

## ABSTRACT

Title of Dissertation: CHALLENGES AND RESILIENCE IN THE LIVES OF MULTIRACIAL ADULTS: THE DEVELOPMENT AND VALIDATION OF A MEASURE

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The purpose of the present study was to develop and validate the Multiracial Challenges and Resilience Scale (MCRS). The MCRS is a measure of the types of challenges (i.e., Others' Surprise/Disbelief Reactions, Lack of Family Acceptance/Understanding, Multiracial Discrimination, Feelings of Disconnection from Family and Friends) and resilience (i.e., Appreciation of Human Differences, Multiracial Pride) experienced by Multiracial adults. Participants ( $N = 317$ ) included a national sample of individuals who identified their biological parents as representing two or more different racial groups. All participants resided in large metropolitan areas within the continental United States at the time of data collection. Data were collected through the use of an internet survey containing the MCRS and measures used to assess convergent and discriminant validity. Internal consistency estimates of subscales ranged from .76 to .83. Convergent validity was supported through positive relations of the Challenge subscales with depression and positive relations of the Resilience scales with self-esteem. Discriminant validity was supported through the absence of correlations between the Challenges scales and Orderliness and lack of relationship between the Resilience scales and Social Desirability. Directions for future research and the limitations of this study are discussed.

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ADULTS: THE DEVELOPMENT AND VALIDATION OF A MEASURE

By

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## Chapter 1

### INTRODUCTION

Since 1967, when anti-miscegenation laws were overturned, the number of children born to parents of different races has grown steadily (Suzuki-Crumly & Hyers, 2004). The change in the 2000 U.S. census, allowing respondents to identify as members of more than one racial group, reflected the beginning of our culture's willingness to acknowledge the existence of Multiracial people (Miville, Constantine, Baysden & So-Lloyd, 2005). Reflecting our larger culture, the experiences of Multiracial people have been mostly overlooked by the fields of counseling and psychology (Miville et al., 2005; Shih & Sanchez, 2005). The term Multiracial will be used in this paper to indicate individuals whose parents identify as belonging to two (or more) different racial groups.

The little research that examines the experiences of Multiracial individuals has focused largely on racial identity development, and most of this research employed qualitative methodologies (e.g., Buckley & Carter, 2004; Collins, 2000; Henriksen & Trusty, 2004; Miville et al., 2005; Rockquemore & Brunsma, 2002; Root, 1998). The literature on Multiracial people has taken the perspective that Multiracial individuals undergo a more complicated identity development process than monoracial people (i.e., individuals whose ancestry is composed of a single racial group), and therefore that Multiracial people probably suffer from greater psychological distress (Shih & Sanchez, 2005). A recent review of qualitative and quantitative literature concluded that Multiracial people do indeed face unique race-related challenges. However, the review also found little support for the hypothesis that Multiracial individuals necessarily suffer from greater psychological distress than Monoracial individuals. Additionally, there is evidence that life

experiences common to Multiracial individuals might contribute to the development of certain psychological strengths (Shih & Sanchez, 2005). At this point, little is known about the specific race-related challenges and resilience that might be relevant for Multiracial people, and how these challenges and resilience impact psychological variables such as ethnic identity, social connections, self-esteem, and satisfaction with life.

Clearly, further research is needed to identify the unique experiences of Multiracial individuals (Miville et al., 2005; Shih & Sanchez, 2005). However, currently, no quantitative measures assessing the race-related experiences among Multiracial people exist. Understanding the challenges and resiliencies that are relevant for Multiracial individuals can provide direction for appropriate psychological interventions with this population. The purpose of this study was to use resilience theory and critical race theory to advance knowledge regarding the operationalization and measurement of race-related challenges (e.g., experience with racism, social invalidation, and negative psychological outcomes) and resilience (e.g., enhanced functioning in society and positive psychological outcomes) experienced by Multiracial people living in the United States.

