratings, verification on a random sample of research participants by an independent researcher yielded above 96% convergence. When a participant's description could not be narrowed to one occupational code, the average status score of all applicable occupations was used.

Ethnic Identity Scale (EIS)

The Ethnic Identity Scale (Phinney, 1992) is a questionnaire designed to measure ethnic identity in individuals from all ethnic groups. It is composed of 14 items answered on a Likert-type scale with four options ranging from strongly disagree (1) to strongly agree (4). Various studies have provided predictive validity evidence for the EIS by obtaining theoretically predicted differences across a variety of US ethnic groups (e.g., Phinney, 1992; Roberts et al., 1999; Spencer, Icard, Harachi, Catalano, & Oxford, 2000). Also, in concordance with the theory behind ethnic identity, higher scores on the EIS tend to correlate positively with measures of well-being and negatively with measures of maladjustment (Phinney & Kohatsu, 1997; Roberts et al., 1999).

It had been standard practice to interpret this scale as a homogeneous measurement of overall ethnic identity (e.g., Phinney, 1992; Worrell, 2000). However, recent studies with large samples of early adolescents find it to be composed of two unique but highly correlated factors: ethnic identity identification and ethnic identity exploration (Roberts et al., 1999; Spencer et al., 2000). Estimates of the correlation between these two factors range from .51 (Spencer et al., 2000) to .75 (Roberts et al., 1999). In addition, Roberts and colleagues (1999) report that the correlation between the two factors is .70 for African Americans and .74 for European Americans.

The ethnic identity identification factor appears to be the largest of the two factors (Spencer et al., 2000). In a study by Roberts and colleagues (1999), this factor accounted for 41.6% of the variance in scores on overall ethnic identity. There are a total of seven items that load on this factor and reflect a sense of commitment and belonging to an ethnic group (e.g., "I have a clear sense of my ethnic background and what it means for me") and feelings associated with ethnic membership (e.g., "I feel good about my cultural or ethnic background"). Roberts

and colleagues (1999) report Cronbach's alphas for this factor of .83 for African American adolescents and .85 for European American adolescents. Additionally, Spencer and colleagues (2000) report Cronbach's alphas of .84 for monoracial individuals and .81 for multiracial individuals. Although Spencer et al. do not provide separate internal consistency figures for different ethnic groups, they do report that the two factor solution and factor loadings are not significantly different across a variety of ethnic subsamples (i.e., White, Black, Asian Pacific Islander, and multiracial).

The ethnic identity exploration factor accounts for a smaller, albeit significant, proportion of the variance in EIS scores (Roberts et al., 1999; Spencer et al., 2000). For instance, in the study conducted by Roberts and colleagues (1999), this factor accounted for 9.6% of the variance in scores on overall ethnic identity. Six items load on this factor reflecting exploration and learning regarding ethnicity (e.g., "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs"). Roberts and colleagues (1999) report Cronbach's alphas for this factor of .62 for African American adolescents and .67 for European American adolescents. Spencer and colleagues (2000) report Cronbach's alphas of .76 for both monoracial and multiracial samples.

The factor-analytic research discussed above used early adolescent samples, whereas the current sample is primarily comprised of older adolescents. Thus, the two-factor interpretation of the Ethnic Identity Scale cannot a priori be generalized to the current sample. For this reason, the data provided by the current sample were subjected to principal components analyses in order to determine whether the two factor structure is generalizable to the current sample. Results of the principal components analyses are discussed in the preliminary analyses section.

Measures of Collectivism

Traditional measures of collectivism tend to be characterized by low internal consistencies that cast some doubt over their ability to adequately measure the construct. Triandis (1995) frames this problem in terms of a bandwith vs. fidelity dilemma, arguing that the low internal consistencies plaguing measures of collectivism result from the use of relatively small numbers of items to measure a broad construct. Taking this explanation to heed, more recently developed measures of collectivism (e.g., Lay et al. 1998; Matsumoto et al. 1997) have focused their content on narrower dimensions of the construct thus achieving acceptable internal consistency values. In addition to producing better internal consistency values, the new

17

collectivism scales better represent current theory regarding the contextual dependence of the construct.

Among these modern measures of collectivism the Individualism-Collectivism Interpersonal Assessment Inventory (ICIAI) stands out for its ability to measure two dimensions of collectivism (i.e., principles and behaviors) across a variety of social contexts. However, the original ICIAI fails to include a social context that is of primary interest in the current study, the ethnic group. For this reason, the ICIAI was adapted to include the ethnic group as a social context. This modification necessitated the inclusion of other measures of collectivism in order to assess the psychometric properties of the newly added ethnic group scale. Recognizing the limitations of early collectivism measures, but having no other available standard of comparison, a representative sample of the existing measures were included in the data collection with the purpose of providing evidence that would allow the assessment of the modified ICIAI's validity. This sample of collectivism measures included those with the best psychometric evidence (i.e., Social Order Scale and the Collectivism Scale), a self-report measure based on Hofstede's (1980) original items for the measurement of collectivism (i.e., Marshall-Hofstede Inventory), and a scale recommended by some of the most notable researchers in the area (i.e., Behavioral Content of the Self – Collectivism).

Individualism-Collectivism Interpersonal Assessment Inventory. All participants completed a modified version of the ICIAI (Matsumoto et al., 1997). The ICIAI is designed to measure the importance of collectivist attitudes and the frequency of collectivist behavior in interactions with specific social groups. The original ICIAI is divided into two sections each comprised of 25 items. In the first section, respondents are asked to rate the importance of 25 value items (e.g., "How important is it for you to share credit for accomplishments of friends") in relation to four social groups (family, close friends, colleagues, strangers) using a Likert-type scale with seven options ranging from 0 ("not at all important") to 6 ("very important"). Higher scores represent greater levels of collectivism. The internal consistency of this section ranges between =.86 and =.90 . Although data provided by respondents from various US ethnic groups (Asian American, Hispanic American, European American, and African American) was used in the development of the ICIAI, its authors do not provide separate internal consistencies for each ethnic group. Items in the second section of the ICIAI ask respondents to rate the frequency of certain types of behaviors in relation to the same four social groups (e.g., "How often do you

share credit for accomplishments of friends") using a Likert-type scale with seven response options ranging from 0 ("never do it") to 6 ("do it all the time"). Higher scores represent greater levels of collectivism. In previous research, internal consistency for this section has ranged from =.87 to =.90.

The authors of the ICIAI provide criterion validity evidence for this measure through comparisons with the Rokeach Values Survey (Rokeach, 1973), the Adjective Check List Scales (Gough & Helbrun, 1965), the Individualism-Collectivism scale (INDCOL, Hui,1988), and an abbreviated form of Triandis, McCusker, and Hui's (1990) multi-method technique for the measurement of individualism-collectivism. Predictive validity evidence was developed by obtaining the theoretically expected differences in scores obtained from samples in different countries and in different US ethnic groups (Matsumoto et al., 1997). The grounding of the ICIAI in current theory on collectivism along with its reliable psychometric structure and validity evidence justify its inclusion as the principal measure of collectivism in the current study.

One of the stated goals of the developers of the ICIAI was to assess collectivist "tendencies specific to interactions with certain types of relationships" (Matsumoto et al., 1997, p.744). The type of relationship that is of particular interest in the current study is that of individuals interacting with members of their own ethnic group. Therefore, the addition of a fifth social reference group, an individual's ethnic group, in both the values and behaviors sections seemed appropriate for the current research and consistent with the goals of the ICIAI's creators. Because this modification of the scale detracts from the generalizability of psychometric data from previous studies, a detailed re-inspection of the modified instrument's psychometric properties was conducted and is reported on in the preliminary analyses section.

Social Order Scale. In order to evaluate the psychometric properties of the modified ICIAI, all participants completed the Social Order Scale (Wink, 1997). The Social Order Scale measures principles associated with collectivism and requires respondents to rate the importance of certain values (e.g., "equality," "obedient") as guiding principles in their lives using a seven point scale varying from 1 = not important to me to 7 = very important to me. In previous research (Wink, 1997), this scale has shown good internal consistency =.85 and significant positive correlations with other measures of collectivism including the Social Identity subscale of the Aspects of Identity Questionnaire and the Interdependent Self-Construal subscale of the Self-

Construal Scale (Singelis, 1994). In the current sample, the Social Order Scale produces a Crobach's alpha value of .83 for the full sample. Internal consistency is not appreciably different when comparing the African American (=.82) and European American (=.83) samples. Despite its impressive psychometric properties and adequate external validation, this scale – like most early measures of collectivism – assesses only a limited range of the construct collectivism (i.e., overall values).

Behavioral Content of the Self – Collectivism. Developed by Triandis and colleagues (1995), this scale is made up of 7 items representing behaviors that are typical of collectivist cultures (e.g., visiting friends without prior warning). Each item is answered on a 9-point scale that asks respondents to indicate if they are "the kind of person that behaves in certain ways." The authors of the scale recommend the use of this scale in situations were researchers wish to have only one measure of collectivism. In the current sample, this scale produces a Cronbach's alpha value of .53 for the full sample. Internal consistency is not appreciably different when comparing the African American (=.54) and European American (=.48) samples. These values are similar to those reported in prior research using this scale (Triandis, Chan, Bhawuk, Iwao, & Sinha, 1995). While this scale was developed and recommended by some of the most notorious researchers in the area of collectivism, its modest internal consistencies warrant caution in its interpretation. For this reason, it is included along with other conventional measures of collectivism to aid in the re-examination of the ICIAI's psychometric properties.