### Theoretical Basis

Resilience theory and critical race theory provide useful frameworks for conceptualizing the experiences of Multiracial individuals. Resilience describes the phenomenon of healthy development within the context of adversity. Based upon Shih and Sanchez' (2005) literature review, Multiracial individuals as a group face unique risk factors. Risk factors are threats (e.g., racism, discrimination) that have the potential to psychologically or developmentally harm an individual. If, in the presence of this threat, an individual achieves desired outcomes (e.g., racial pride, self-esteem) or avoids negative

outcomes (e.g., depression, social disconnection), the person is considered resilient (Masten, 2001). Critical race theory asserts that race and racism are a central part of American society and culture. Thus, racism can be considered an ever-present risk factor in the lives of people of color.

*Definitions: Race and Racism*

Race refers to a socially and politically constructed category of people who are believed to share certain physical characteristics, such as skin color, hair texture, and facial features (Cokley, 2007, Helms, 1995, James & Tucker, 2003). More specific definitions of race are widely debated (e.g., whether or not a biological component to race exists, Cokley, 2007, James & Tucker, 2003). Although there is little consensus about the definition of race, this study considered race as a socially and politically constructed variable. Helms (1995) asserted that racial groupings are “sociopolitical and economic conveniences” (p. 181). The inclusion criteria for membership in particular racial groups also are socially defined (Helms, 1995). The set of inclusion criteria differs by racial category, and changes over time and across cultures depending upon the needs of the dominant group.

Racial hierarchies result in racism and oppression of less powerful groups (Ridley, 2005). Ridley (2005) defined racism as “any behavior or pattern of behavior that tends to systematically deny access to opportunities or privileges to members of one racial group while allowing members of another racial group to enjoy those opportunities or privileges” (p. 29). These behaviors can be intentional or unintentional, and can take the forms of both mistreatment and neglect (Ridley, 2005). However, even when unintentional, racism is believed to be a potential source of trauma for the victim of racism (Bryant-Davis & O’Campo, 2005; Ridley, 2005; Spanierman & Poteat, 2005), and the dynamics of racist

victimization have been paralleled to the dynamics of widely recognized traumatic experiences such as rape and domestic violence (Bryant-Davis & O'Campo, 2005). In the language of critical race theory, these unintentional, often invisible forms of racism are called "microaggressions" (Delgado & Stefancic, 2001; Solorzano, Ceja, & Yosso, 2001). Future research should seek to understand the role of and consequences of these microaggressions among specific groups of people, such as Multiracial adults. This knowledge is necessary for designing interventions to improve psychological health of Multiracial individuals.

### *Racism and Multiracial Adults*

Because race and racism are central to human experience in the United States, all people undergo racial socialization, and the content of this socialization differs by racial group membership (Helms, 1995). More specifically, all people are exposed to powerful messages about what it means to be a White, Black, Asian, Native American, or Latina/o living in the United States. However, there are no consistent social messages about who is Multiracial and what it means to be Multiracial (Shih & Sanchez, 2005). Race-relations and the meaning of race are often shifting, and people develop ways (e.g., attitudes, beliefs, behaviors, ways of coping, interpersonal styles) to adjust to the current racial context (Helms, 1995; Ridley, 2005).

Race-related experiences faced by Multiracial people are thought to differ than those experienced by monoracial individuals (Kerwin & Ponterotto, 1995, Miville et al., 2005; Poston, 1990). For example, Multiracial individuals encounter the types of racism experienced by monoracial people of color, but also confront specific forms of racism directed only toward Multiracial individuals (Buckley & Carter, 2004; Collins, 2000;

Henriksen & Trusty, 2004; Miville et al., 2005; Rockquemore & Brunsma, 2002).

Additionally, Multiracial individuals may have less access to Multiracial family and friends and thus may have less social support or guidance about how to negotiate race-related obstacles or make meaning of racial stimuli.