Collectivism Scale. This scale is included to facilitate the examination of the psychometric properties of the ICIAI. It reflects a conceptualization of collectivism as a construct characterized by a low need for uniqueness, high self-monitoring tendencies, and an external locus of control (Yamaguchi, 1994). The scale has been extensively validated and shows good internal consistency (alphas range from .77 to .88). It is comprised of ten items (e.g, "I sacrifice my self-interest for my group," and "I avoid arguments with my group, even when I strongly disagree with other members") which are answered on a Likert-type scale. In the current sample, this scale has an internal consistency of .82 for the full sample. Internal consistency is not appreciably different when comparing the African American (=.80) and European American (=.83) samples.

Marshall-Hofstede Inventory. This scale was developed Roger Marshall (1997) based on the items originally used by Gert Hofstede (1980) in identifying the individualism-collectivism

dimension of work values. The scale consists of thirteen items answered on a five-point Likert-type scale and has shown adequate internal consistency in previous research (alphas range from .69 to .87). In the current sample, this scale produced a Cronbach's alpha of .45 for the full sample. Internal consistency is considerably lower in the African American sample (=.35) than it is in the European American sample (=.50). Like other early scales of collectivism, this scale samples a limited range of collectivism (work related values) and has quite modest internal consistencies. For this reason, it is included to aid in the re-examination of the ICIAI's psychometric properties.

Measures of Individualism

As mentioned previously, individualism and collectivism were originally thought to represent extremes along a continuum of value orientations. This theoretical misunderstanding limited the internal consistency and external validity of early measurement attempts. When the orthogonal nature of these two constructs was postulated, scales were constructed to measure these constructs as independent of one another. While these early measures provided empirical evidence for independence between these two constructs, they continued to suffer from the psychometric shortcomings of their predecessors. This led to Triandis' (1995) suggestion that poor psychometric properties manifested by measures of both constructs resulted from a bandwith vs. fidelity dilemma. While recent attempts at measuring collectivism have heeded this interpretation and hence greatly improved in terms of internal consistency and connection to theory, the development of individualism measures has lagged far behind.

As a result of its acceptable internal consistency and adequate external validation, Wink's (1997) Personal Openness Scale was selected as the primary measure of individualism in the current study. An additional measure of individualism developed by prominent researchers in the field, the Behavioral Content of the Self – Individualism scale, was included to aid in the validation of the modified ICIAI.

Personal Openness Scale. All participants completed the Personal Openness Scale (Wink, 1997). The Personal Openness Scale measures principles associated with individualism and requires respondents to rate the importance of certain values (e.g., "enjoying life," "freedom") as guiding principles in their lives using a seven point scale (1 = not important to me, 7 = very important to me). In previous research (Wink, 1997), this scale has shown good internal consistency (=.85) and significant positive correlations with other measures of individualism

including Personal Identity from the Aspects of Identity Questionnaire and Independent Self-Construal on the Self-construal Scale (Singelis, 1994). In the current sample, data from this scale provides a Cronbach's alpha value of .84 for the full sample. Internal consistency is not appreciably different when comparing the African American (=.83) and European American (=.83) samples. While this scale – like most other measures of individualism – assesses only a limited range of the construct (i.e., overall values), it is significantly more psychometrically robust than its counterparts. For these reasons, the Personal Openness scale was included in the current study as a measure of individualism.

       <u>Behavioral Content of the Self – Individualism</u>. Developed by Triandis and colleagues (1995), this scale is made up of 6 items representing behaviors that are typical of individualist cultures (e.g., calling a friend in order to arrange a visit time) and was administered to aid in the examination of the modified ICIAI. Each item is answered on a 9-point scale that asks respondents to indicate whether they are "the kind of person that behaves in certain ways." The authors of the scale recommend the use of this scale in situations were researchers wish to have only one measure of individualism. In the current sample, this scale produces a Cronbach's alpha value of .45 for the full sample. Internal consistency is somewhat higher in the African American (=.53) sample than it is in the European American (=.43) sample. These values are similar to those reported in prior research using this scale (Triandis et al., 1995). While this scale was developed and recommended by some of the most notorious researchers in the area of individualism, its modest internal consistencies warrant caution in its interpretation.

<u>Procedure</u>

       A total of 154 participants were recruited for this study. Most (N=142) were recruited from introductory psychology courses. These participants received course credit as a result of their involvement in this study. Participants were admitted to this study if they described their ethnic group membership as only African American or only European American. Participants reporting membership to any other ethnic group (e.g., Latino, Asian American) or membership to multiple ethnic groups were excluded from this study. Due to the low numbers of African American participants recruited from introductory courses (N=42), additional African American participants were actively recruited from university enrollment lists and offered monetary compensation in exchange for volunteering. This approach yielded an additional 12 African American participants. Statistical analyses revealed that recruitment strategy (whether a

participant volunteered for course credit or received a monetary compensation for volunteering) was significantly correlated with ethnic identity (r=.375, p=.005). For this reason, the effect of recruitment strategy was statistically controlled in analyses involving ethnic identity.

After providing informed consent, participants completed the measures described above. With the exception of the demographic information questionnaire, the presentation of all instruments was randomized in order to control for placement effects. In all cases, the demographic information questionnaire was the last instrument completed. After completing the instruments, participants were provided with an educational debriefing form, given the opportunity to ask questions, thanked for their participation, provided with compensation and dismissed.

Chapter Three

Results

<u>Descriptives</u>

Means and standard deviations obtained from the current sample on each of the measures described above are presented in Table 1. Values are presented separately for African American and European American samples and significance values for the difference between the means of these groups is provided. On average, European American students in the sample came from families with larger per-capita incomes where the head of household had received more education and held a higher status job. These findings highlight the importance of controlling for the effects of SES variables when looking at differences between ethnic groups. African American students appear to have significantly higher levels of ethnic identity and to endorse significantly higher levels of collectivist principles and behaviors within the context of their own ethnic group.

The status of each ethnic sample on instruments that purport to measure overall collectivism and overall individualism is less clear. In the case of collectivism, two scales show significant differences between ethnic groups. However, these differences are not consistent, as European Americans appear to be significantly more collectivist on one measure (Marshall-Hofstede Inventory) and the opposite is true on the other (Social Order Scale). These apparent incongruities in collectivism may be explained by the different aspects of collectivism measured in each scale. Despite its use in previous research as an overall measure of collectivism, the Marshall-Hofstede Inventory originated in empirical studies of work-related values and is thus most closely associated with collectivism in the context of the workplace. By contrast, the Social Order Scale measures values that are consistent with global aspects of collectivism. Thus, it is possible that European Americans may indeed be more prone to endorsing collectivism in the workplace while African Americans may be more prone to endorsing values consistent with collectivism in general.

Results from the two scales measuring individualism are also inconsistent. In this case, the Personal Openness Scale shows significantly greater amounts of individualism in the African American sample while the Behavioral Content of the Self – Individualism measure evinces a trend in the opposite direction. The explanation for these results is analogous to that of the results of collectivism scales. The Personal Openness Scale is intended to measure values that

are consistent with global aspects of individualism. On the other hand, the individualism scale from the Behavioral Content of the Self measure is intended to measure prototypical individualist behaviors. It may be the case that while African Americans endorse values consistent with individualism to a greater extent than European Americans, European Americans perform a greater number of behaviors considered prototypical of individualism.

<u>Preliminary Analyses</u>

<u>Factorial Structure of the EIS</u>

The EIS is traditionally interpreted as a homogeneous measurement of one overall construct (e.g., Phinney 1996; Worrell, 2000). However, results of two recent factor-analytic studies (Roberts et al., 1999; Spencer et al., 2000) using early adolescent samples have produced similar two-factor descriptions of this scale. With the purpose of testing the validity of these factor solutions in the current sample, separate Principal Components Analyses (PCA) were calculated using the items reported in each of the two-factor solutions reported in previous literature. PCA with oblique rotation was selected because the extracted factors are hypothesized to be correlated components of one overall construct and because this approach was used by both groups of researchers reporting two-factor solutions for the Ethnic Identity Scale. Cases were excluded pairwise in these analyses. The items of the original EIS are presented in Table 2. Throughout the discussion, these items will be referred to by their numbers on the original EIS.

The first test of generalizability was conducted on the factor solution reported by Roberts and colleagues (1999). As a result of their factor-analytic work, these authors reduced the EIS to twelve items and described the scale as being composed by two highly correlated factors. Because of the high correlation between factors, researchers allowed one item to load on both factors. The factor structure described by Roberts et al. is presented in Table 3. To increase clarity in the discussion of results, this description of the Ethnic Identity Scale's factor structure will be referred to in this report as the Roberts solution.

To test for generalizablity, the twelve items of the Roberts solution were entered into a PCA with a forced two factor solution. The obtained results are presented in Table 3. A .10 difference in factor loadings was considered significant and items meeting or exceeding this difference were assigned to the factor on which they loaded most clearly.   All other items were considered double-loaders. This approach replicates the procedures used by Roberts and colleagues and is considered justified because the extracted factors are conceptualized as highly

correlated components of one overall construct.

When compared to the Roberts' solution, the factor structure obtained in the current sample shows some important differences. As can be seen in Table 3, items 2, 11, and 13 load on the factor opposite to the one they loaded on in the Roberts solution. Item 9 now loads on both factors and item 3 clearly loads on to Factor 2 but in the Roberts solution loaded on both factors. Importantly, these changes in loading neither evince an identifiable pattern nor do they appear to be consistent with the theory of ethnic identity. Additionally, the proportion of scale variance accounted for by each factor is dramatically different from that of the Roberts solution. Specifically, Factor 2 (48.8% of the variance in the current study; 9.6% of the variance for Roberts et al.) is now much larger than Factor 1 (9.8% of the variance in the current study; 41.6% of the variance for Roberts et al.). While Roberts and colleagues report a correlation of .75 between their factors, the correlation between the currently obtained factors is .38. Overall, results of the current PCA indicate that the factor structure presented by Roberts and colleagues does not adequately describe the data generated by the current research sample.