Little is known about the ways of coping, and other types of resilience Multiracial people tend to develop as a consequence of their race-related challenges. Some research indicated that Multiracial people demonstrated enhanced social functioning (Collins, 2000; Miville et al., 2005; Roberts-Clarke, Roberts, & Morokoff, 2004; Suyemoto, 2004) and positive psychological health (McKelvey & Webb, 1996; Suzuki-Crumly & Hyers, 2004). Further research is needed to replicate these findings. Thus, the second purpose of this study is to understand the resilience Multiracial people may develop in the presence of race-related challenges, including enhanced interpersonal functioning and positive psychological health.

#### Research Summary of Multiracial Challenges and Resiliencies

Multiracial people represent a very diverse group of people and racial, ethnic, socioeconomic, geographic and other variables undoubtedly impact the specific experiences of Multiracial people. However, it also seems that some race-related experiences might be common for Multiracial people living in the United States (Miville et al., 2005).

#### *Race-related Challenges*

*Racism.* Many Multiracial people report victimization experiences with multiple types of racism (Herman, 2004; Miville et al., 2005; Shih & Sanchez, 2005). Multiracial people may experience racism directed toward their minority status and toward their

Multiracial status. For example, a Biracial European American and Arab American man might experience job discrimination due to stereotypes about Arab Americans as terrorists. On the other hand, he also is likely to encounter experiences of racism due to his Multiracial status: such as not being treated as an outgroup member by both Whites and Arab Americans.

Additionally, Multiracial people are victims of institutional racism that makes Multiracialism invisible or non-normative. Examples of this are school and job applications that do not provide an opportunity for Multiracial people to appropriately identify their racial background (Miville et al., 2005). More specifically, applications that only allow individuals to check a single box (either a single racial category or an “other” category) to indicate race serve to invalidate the existence of Multiracial individuals.

*Social invalidation of identity.* Racial identity development can be complex for Multiracial people in part due to societal, family, and peer pressures to identify or not to identify with particular groups. For example, at times, some Multiracial people feel pressured to identify with one racial group, even though they feel close to two or more groups (Herman, 2004; Herring, 1995; Miville et al., 2005; Rockquemore & Brunnsma, 2004). Perhaps a Biracial Asian and Black woman who shares more physical features with her Asian parent, personally identifies equally as Asian and Black. Others are likely to assume she is Asian due to her physical features. Some people also might challenge her decision to identify with a Black racial group, surprised when she discloses her Black heritage, and expect her to identify with a single race (Brunnsma & Rockquemore, 2001; Khanna, 2004; Nakashima, 1992; Rockquemore & Brunnsma, 2004; Rockquemore & Laszloffy, 2003).

On the other hand, many Multiracial people who feel close to only one racial group might feel pressure to identify with multiple racial groups (Herman, 2004; Milville et al., 2005). A Biracial man whose mother is White and father is Native American might identify as Native American, but feel guilty for not identifying with his mother's racial group. This person also might experience social invalidation and challenges by others who know his ancestry is composed of White and Native American groups and believe he should identify with both (Gaskins, 1999).

*Negative psychological outcomes.* Research suggested that some Multiracial people reported feeling "different" or not "normal" (Miville et al., 2005; Suyemoto, 2004). Many reported feeling some distance from family members because of their racial difference from them (Khanna, 2004; Miville et al., 2005). For example, a Biracial South Asian and Latina woman may not feel entirely accepted or understood by either side of her family. Perhaps her physical features do not closely resemble those of her family members. It also is possible that her parents communicate with each other primarily in English, so she may not be fluent in the primary languages of her maternal or paternal relatives. These physical and cultural differences also might lead to rejection from South Asian, Latina, and other peer groups: all of whom might consider this woman an outgroup member. These real experiences of rejection could potentially lead to the development of a self-perception of difference that could be generalized to many areas of this woman's life.