The factor structure described by Spencer and colleagues was also tested for generalizability. This group of authors deleted one item (item six) from the original Ethnic Identity Scale (leaving the scale at 13 items) and did not include any double-loading items. The factor structure described by these authors is presented in Table 4 and will heretofore be referred to as the Spencer solution.

PCA with oblique rotation and pairwise exclusion was used to force a two-factor solution to the 13 items of the Spencer solution. A .10 difference in factor loadings was considered significant and items meeting or exceeding this difference were assigned to the factor on which they loaded most clearly.   All other items were considered double-loaders. This approach is considered justified because the extracted factors are considered to be highly correlated components of one overall construct. The resultant factor structure is presented in Table 4 and differs somewhat from that reported by Spencer and colleagues. In particular, items 2 and 3 load on opposite factors, and items 4 and 12, which previously had a clear loading, now load on both factors. Contrary to the results obtained when examining the Roberts solution, in the current PCA the proportion of scale variance accounted for by each obtained factor remains close to that reported by the original authors. Specifically, Factor 1 accounts for 46.6 % of the variance and Factor 2 accounts for 11.2%. Spencer et al. report a correlation between factors of .51; in the

current sample this correlation is .68.

In contrast to the discrepancies in loading manifested when examining the Roberts solution, the discrepant loadings in the PCA of the Spencer solution follow a pattern consistent with established theory on ethnic identity. Specifically, with the exception of item 3, most items showing significantly different loadings were classified by Spencer as belonging in Factor 2, a factor termed "Exploration." This factor, which also emerged in the Roberts solution, is hypothesized to reflect a developmental process that occurs in adolescence. During adolescence, individuals require the exploration and clarification of their ethnic identity. As individuals mature and ethnic identity becomes better established, exploration becomes less important. Because Spencer et al. conducted their research using an early adolescent sample, the differences in item loading that exist in the current PCA can be interpreted as evidence of the diminished importance that ethnic identity exploration has in later adolescence.

Neither of the factor structures reported previously in the literature appear to adequately describe the data generated by the current sample. Because of this, PCA was used in an exploratory fashion to ascertain the most adequate factor solution for the current sample. As an initial step in exploration, separate PCAs (with oblique rotation and pairwise exclusion) with the numbers of factors unconstrained were used to analyze the items from the Roberts and Spencer solutions. Results of these analyses are presented in Table 5. Overall, loading patterns for the three-factor solutions are much closer to their original assignments and each other than the loading patterns presented in the generalizability analyses. However, in both cases item # 2 loads uniquely onto Factor 3. Additionally, with respect to accounts for overall scale variance, factors generated by items from the Roberts solution continue to follow a pattern where the variance explained by the original Factor 2 is considerably larger than Factor 1.

Evidence from the exploratory use of PCA on this sample suggests that item # 2 is a uniquely varying item in this sample. It is possible that the forced inclusion of this item was responsible for the disparities observed in the generalizability analyses. To test this hypothesis, item 2 was removed and unconstrained PCAs calculated. Results of these PCAs are reported in Table 6. If these results are compared to those of the generalizability analyses (Tables 3 and 4), relatively minor differences are apparent in the factor structure of the Spencer solution but dramatic changes emerge in the Roberts solution. Specifically, in the Spencer solution item 3 now clearly loads on both scales and item 12 loads exclusively on Factor 1. By contrast,

although the Roberts items continue to produce a two-factor solution, all items now load more clearly on Factor 1.

This last set of analyses produces a number of examples that underscore the highly correlated nature of the EIS factors. For instance, the removal of item #2 from the Roberts solution caused changes in its factorial structure of such magnitude that, after assigning items to factors, the scale is best explained by a one-factor solution. Additional examples of the considerable overlap between factors can be found in the double loading items present in the Spencer solution both before and after removing the uniquely varying item 2, and in the loading assignment changes that exist in this solution after item 2 is removed.

The analyses described so far seem to warrant the conclusion that in samples of late adolescents the EIS is best represented by a two-factor structure with one factor measuring ethnic identity identification and the second measuring ethnic identity exploration. While these factors have some similarities to those reported in the Spencer solution and Roberts solution, there are considerable differences. First, in the current sample, item 2 varies uniquely from the rest of the scale. When this item is eliminated, the internal consistency of the scale improves. For this reason, it is suggested that researchers using the EIS with college student samples consider eliminating item 2. Second, the EIS identification factor appears to be of greater strength than in the Spencer or Roberts solutions. This change in magnitude is consistent with theory on the development of ethnic identity. Specifically, ethnic identity exploration is considered an important developmental process that peaks in adolescence and leads to greater ethnic identity identification (Phinney, 1992).

Based on these conclusions, it is recommended that researchers considering whether to interpret the scale as one overall measure of ethnic identity or as a measure of two related subcomponents may be best served by basing their decision on the goals and purposes of their research. If the question of interest involves a specific subcomponent of ethnic identity (e.g. exploration), then computation of subscale scores should be undertaken. If the question of interest requires the measurement of ethnic identity as an overall construct, then full-scale scores may be computed. The use of the EIS as a measure of overall ethnic identity is supported by the high internal consistency of the full scale (.90), which is comparable to that of the separated factors (.74-.90). Accordingly, in the current study the EIS will be interpreted as a measure of overall ethnic identity. This is because the relations of primary interest are those of overall

ethnic identity with other constructs. Additionally, ethnic identity scores will be calculated summing the 12 items that remain on the scale after removing item 6 (as suggested by both Roberts et al. 1999 and Spencer et al., 2000) and the uniquely varying item 2. In the current sample, the internal consistency values for this 12 item scale are .86 (alpha) for the African American group, .89 for the European American group, and .90 for the overall sample.

     Psychometric Properties of the ICIAI

     The original ICIAI was modified to include a fifth referent, the individual's ethnic group. This modification, while in accordance with the conceptualization of collectivism presented by the scale's original authors, may detract from the generalizability of original validation data. Because of this, the psychometric properties of the modified ICIAI were examined before proceeding with further analyses.

     Internal consistency coefficients for each of the subscales and sample groups are reported in Table 7. Internal consistency values for the various ICIAI subscales ranged from =.85 to =.93 for the full sample. When calculated separately for each ethnic group, internal consistency values for the African American group ranged from =.84 to =.93, and from =.85 to =.93 for the European American group.

     Full-sample correlations among the ICIAI subscales are reported in Table 8. All but two of these correlations are significant at the $p < .01$ level. Generally speaking, the highest correlation values are those between the principles and behaviors subscales of a same reference group. Additionally, correlations tend to be higher among subscales measuring the same aspect of collectivism. That is, when comparing across reference groups, subscales measuring principles tend to have higher correlations with other subscales measuring principles and subscales measuring behaviors tend to be most related to other behavior subscales. This pattern of correlations among ICIAI subscales is consistent with the theoretical background behind the development of the subscale where collectivism is seen as a multifaceted, context-dependent variable (Matsumoto et al., 1997). The psychometric properties of the ethnic group subscales of the ICIAI that were added are comparable to those of the original ICIAI subscales. Specifically, the internal consistency of the behavior (=.93) and principles (=.92-.93) subscales is adequate, and the pattern of correlations with other ICIAI subscales is consistent with the interpretation of these new subscales as representing a specific contextual facet of collectivistic tendencies.

     External validity evidence for the ICIAI is provided by its pattern of full-sample

correlations with measures of collectivism and individualism (Table 9). Overall, the ICIAI correlates positively and significantly with other measures of collectivism. This suggests that adding the ethnic group as a reference group did not compromise the integrity of the ICIAI, as the original subscales correlated, as expected, with other collectivism measures. The findings also suggest that the addition of the ethnic group as a referent category did not alter the performance of the ICIAI in relation to measures of individualism. Previous research has found small but significant correlations between measures of collectivism and measures of individualism (e.g., Wink, 1997). Likewise, the current study found that some ICIAI subscales – including the ethnic group referent category – were correlated with one of the measures of individualism used in this study. Since the measurement of individualism has not advanced as far as that of collectivism, it is possible that the correlations reflect error in the measurement of individualism. However, given the argument that individualism and collectivism are not polar opposites but are instead independent and context-specific, it is also possible that the patterns of correlations reflect actual relations between context-dependent collectivism and individualism. Additional external validity evidence for the added subscales is provided by their significant correlation with scores on the Ethnic Identity Scale ($r_{principles}$ = .49, p<.0001; $r_{behaviors}$ = .48, p<.001). Additionally, the significantly higher scores obtained by African Americans on these new subscales (Principles p<.001, Behaviors p<.0001) are in line with theory on differences among US ethnic groups. These differences constitute an important finding of the current research and are described in detail in the next section of this report.

Overall, the psychometric properties of the modified ICIAI suggest that this instrument is an adequate measure of collectivist principles and collectivist behaviors across a wide variety of social contexts. The psychometric properties of the ethnic group subscales that were added for the current research are consonant with those of the original subscales. The inclusion of the ethnic group subscales allows researchers to reliably and validly measure collectivist behaviors and principles with regards to an important social referent that was overlooked in the development of the original scale (i.e., the ethnic group).

Main Analyses

Are African Americans More Collectivist than European Americans?

The assertion that African Americans are a more collectivist group than European Americans is a common one in the literature on US ethnic group differences. However, few

30

empirical tests of this assertion exist and those that do exist have used collectivism measures with poor psychometric properties and samples that are too small or heterogeneous in terms of ethnic group membership. This form of sample heterogeneity does not permit direct generalization to a specific ethnic group. Thus, the first aim of this study was to provide an adequate test of the assumption that African Americans are more collectivist than European Americans. The current study avoids the shortcomings of prior research by using an adequately-sized, homogenous sample of African American college students and using a theory-based, psychometrically sound collectivism measure (i.e., the ICIAI). Additional rigor is ensured by statistically controlling for the effects of important SES variables through the use of hierarchical regression analyses.

To test the assertion that African Americans are a more collectivist group than European Americans, ten separate hierarchical multiple regression analyses were run for each of the subscales in the modified ICIAI. In all analyses, per-capita family income, head of household occupational status, and head of household education, were entered as step one predictors. A dummy-coded variable representing ethnic group membership (African American = 1, European American = 0) was entered as the sole step two predictor. In each of the analyses conducted, the dependent variable was a subscale from the modified ICIAI.

Ethnic group membership was only a significant predictor of collectivism in two of the analyses. These are presented in Table 10. Results suggest that African American group membership is a significant predictor of collectivist behaviors toward the ethnic group (β=.205, p=.014) and of collectivist principles toward the ethnic group (β=.269, p=.001) even after controlling for the effects of SES variables. Additionally, there was a trend for African Americans to report less collectivist behavior toward colleagues than is the case for European Americans (β=--.148, p=.092). In all of the analyses, no other predictor approached significance.

To examine whether gender moderated the relation between African American ethnicity and collectivism, ten separate multiple regression analyses were run for each of the subscales in the modified ICIAI. In all analyses the SES variables were entered as step one predictors. A variable representing ethnic group membership and a variable representing gender were entered as step two predictors. Finally, at step three, a term representing the interaction of gender and ethnicity was entered. There were no significant interactions involving gender and no significant main effects for gender.

As a whole, these analyses suggest that African Americans are more collectivist than European Americans in some social contexts but not others. Specifically, African Americans reported higher levels of collectivist behaviors and collectivist principles toward the ethnic group, but not toward family, friends, colleagues, or strangers. However, when the social context was a collegial relationship, there was some suggestive evidence that European Americans report a slightly higher degree of collectivist behaviors toward colleagues than African Americans do. Importantly, gender had no effect on the relation between ethnicity and collectivism.

The second aim of this study was to examine the relation among ethnic identity, collectivism, and individualism by comparing and contrasting two hypotheses regarding the nature of this relation. The first set of analyses examines whether ethnic identity acts as a mediator in the relation between ethnicity and collectivism and between ethnicity and individualism. The second set of analyses examines whether a moderating relation exists among these variables such that ethnic identity, individualism, and collectivism are differently related in different ethnic groups. These analyses will be presented using a question and answer format. In each case, the analytic strategy is first described and then followed by a presentation of the obtained results.

Does ethnic identity act as a mediator in the relation between ethnicity and
individualism?

According to Baron and Kenny (1986), a variable must meet four conditions in order to function as a mediator. First, the independent variable should have associated with the dependent variable. Second, the presumed mediator should be significantly associated with the independent variable in question. Third, the presumed mediator should be significantly related to the dependent variable in question. And fourth, the inclusion of the mediator in a statistical model must reduce or eliminate a significant direct relation between the independent and dependent variables. Recently, some researchers have highlighted the importance of a fifth necessary condition in all tests of mediation (Brown, Salsman, & Brechting, 2002; MacKinnon, Krull, & Lockwood, 2000). Specifically, the statistical significance of the reduction in the direct relation between the independent and dependent variable once the mediator is in the model must be tested. The completion of this additional procedure is necessitated by the multicollinearity and ensuing reduced power that result from the significant correlation between the independent

variable and the mediator. By completing this fifth step, researchers studying mediating effects ensure that the observed reduction in the relation between the independent and dependent variables once the mediator is in the model is greater than that which could be expected by chance. In the current research this five-step approach will be used, and the effects of SES variables and recruitment strategy will be controlled.

Hierarchical regression revealed that the relation between ethnicity and individualism, after statistically controlling for the effects of SES and recruitment strategy, was positive and significant (β=.282, p=.002), thus satisfying the first condition for mediation. The second step in testing for mediation was also met. Hierarchical regression was used to study the relation between ethnic identity and ethnicity after statistically controlling for the effects of SES variables and recruitment strategy. This relation was positive and significant (β=.344, p<.0001). Hierarchical regression confirmed that the third condition for mediation was also met. After controlling for SES and recruitment strategy, the relation between ethnic identity and individualism was positive and significant (β=.328, p<.0001). The fourth step in testing for mediation involves ensuring that the addition of the mediator variable (MV) in a statistical model accounts for a significant reduction in the relation between independent (IV) and dependent variables (DV). This step was tested using hierarchical regression (Table 11). When ethnic identity is entered at the final step of a hierarchical regression model that includes SES, recruitment strategy and ethnicity as predictors, the statistical relation between ethnicity and individualism is reduced but remains positive and significant (β=.193, p=.044).

To test whether the reduction in the direct relation between the IV and DV once the MV is in the model is statistically significant, Sobelis' (1982) formula for computing the standard error associated with the indirect effect was used. The value obtained from this statistical test was 2.35. Comparison to the critical value of 1.96 indicates that the reduction in the relation between ethnicity and individualism is significant. Taken together, the five steps involved in the analysis of mediation suggest that ethnic identity acts as a weak partial mediator in the relation between ethnicity and ethnic identity.

Does ethnic identity act as a mediator in the relation between ethnicity and collectivist behaviors toward the ethnic group?

The same analytic strategy described above for testing mediation in the context of individualism was used here to test for the mediation of ethnic identity in the relation between

ethnicity and collectivism. Since this study includes measures of collectivist behaviors and principles, parallel analyses were computed separately for these dependent variables. Hierarchical regression revealed that the relation between ethnicity and collectivist behaviors, after statistically controlling for the effects of SES variables and recruitment strategy, was positive and significant (β=.213, p=.019), satisfying the first condition for mediation. The second condition in testing for mediation, which involves verifying that ethnic identity (MV) is significantly related to the ethnicity (IV), was also met. The relation between ethnic identity (MV) and ethnicity (IV) was positive and significant, even after controlling for the effects of SES variables and recruitment strategy (β=.344, p<.0001). The third step in mediation testing is to test whether ethnic identity (MV) is significantly related to collectivist behaviors toward the ethnic group (DV). Use of hierarchical regression to confirm this relation showed that, after controlling for SES variables and recruitment strategy, this relation was positive and significant (β=.456, p<.0001). The fourth step in testing for mediation involves ensuring that the addition of ethnic identity (MV) in a statistical model accounts for a significant reduction in the relation between ethnicity (IV) and collectivist behaviors toward the ethnic group (DV). This step was tested using hierarchical regression (Table 12). When ethnic identity was entered at the final step of a hierarchical regression model that included SES and recruitment strategy and ethnicity as step one predictors of collectivist behaviors toward the ethnic group, the statistical relation between ethnicity and collectivist behaviors toward the ethnic group became non-significant (β=.053, p=.546).

To test whether the reduction in the direct relation between the IV and DV once the MV is in the model was statistically significant, Sobelis' (1982) formula for computing the standard error associated with the direct effect was used. The value obtained from this statistical test was 3.399. Comparison to the critical value of 1.96 indicates that the reduction in the relation between ethnicity and collectivist behaviors toward the ethnic group is significant. Taken together, the five steps involved in the analysis of mediation suggest that the vast majority of the relation between ethnicity and collectivist behaviors toward the ethnic group is explained through the mediation of ethnic identity.

<u>Does ethnic identity act as a mediator in the relation between ethnicity and collectivist principles toward the ethnic group?</u>

The same analytic strategy used in the previous two sections of this report was used to

test for the mediation of ethnic identity in the relation between ethnicity and collectivist principles toward the ethnic group. To confirm the first requirement for mediation, hierarchical regression analyses of the relation between ethnicity (IV) and collectivist principles toward the ethnic group (DV) was conducted. Results indicate that, after statistically controlling for the effects of relevant SES variables and recruitment strategy, the relation was positive and significant (β=.234, p=.008). Next, the relation between the MV and IV was examined and found to be positive and significant (β=.344, p<.0001). This after controlling for the effects of SES variables and recruitment strategy. The relation between ethnic identity (MV) and collectivist principles toward the ethnic group (DV) was examined next. After controlling for SES variables and recruitment strategy, this relation was found to be positive and significant (β=.456, p<.0001), satisfying the third condition for mediation. Ethnic identity (MV) was then added to a statistical model that describes the relation between ethnicity (IV) and collectivist principles toward the ethnic group (DV) after accounting for the variance in the DV explained by SES variables and recruitment strategy. The addition of ethnic identity accounted for a reduction in the statistical relation between ethnicity and collectivist principles toward the ethnic group (β=.112, p=.203). These results are presented in Table 12.

To test whether the reduction in the direct relation between the IV and DV once the MV is in the model was statistically significant, Sobelis' (1982) formula for computing the standard error associated with the direct effect was used. The value obtained from this statistical test was 2.05. Comparison to the critical value of 1.96 indicates that the reduction in the relation between ethnicity and collectivist principles toward the ethnic group is significant. Taken together, the five steps involved in the analysis of mediation suggest that ethnic identity is a very strong partial mediator in the relation between ethnicity and collectivist principles toward the ethnic group.

<u>Does ethnicity moderate the relation between ethnic identity and individualism?</u>

The analytic strategy used to test for moderation is that suggested by Aiken and West (1996) for the testing of interactions using multiple regression. Consistent with previously reported analyses, the effects of important SES variables and of recruitment strategy were controlled in all analyses by entering them in the first step of each of the three hierarchical regressions reported below. The variables that are thought to interact were entered as main effects at the second step of each hierarchical regression. Finally, the interaction term, created

by multiplying the dummy coded ethnicity variable (European American = 0, African American = 1) with the relevant centered continuous variable, was entered at step three. In the approach described by Aiken and West, the third step constitutes the de facto test of significance for moderation. If the interaction term accounts for significant amounts of variance in the dependent variable beyond that accounted for by other variables in the model, evidence for moderation exists. The interaction is then probed and described by means of simple slope analyses. When the interaction term does not account for significant amounts of variance in the dependent variable beyond that accounted for by other variables in the model, there is insufficient evidence to conclude that moderation exists.

When this analytic strategy was used to examine whether ethnicity moderates the relation between ethnic identity and individualism, results failed to confirm that a moderating effect exists. At step two, each of the main effects showed a positive and significant relation to individualism (ethnicity, $\beta=.193$, p=.044; ethnic identity, $\beta=.259$, p=.006). This suggests that ethnicity and ethnic identity are both significantly related to individualism even after controlling for the effects of SES variables. At step three both main effects continued to show a positive and significant relation to individualism (ethnicity, $\beta=.214$, p=.029; ethnic identity, $\beta=.311$, p=.004), however, the interaction term created by multiplying ethnicity and the centered ethnic identity variable was not significantly related to individualism scores ($\beta= 1.11$, p=.34). Results from this analysis suggest that ethnic identity and ethnic group membership each have independent linear effects on individualism. There is no evidence to suggest that the relation between ethnic identity and individualism significantly different for European Americans and African Americans.

Does ethnicity moderate the relation between ethnic identity and collectivist behaviors toward the ethnic group?

The analytic strategy described above was used to test for a moderating effect of ethnicity on the relation between ethnic identity and collectivist behaviors toward the ethnic group. Using the collectivist behaviors toward the ethnic group score from the ICIAI as a dependent variable, SES variables and recruitment strategy were entered as step one predictors, ethnicity and ethnic identity were added as main effects at step two, and the interaction term created by multiplying centered ethnic identity and the dummy-coded ethnicity variable was added at step three. At step three, ethnic identity is the only variable that shows a direct and significant relation to collectivist

behaviors toward the ethnic group (β=.528, p<.0001). Thus, the available evidence fails to support the consideration of ethnicity as a moderator in the relation between ethnic identity and collectivist behaviors toward the ethnic group, suggesting that the relation between ethnic identity and collectivist behaviors toward the ethnic group is not significantly different for European Americans and African Americans.

Does ethnicity moderate the relation between ethnic identity and collectivist principles toward the ethnic group?

The same analytic strategy was used to test for a moderating effect of ethnicity on the relation between ethnic identity and collectivist principles toward the ethnic group. Using the collectivist principles toward the ethnic group score from the ICIAI as a dependent variable, SES variables and recruitment strategy were again entered as step one predictors, ethnicity and ethnic identity were added as main effects at step two, and the interaction term created by multiplying centered ethnic identity and the dummy-coded ethnicity variable was added at step three. At step three, ethnic identity is the only variable that shows a direct and significant relation to collectivist behaviors toward the ethnic group (β=.400, p<.0001). Thus, the available evidence fails to support the consideration of ethnicity as a moderator in the relation between ethnic identity and collectivist principles toward the ethnic group, suggesting that the relation between ethnic identity and collectivist behaviors toward the ethnic group is not significantly different for European Americans and African Americans.

Chapter Four

Discussion

As the US population becomes increasingly diverse, the need to understand the psychological effects of ethnic diversity is imperative. Emerging research by Betancourt and Lopez (1993), Hall (2001), and Phinney (1996a) suggest that conceptualizing ethnicity as a multidimensional construct will draw attention to the specific mechanisms through which ethnicity operates on psychologically important outcomes. The goal of this study was to investigate the nature of the relation between ethnic identity, collectivism, and individualism as three components of ethnicity. Specifically, this study (a) sought to determine whether African Americans are more collectivist than European Americans, and (b) to investigate whether the nature of the relation among ethnicity, ethnic identity, collectivism, and individualism is best captured by a mediation or a moderation model.

Are African Americans more collectivist than European Americans

US ethnic groups have received relatively little attention from cross-cultural collectivism researchers (Gaines et al., 1997). As a result, the empirical evidence detailing the prevalence and patterns of collectivism in US ethnic groups is scarce. While it is common for cross-cultural researchers to describe African Americans as more collectivist than European Americans, there is little empirical support for this claim. The studies that previously have attempted to provide such empirical support suffer from unfortunate shortcomings such as unacceptably small African American samples, and use of poorly validated instruments. Thus, one aim of the current study was to appropriately test whether African Americans and European Americans differ in collectivism. Results suggest that African Americans are indeed more collectivist than European Americans but only in certain contexts.

When compared to European Americans, African Americans in this study reported greater collectivism – both in terms of adherence to collectivist principles and performance of collectivist behaviors – in reference to their ethnic group. In other words, African Americans in this sample reported attitudes and behaviors consistent with the deferment of individual goals in favor of ethnic group goals. The ethnic group was the only context in which African Americans were more collectivist. In fact, no between-groups differences in collectivism in the context of the family, friends, strangers, or attitudes toward colleagues were found. These findings are of particular importance as they were obtained after statistically controlling for the effects of

38

relevant SES variables. Additionally, gender did not have any effect on the relation between African American ethnicity and collectivism.

This study's findings are inconsistent with those of Matsumoto and colleagues (1997), who found that, when compared to European Americans, African Americans reported greater adherence to collectivist principles and greater performance of collectivist behaviors within the context of the family, and more collectivist behaviors toward friends. There are several possible explanations for the discrepancies between the findings of this study and those of Matsumoto et al. First, Matsumoto and colleagues did not control for the effects of SES variables. Socioeconomic differences between research participants from different US ethnic groups recruited through the same procedures are a consistent finding in cross-cultural research. For instance, in the current study mean values for the African American sample were lower than the mean values for the European American sample on all measured SES components. Thus, it was necessary to control for SES to ensure that ethnicity was directly responsible for any observed findings. Because they failed to control for SES, there is no way of knowing whether the variability in collectivist outcomes toward family and friends that Matsumoto et al. attribute to ethnicity may in fact have been due to SES differences between ethnic groups. Second, the African American sample used by Matsumoto and colleagues (N=21) was less than half the size of the current African American sample (N=54). A small sample size increases the possibility that observed differences are attributable to idiosyncratic features of a particular study sample. Third, it is possible that the failure to replicate the findings of Matsumoto et al. is a result of using a sample that is representative of a different population than that sampled by Matsumoto and colleagues. Specifically, European American students at the university in which the current sample was collected tend to come from rural areas. It is possible that European Americans from rural areas are more likely to hold collectivist beliefs and this may account for the failure to find differences between European American and African American students in most collectivism outcomes. However, previous research (Freeman, 1997) suggests that while the direct effect of a rural upbringing on collectivism is significant, it is accounted for by differences in SES, particularly occupational status. Since SES – including occupational status – was controlled for in this study, our expectation is that we effectively removed any bias associated with the over-inclusion of European Americans with rural origins. Nevertheless, greater certainty could be placed on current findings if future research should replicate the finding that controlling for SES

(particularly occupational status) accounts for the effects of a rural vs. an urban upbringing on collectivism differences between European Americans and African Americans. Finally, it is also possible that the addition of a fifth reference group in the current study influenced participants response patterns. Specifically, variance attributable to the referents "ethnic group," "family," and "friends" may have been confounded in the Matsumoto et al. study as "ethnic group" was not an available response category.

The current study found no effects of gender on the relation between African American ethnicity and collectivism. This contrasts with Gaines et al's (1997) report that gender moderated the relation between ethnicity and collectivism. A highly probable reason for this discrepancy is the heterogeneity that characterized the samples used by Gaines and colleagues. These samples included individuals from a variety of ethnic groups. Thus, as it does not replicate in the current sample, it is likely that the effect of gender was carried by individuals of color belonging to ethnic groups other than African American. A second, less likely, explanation for this discrepancy, lies in the gender composition of the current sample. Specifically, the current African American sample does not include equal gender representation. Perhaps, African American women are carrying the effects that the current study is attributing to ethnicity. However, this seems unlikely as the interaction term combining gender and ethnicity did not approach significance in any of the analyses. Importantly, ethnicity remained a significant predictors in these analyses.

In sum, it appears that the answer to the question of whether African Americans are more collectivist than European Americans is: it depends. African Americans are more collectivist but only in the context of their own ethnic group. In other contexts (e.g., family, friends, strangers) there is no difference between ethnic groups. The idea that collectivism varies with context is consistent with emerging research. Additionally, it is important to note that gender does not affect the relation between African American ethnicity and collectivism.

What is the relation among ethnic identity, collectivism, and individualism in African Americans and European Americans?

Because of their importance in explaining cross-cultural differences, ethnic identity and collectivism are constructs of particular interest in ethnicity research. The current study expands the theory on US ethnic group differences by clarifying the relation between ethnic identity, individualism, and collectivism in samples of African American and European Americans.

Specifically, Gaines et al's (1997) assertion that ethnic identity mediates the relations between ethnicity and collectivism, and between ethnicity and individualism is tested. Also tested is a hypothesis that these relations may differ for African Americans and European Americans.

Consistent with the findings of Gaines et al. (1997), results of this study found that ethnic identity mediates the relation between ethnicity and collectivism, and between ethnicity and individualism. Current findings expand on the findings of Gaines et al. (1997) by clarifying the nature of the mediating relation. An initial way in which the findings from the current study expand on those of Gaines et al is by clarifying that the relation between ethnicity and collectivism exists only in the context of the ethnic group. Specifically, African Americans report greater adherence to collectivist principles and performance of collectivist behaviors than European Americans when the context is their own ethnic group but not in any other context (e.g., family, friends, colleagues, strangers).

Additionally, the current study identified differences in the mediating role of ethnic identity in the relation between ethnicity and collectivism toward the ethnic group according to the type of collectivist outcome. Specifically, it appears that higher average ethnic identity is the main reason behind the elevated levels of collectivist behaviors toward the ethnic group in African Americans. However, the higher average ethnic identity of African Americans does not fully account for the higher levels of collectivist principles toward the ethnic group. Apparently, irrespective of their ethnic identity, African Americans will tend to report higher adherence to collectivist principles toward the ethnic group. However, these collectivist principles only translate into actual behaviors in individuals with higher levels of ethnic identity. If replicated, these findings might have important implication for the provision of psychological services among African Americans. Given the prevalence of ethnic group collectivism among African Americans, psychological services could be adapted for African American individuals by incorporating aspects of ethnic group collectivism. For instance, including therapy discussion of ethnic group experiences such as discrimination and the effect that these may have on the client's distress, and using interventions focused on establishing (or re-establishing) connections between a client and his or her ethnic group. Further, group therapy clients high in ethnic identity may reap greater benefit from services if other group members are of the same ethnicity. Overall, these types of adaptations may be less likely to provide any additional benefit to African Americans low on ethnic identity. For this reason, screening for ethnic identity may be an

important component in determining whether a given individual will receive greater benefit by receiving culturally-congruent services rather than the traditional services which may be more readily available. Thus, future research might explore the link between ethnic identity, collectivism and therapy process variables as well as treatment outcome.

With regard to individualism, results of the current study show weak partial mediation of ethnic identity in the relation between ethnicity and individualism. Specifically, results show that while accounting for ethnic identity can produce a significant decrease in the relation between ethnicity and individualism, this decrease does not reduce the direct relation between ethnicity and individualism to a non-significant level. Further analyses reveal the interaction effect of ethnic identity and ethnicity on collectivism is non-significant. Thus, results suggest that ethnicity and ethnic identity both are significantly and independently related to individualism, with neither variable (ethnic identity, ethnicity) being able to fully account for the other's influence on individualism. An implication of this finding is that the characterization of African American culture as a collectivist culture may be misleading. Specifically, while African Americans do demonstrate greater levels of ethnic group collectivism than European Americans, they also demonstrate greater adherence to values associated with individualism (e.g., "enjoying life" and "freedom"), a pattern of findings that supports the contention that individualism and collectivism are orthogonal. Once better measures of individualism are developed, future research should investigate the individualist aspects of African American culture. Comparison of patterns of individualism among African Americans to individualism patterns among other ethnic cultures of the US may be of particular interest and usefulness. A practical implication of the current findings is that adaptation of psychological services to meet the needs of African American clients should take into account individualist as well as collectivist aspects of African American culture.

None of the analyses for moderation were significant. Therefore, the available evidence suggests that there are no differences between African Americans and European Americans in the relation between ethnic identity and collectivism, and the relation between ethnic identity and individualism.

To summarize, findings from the current study suggest that the mediating role of ethnic identity is strongest in the relation between ethnic group membership and collectivist principles toward the ethnic group. In this case, ethnic identity is accountable for the majority of the

relation. Ethnic identity is also a strong mediator in the relation between ethnicity and collectivist behaviors toward the ethnic group, however, it does not fully account for this relation. Additionally, ethnic identity only accounts for a small amount of variance in the relation between ethnicity and individualism, as such it is best described as a weak partial mediator in this relation. Finally, there appear to be no differences between African Americans and European Americans in the relation between ethnic identity and the constructs of interest (i.e., individualism and collectivism).

Issues regarding the measurement of ethnic identity, collectivism, and individualism

Measurement of ethnic identity

Several important conclusions regarding the use of the EIS in the measurement of ethnic identity arise from this research. First, despite being developed and most extensively used among young adolescents, the EIS appears to be a reliable and valid measure of ethnic identity in older adolescents and young adults. Second, when used with older adolescents and young adults, minor changes to the EIS may be required. Specifically, researchers may wish to remove one item number three (i.e., "I am active in organizations or social groups that include mostly members of my ethnic group") as it appears to vary uniquely from the remaining items. In this study, the twelve remaining items produced a two-factor structure that, when compared to factor analyses based on data from younger adolescents (Spencer et al., 2000), appears to reflect the reduced importance of exploration in the development of ethnic identity. Third, as is the case with its use among younger adolescents, the high inter-factor correlation found in this study allowed for the EIS to be interpreted both as an overall measure of ethnic identity and as a measure of two related subcomponents. Further replication of these high inter-factor correlations would suggest that future research decisions on whether to use the full EIS score or scores for the separate subscales should be based on the specofoc goals and purposes of each study. Specifically, when the question of interest involves a specific subcomponent of ethnic identity (e.g. exploration), then computation of scale scores should be undertaken. However, if the question of interest requires the measurement of ethnic identity as an overall construct, then full-scale scores may be computed.

Measurement of Collectivism

Results of this study suggest that reported levels of collectivism will vary according to social context and according to the dimension of collectivism being assessed (i.e., behaviors or

attitudes). This suggests that cross-cultural focused on simple description of one group as more collectivist than another without reference to context or dimension is problematic. Additionally, current results highlight the importance of including the ethnic group as a context when studying collectivism among US ethnic groups. In the current study, this was the only context in which African Americans reported significantly higher levels of collectivist behaviors and attitudes. Overall, results strongly support the notion that future collectivism research among US ethnic groups should make use of psychometrically sound measures that account for context and dimensions of collectivism (e.g., the ICIAI).

Measurement of Individualism

At this time, there appear to be no published measures of individualism that are psychometrically sound and accurately reflect the theory behind this construct. Overall, published instruments assess broad conceptions of individualism that neither differentiate between individualist principles and behaviors nor appropriately reflect the importance that existing theory places on context. When it is considered that the collectivism findings from this study demonstrate the importance of differentiation between behaviors and principles and of accounting for context, it becomes apparent that findings based on the use of currently available individualism measures – including those of this study – should be interpreted with caution. Future research should focus on the development of individualism measures that are psychometrically sound and theory-based. In order to adequately represent the construct, future measures should differentiate between individualist principles and individualist behaviors, and sample across a variety of relevant social contexts. The ICIAI provides a good example of how this may be done.

Study Limitations

The relatively smaller size of the African American sample appears to limit current findings in several ways. First, it appears to compromise the sample's potential to adequately represent population parameters. However, it should be noted that the current African American sample is much larger than samples used in existing studies (e.g., Gaines et al., N1=5, N2=23; Matsumoto et al., N=21). The larger than typical sample size was obtained by going beyond traditional strategies in the recruitment of African American subjects. Specifically, while European American participants were recruited through a conventional listing of available research opportunities, African American participants were additionally recruited through

personal phone contact and e-mails by researchers, postings on electronic distribution lists, campus postings, and personal references from teaching assistants. Additionally, the statistical control of SES effects permits greater confidence in attributing the observed patters directly to the effects of ethnicity. For these reasons, while a larger sample size would have been advantageous, findings from this study should be more directly related to population parameters than those of previous studies involving the same variables. Researchers interested in further researching the relations of interest to this study may wish to consider including non-traditional recruitment strategies as a way to ensure larger African American samples, and include the measurement and control of SES.

The relatively smaller size of the African American sample also has implications for the factor analyses conducted as part of this research. Specifically, the current sample does not meet the frequently used rule of thumb of having a sample size larger than 300 (Tabachnik & Fidell,1996). However, it must be noted that four (two in each factor) out of the 12 items in the EIS have factor loadings above .80. Importantly, Guadagnoli and Velicer (1988) have stipulated that when several high-loading (>.80) marker variables exist, sample sizes greater than 150 allow for adequate confidence in the results of factor analyses. The current sample size surpasses this benchmark. For this reason, adequate confidence can be placed on the factor analytic results of this study. However, replication of this study's findings with a sample size larger than the traditional rule of thumb would engender more confidence in the results.

A final limitation imposed by the relatively smaller size of the African American sample is that it prevents the use of a within groups approach to look at variable relations specifically in this ethnic group. This is particularly unfortunate as a within-groups approach to research has shown great promise in furthering current understanding of US ethnic groups (e.g., Phinney et al., 2001). However, the current study's underlying goal of maintain adequate empirical rigor prevented the incorporation of this type of approach. The small number of African American participants does not have adequate statistical power, suggesting it would be imprudent to conduct within-groups analyses, particularly factor analytic work.. Our plan is to continue collecting data from African Americans until we have a large enough sample to permit with-groups analyses to be performed.

Conclusions

Despite its limitations, the current study produced several important findings. First,

regarding ethnic identity, findings suggest that ethnic identification may grow in importance as adolescents mature. Additionally, the current research demonstrates that, with certain modification, the EIS serves as a reliable and valid measure of ethnic identity among late adolescents. Second, the current study highlights the deficiencies that characterize current attempts at the measurement of individualism. There is an urgent need for the development of psychometrically sound individualism measures that appropriately reflect the importance that existing theory places on context and assess individualism across important domains (i.e., behaviors and attitudes). Third, results of this study strongly support the notion that future research focusing on collectivism among US ethnic groups should make use of psychometrically sound measures that account for context and dimensions of collectivism. It is particularly important to make use of measures that include the ethnic group as a social context. Fourth, results suggest that African Americans are only more collectivist than European Americans in the context of the ethnic group. Additionally, results of this study indicate that African Americans are more individualist than European Americans. However, in light of the current limitations of individualism measurement, these findings should be cautiously interpreted. Importantly, contrary to suggestions made by previous researchers, there are no differences in these patterns attributable to gender. Finally, ethnic identity mediates the relation between African American ethnicity and collectivism but not the relation between African American ethnicity and individualism.

Taken together, findings from this study provide a significant advancement in our understanding of cultural differences between European Americans and African Americans. They indicate the need to use context-dependent measures of collectivism and develop better (i.e., theory-based and context-dependent) measures of individualism. Furthermore, they highlight the importance of ethnic identity as a construct that can greatly clarify and expand findings based on the traditional approach to the measurement of ethnicity using a "yes/no" approach. Additionally, if replicated, findings from this study have implications for making psychological services more effective for African Americans (e.g., incorporating aspects of ethnic group collectivism and individualist values such as freedom and enjoyment of life into the development of culturally-congruent services for African Americans). In an era of increasing diversity, the crucial importance of adequately understanding ethnic group differences can no longer go underestimated and unaddressed.

Table 1

Description of the current research sample

Variable	African American		European American		p (bg, wg)
	M	SD	M	SD	
Socioeconomic Status Measures:					
Head of Household					
Occupational Status	51.89	14.98	62.96	17.40	**<.001(1,153)**
Per-capita Family Income	1.71	.93	2.20	1.25	**.014 (1, 149)**
Head of Household Education	2.63	1.65	3.40	1.83	**.011 (1, 153)**
Ethnic Identity Scale	42.37	7.25	33.87	8.13	**<.001(1,153)**
Collectivism Measures:					
ICIAI Principles: Family	124.03	16.77	120.28	15.43	.164 (1, 153)
ICIAI Principles: Friends	112.33	20.02	113.70	16.26	.650 (1, 153)
ICIAI Principles: Colleagues	92.84	22.11	95.69	19.81	.424 (1, 146)
ICIAI Principles: Strangers	56.27	23.48	52.57	23.40	.613 (1, 143)
ICIAI Principles: Ethnic Group	80.44	27.30	60.13	27.37	**<.001(1,152)**
ICIAI Behaviors: Family	121.23	18.17	118.27	16.88	.326 (1, 146)
ICIAI Behaviors: Friends	110.82	20.64	113.60	16.63	.375 (1, 146)
ICIAI Behaviors: Colleagues	91.20	22.87	97.26	21.46	.112 (1, 146)
ICIAI Behaviors: Strangers	57.26	26.59	59.41	22.99	.613 (1, 143)
ICIAI Behaviors: Ethnic Group	81.03	27.92	66.14	26.54	**.001 (1, 151)**
Social Order Scale	104.67	12.46	97.51	12.78	**.001 (1, 150)**
Behavioral Content of the Self					
- Collectivism	5.70	1.22	5.79	.97	.578 (1, 152)
Collectivism Scale	32.85	6.86	32.54	6.50	.781 (1, 152)
Marshall-Hofstede Inventory	34.96	4.94	37.32	5.17	**.007 (1, 151)**
Individualism Measures:					
Personal Openness Scale	76.66	9.16	72.18	9.18	**.004 (1, 153)**
Behavioral Content of the Self					
- Individualism	3.65	1.175	3.94	1.05	.117 (1, 149)

Table 2

Original Ethnic Identity Scale items and scale assignments

Item No.	Item
1	I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.
2	I am active in organizations or social group that include mostly members of my own ethnic group.
3	I have a clear sense of my own ethnic background and what it means to me.
4	I think a lot about how my life will be affected by my ethnic group membership.
5	I am happy that I am a member of the group I belong to.
6	(Reverse-scored) I am not very clear about the role of ethnicity in my life.
7	(Reverse-scored) I really have not spent much time trying to learn more about the culture and history of my ethnic group.
8	I have a strong sense of belonging to my own ethnic group.
9	I understand pretty well what my ethnic group means to me, in terms of how to relate to my own group and other groups.
10	In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.
11	I have a lot of pride in my ethnic group and its accomplishments
12	I participate in cultural practice of my own group, such as special food, music, or customs.
13	I feel a strong attachment towards my own ethnic group
14	I feel good about my cultural or ethnic background

Table 3

The Robert's solution

Item	Phinney 1992 No.	Factor 1 Group			Factor 2 Group		
		1	2	3	1	2	3
Happy to be a member	(6)	.65	.77	**.74**	-	-	.15
Strong sense of belonging	(8)	.75	.65	**.56**	-	-	.45
Understand ethnic membership	(9)	.73	.67	**.45**	-	-	**.50**
Pride in group	(11)	.77	.85	.19	-	-	**.70**
Feel strong attachment	(13)	.83	.77	.41	-	-	**.65**
Feel good about background	(14)	.76	.79	**.48**	-	-	.36
Clear sense of ethnic background	(3)	.37	.44	.11	.38	.25	**.72**
Have spent time trying to learn	(1)	-	-	-.23	.57	.67	**.83**
Active in ethnic organizations	(2)	-	-	**.67**	.54	.53	-.17
Think about group membership	(4)	-	-	-.02	.61	.44	**.67**
Often talked to people	(10)	-	-	-.03	.65	.60	**.83**
Participate in cultural practices	(12)	-	-	.02	.67	.49	**.70**

Note 1. Group 1: European American (Roberts et al., 1999). Group 2: African American (Roberts et al., 1999. Group 3: Current Sample

Note 2. For Group 3, loadings in bold represent factor assignments in the current study.

Note 3. Variance accounted for by Factor 1= 41.6% (Roberts et al., 1999 combined sample); 9.8% (Current Sample)
Variance accounted for by Factor 2 = 9.6% (Roberts et al., 1999 combined sample); 48.8% (Current Sample)

49

Table 4

Spencer solution analyses

Item	Phinney #	Factor 1		Factor 2	
		Group		Group	
		1	2	1	2
Clear sense of ethnic background	(3)	**.56**	.42	.54	**.53**
Happy to be a member	(5)	**.74**	**.77**	.26	.09
Strong sense of belonging	(8)	**.70**	**.81**	.44	.09
Understand ethnic membership	(9)	**.65**	**.73**	.41	.16
Pride in group	(11)	**.78**	**.60**	.38	.32
Feel strong attachment	(13)	**.74**	**.77**	.56	.26
Feel good about background	(14)	**.75**	**.68**	.32	.06
Have spent time trying to learn	(1)	.35	.06	**.77**	**.81**
Active in ethnic organizations	(2)	.33	**.52**	**.55**	-.26
Think about group membership	(4)	.33	**.37**	**.58**	**.39**
(Reverse) Not tried to learn	(7)	.24	-.18	**.67**	**.87**
Often talked to people	(10)	.40	.28	**.66**	**.67**
Participate in cultural practices	(12)	.47	**.43**	**.61**	**.38**

Note 1. Group 1: Spencer et al., 2000. Group 2: Current Sample

Note 2. Loadings in bold represent factor assignments in the study of origin.

Note 3. Variance accounted for by Factor 1= 46.6% (Current Sample)
　　　Variance accounted for by Factor 2 = 11.2% (Current Sample)

Table 5

Results of PCA with number of factors unconstrained

Item	Phinney #	Factor 1		Factor 2		Factor 3	
		Spencer	Roberts	Spencer	Roberts	Spencer	Roberts
Clear sense of ethnic background	(3)	**.473**	.352	**.467**	**.541**	-.051	-.083
Happy to be a member	(5)	**.702**	**.794**	-.132	-.135	.228	.256
Strong sense of belonging	(8)	**.749**	**.652**	.038	.216	.212	.202
Understand ethnic membership	(9)	**.687**	**.568**	.107	.286	.163	.147
Pride in group	(11)	**.756**	**.554**	.177	.397	-.174	-.200
Feel strong attachment	(13)	**.805**	**.653**	.160	.359	.039	.018
Feel good about background	(14)	**.886**	**.886**	-.127	-.078	-.230	-.202
Have spent time trying to learn	(1)	.014	-.132	**.839**	**.861**	.029	-.040
Active in ethnic organizations	(2)	.026	.029	.011	.054	**.960**	**.945**
Think about group membership	(4)	**.306**	.034	**.391**	.662	.133	.070
(Reverse) Not tried to learn	(7)	-.159		**.891**		-.114	
			NA		**NA**		**NA**
Often talked to people	(10)	.194	-.018	**.693**	**.838**	.129	.058
Participate in cultural practices	(12)	**.391**	.122	**.336**	**.642**	.097	.034

Note 1. Spencer refers to the items used by Spencer et al., 2000. Roberts refers to the items used by Roberts et al., 1999.

Note 2. Loadings in bold represent factor assignments in the current study.

Table 6

Unconstrained PCAs for the Spencer and Roberts solutions with item 2 removed

Item	Phinney #	Factor 1		Factor 2	
		Spencer	Roberts	Spencer	Roberts
Clear sense of ethnic background	(3)	**.475**	**.759**	**.450**	.104
Happy to be a member	(5)	**.785**	**.631**	-.167	-.494
Strong sense of belonging	(8)	**.841**	**.799**	-.007	-.247
Understand ethnic membership	(9)	**.763**	**.774**	.065	-.164
Pride in group	(11)	**.704**	**.788**	.166	-.046
Feel strong attachment	(13)	**.835**	**.886**	.128	-.148
Feel good about background	(14)	**.791**	**.667**	-.121	-.439
Have spent time trying to learn	(1)	.056	**.619**	**.824**	.494
Think about group membership	(4)	**.382**	**.616**	**.355**	.296
(Reverse) Not tried to learn	(7)	-.175		.897	
			NA		NA
Often talked to people	(10)	.274	**.718**	**.661**	.412
Participate in cultural practices	(12)	**.453**	**.668**	.331	.249

Note 1. Spencer refers to the items used by Spencer et al., 2000. Roberts refers to the items used by Roberts et al., 1999.

Note 2. Loadings in bold represent factor assignments in the current study.

Table 7

Internal Consistency Values (Alpha) for the Individualism-Collectivism Interpersonal Assessment Inventory

		Family	*Friends*	*Colleagues*	*Strangers*	*Ethnic Group*
Behaviors:	Full Sample	.88	.88	.91	.90	.93
	African American	.88	.90	.90	.91	.93
	European American	.88	.87	.92	.90	.93
Principles:	Full Sample	.85	.86	.88	.89	.93
	African American	.84	.87	.88	.87	.92
	European American	.86	.85	.88	.90	.93

Table 8

Full-sample correlations among ICIAI scales

	PF	BF	PR	BR	PC	BC	PS	BS	PE	BE
Principle Family (PF)	-	.86**	.78**	.67**	.53**	.40**	.34**	.13	.41**	.33**
Behavior Family (BF)		-	.71**	.83**	.49**	.50**	.29**	.17*	.32**	.35**
Principle Friends (PR)			-	.85**	.72**	.57**	.45**	.25**	.48**	.40**
Behavior Friends (BR)				-	.62**	.66**	.38**	.29**	.37**	.42**
Principle Colleagues (PC)					-	.84**	.53**	.40**	.53**	.44**
Behavior Colleagues (BC)						-	.40**	.47**	.38**	.49**
Principle Strangers (PS)							-	.75**	.67**	.55**
Behavior Strangers (BS)								-	.45**	.60**
Principle Ethnic Group (PE)									-	.81**
Behavior Ethnic Group (BE)										-

*p<.05. **p<.01

54

Table 9

Correlation of the ICIAI scales with other measures of collectivism and individualism

ICIAI Scale	Collectivism Measures				Individualism Measures	
	Collectivism Index	Marshal-Hofstede Collectivism	Social Order	Behavioral Content - Collectivism	Behavioral Content - Individualism	Personal Openness
Principle – Family	.400**	.305**	.492**	.189*	-.079	.007
Behavior – Family	.377**	.217**	.455**	.195*	-.009	.099
Principle – Friends	.470**	.420**	.460**	.227**	-.036	.123
Behavior – Friends	.456**	.314**	.450**	.245**	.022	.203*
Principle – Colleagues	.393**	.302**	.440**	.116 (p=.14)	.024	.199*
Behavior – Colleagues	.359**	.258**	.335**	.150 (p=.06)	.049	.233**
Principle – Strangers	.242**	.227**	.370**	.175*	-.061	.160*
Behavior – Strangers	.173*	.136 (p=.10)	.192*	.121 (p=.13)	-.026	.216**
Principle – Ethnic Group	.363**	.185*	.434**	.160*	-.135	.255**
Behavior – Ethnic Group	.341**	.134 (p=.10)	.387**	.186*	-.107	.339**

*p<.05. **p<.01

Table 10

Summary of hierarchical regression analysis relating African American ethnicity to collectivism after accounting for SES

Variable	DV = Collectivist Behaviors Toward the Ethnic Group					DV = Collectivist Principles Toward the Ethnic Group				
	B	SE B	β	R^2	ΔR^2	B	SE B	β	R^2	ΔR^2
Step 1				.07	.07*				.08	.08**
Head of household Occupational Status	-0.23	0.16	-.14			-0.36	0.17	-.21*		
Head of household Education	-2.28	1.57	-.15			-0.25	1.60	-.02		
Per-capita family Income	0.20	2.09	.01			-2.63	2.15	-.11		
Step 2				.11	.04*				.14	.06**
Head of household occupational Status	-1.56	0.16	-.10			-0.25	0.17	-.15		
Head of household Education	-2.24	1.54	-.15			-0.01	1.55	.00		
Per-capita family Income	0.78	2.07	.03			-1.90	2.09	-.08		
Ethnicity	11.95	4.83	.20**			16.24	4.90	.27**		

*p<.05. **p<.01.

Table 11

Summary of hierarchical regression analysis for the mediation of ethnic identity in the relation between African American ethnicity and individualism

Variable	B	SE B	β
Step 1			
Head of household occupational Status	-0.01	0.06	-.02
Head of household education	0.18	0.53	.03
Per-capita family income	0.57	0.72	.07
Recruitment Strategy	-3.15	3.09	-.09
Ethnicity	5.58	1.80	.28**
Step 2			
Head of household occupational Status	-0.02	0.06	-.05
Head of household education	0.48	0.53	.09
Per-capita family income	0.70	0.70	.09
Recruitment Strategy	-4.86	3.08	-.14
Ethnicity	3.81	1.87	.19*
Ethnic Identity	0.28	0.10	.26**

Note. ΔR^2 for Step 1 = .07 (p=.08); ΔR^2 for Step 2 = .05 (p<.01).
*p<.05. **p<.01.

Table 12

Summary of hierarchical regression analysis for the mediation of ethnic identity in the relation between ethnicity and ethnic group collectivism

Variable	DV = Collectivist Behaviors Toward the Ethnic Group					DV = Collectivist Principles Toward the Ethnic Group				
	B	SE B	β	R^2	ΔR^2	B	SE B	β	R^2	ΔR^2
Step 1				.11	.11**				.15	.15**
Head of household Occupational Status	-0.16	0.17	-.10			-0.24	0.17	-.14		
Head of household Education	-2.27	1.55	-.15			0.00	1.56	.00		
Per-capita family Income	0.82	2.08	.03			-2.09	2.10	-.08		
Recruitment Strategy	-2.01	8.91	-.02			9.59	9.01	.09		
Ethnicity	12.40	5.24	.21*			14.15	5.28	.23**		
Step 2				.27	.16**				.25	.10*
Head of household occupational Status	-0.23	0.15	-.14			-0.30	0.16	-.18		
Head of household Education	-0.73	1.44	-.05			1.34	1.50	.08		
Per-capita family Income	1.52	1.90	.06			-1.44	1.99	-.06		
Recruitment Strategy	-11.01	8.27	-.11			2.26	8.69	.02		
Ethnicity	3.05	5.05	.05			6.76	5.28	.11		
Ethnic Identity	1.48	.27	.47**			1.21	0.28	.37**		

*p<.05. **p<.01.

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PERSONAL INFORMATION

Name: Ignacio David Acevedo
Date of Birth: May 15, 1976
Place of Birth: Puebla, Puebla, México

EDUCATION

Aquinas College. Grand Rapids, Michigan
B. S., Magna Cum Laude
Major: Psychology. Minor: Sociology.
Graduation Date: May 1999

HONORS AND AWARDS

February 2003   Excellence in Campus Leadership Award from the American
Psychological Association of Graduate Students

March 2002   Graduate Student Enrichment and Research Award from the African
American Studies and Research Program at the University of
Kentucky

May 1999   National Dean's List Award

May 1999   All-American Scholar/Athlete Honors from the National
Association of Intercollegiate Athletics

May 1995 –   Aquinas College Dean's List Awards
May 1999

March 1996   Who's Who Among Students in American Colleges and
Universities, Aquinas College

PROFESSIONAL EXPERIENCE

August 2000 -   University of Kentucky
Present   Department of Psychology

January 2003- May 2003	Teaching Assistant (PSY 534, Child Psychopathology)
July 2001- Present	Jesse G. Harris Jr. Psychological Services Center
August 2001- Present	Therapist
July 2001- July 2002	Coordinator
August 2000- May 2001	Teaching Assistant (PSY 100, Introduction to Psychology)
August 98- August 2000	Pine Rest Christian Mental Health Center for Psychiatric Residential Services Residential Care Provider
January 2000 - July 2000	Grand Valley State University Department of Psychology Research Assistant
March 99 - December 99	Spectrum Health Patient Relations Department Translation and Interpretation Services Program Coordinator
July 96 - July 98	Hispanic Center of Western Michigan Translator / Interpreter
May 97 - August 97	Summer Youth Program Coordinator
June 96 - July 96	Summer Youth Program Supervisor

PROFESSIONAL AFFILIATIONS

American Psychological Association of Graduate Students
Member - Campus Representative

American Psychological Association
Graduate Student Affiliate

Division 12, Society of Clinical Psychology
Student Member

Section VI, The Clinical Psychology of Ethnic Minorities
Member

Division 45, Society for the Psychological Study of Ethnic Minority Issues
Student Member

Division 53, Society of Clinical Child and Adolescent Psychology
Student Member

SELECTED PAPERS AND PRESENTATIONS

Acevedo-Polakovich, I. D., Lorch, E. P., Milich, R., & Meyer, K. (2003, August). Patterns of media use in ADHD and comparison children. Poster accepted for presentation at the 2003 Annual Conference of the American Psychological Association. Toronto, Ontario, Canada.

Acevedo-Polakovich, I. D., & Brown, T. L., (2003, May). Putting it in context: The value of linking collectivism theory and measurement. Poster accepted for presentation at the 2003 Annual Conference of the Midwestern Psychological Association. Chicago, IL.

Gottardo, A., Harmon, M., Acevedo, I. D., Stanish, H., & Wolfe, M. The development of English reading in Spanish-speaking children. Paper presented at the 8th Annual Meeting of the Society for Scientific Studies in Reading.

Gottardo, A., Harmon, M., Acevedo, I. D., & Booker, R. (2000, November). English and Spanish language skills in prereaders and beginning readers. Poster presented at the 51st Annual Conference of the International Dyslexia Association. Washington, DC.