Some research also has found evidence of internalized racism within Multiracial individuals (Rockquemore, 2002; Root, 1998; Thornton & Gates, 2001). Rockquemore (2002) and Root (1998) found that Multiracial adults tend to "color code" the family dynamics they observe. Thus, if a woman's South Asian father is verbally abusive towards

her Latina mother, this woman might interpret this to mean that South Asian men are tyrannical. If she finds support for these beliefs in societal stereotypes, the beliefs may be reinforced.

### *Positive Adaptations*

*Enhanced social functioning.* Several studies have found that Multiracial people reported developing cross-cultural competence. For example, Multiracial people indicated valuing and accepting human differences and worldviews, as well as experiencing empathy for people from different cultures (Miville et al., 2005; Shih & Sanchez, 2005; Suyemoto, 2004). These individuals described an understanding of the role of racism in distancing racial groups from each other as well as the importance of building relationships across racial and cultural groups. Not only did many Multiracial individuals discuss their own valuing of cultural diversity, but many also reported actively seeking friends and romantic partners who shared these values (Roberts-Clarke et al., 2004).

Some Multiracial individuals reported an ability to “fit-in” in multiple cultural social contexts (Miville et al., 2005; Shih & Sanchez, 2005). Because of their exposure to at least two different cultural and racial groups, some Multiracial individuals described a capacity to intuit cultural cues and respond in culturally appropriate ways, thus being able to more easily adapt to different cultural contexts (Suyemoto, 2004). Finally, these individuals reported an ability to magnify one part of their identities, while minimizing other parts to connect with a particular group of people. For example, a Native American and Latino man might choose not to disclose his Latino ancestry in a largely Native American environment. He might expose those parts of him that help him connect with the

Native American community. On the other hand, this man might emphasize his Latino culture in more heavily Latin American contexts.

*Positive psychological outcomes.* Few studies have examined positive psychological outcomes among Multiracial adults. One study reported that Multiracial women valued their belonging to two or more racial groups as an important asset (Roberts-Clarke et al., 2004). These women felt that their racial and cultural ties were a resource they brought to romantic relationships and families of creation. For example, their children could benefit from the exposure they could provide to two or more cultures.

Another study examined life satisfaction, depression, and self esteem among Biracial adults with one minority parent and one White parent (Suzuki-Crumly & Hyers, 2004). The findings suggested that minority identification was related to higher life satisfaction. Also, among individuals with some Asian ancestry, minority identification was related to lower levels of depression. There were no relationships between racial identification and self-esteem (Suzuki-Crumly & Hyers, 2004).

#### Shih and Sanchez (2005): A Comprehensive Literature Review

Shih and Sanchez (2005) conducted a comprehensive review of the literature examining psychological outcomes among Multiracial individuals living in the United States. The authors found 28 qualitative studies and 15 quantitative studies matching their search criteria. The review revealed evidence of positive and negative psychological outcomes exhibited by Multiracial individuals. For example, the authors found that many Multiracial individuals appreciated all of their cultural heritages, empathized with cultures and races different than their own, reported overcoming discrimination, created strong interpersonal relationships, and indicated few problems with identity development.

On the other hand, the results also indicated that many Multiracial individuals expressed conflict and confusion about their racial identity, discomfort responding to questions about their race, rejection by others, depression, delinquency, and behavior problems (Shih & Sanchez, 2005). The authors concluded that further research was needed to explicate the factors relating to positive and negative psychological functioning among Multiracial individuals. The authors also emphasized the importance of studying Multiracial experiences in a balanced manner: giving attention to both the difficulties Multiracial individuals encounter as well as the strengths, resources, and resiliencies these individuals possess.

#### Current Measures

No assessments have been created to measure the experiences of Multiracial individuals. In Shih and Sanchez's (2005) comprehensive review of the literature examining psychological outcomes among Multiracial individuals, the authors found that the majority of the research used qualitative methodology. Additionally, only one empirically validated measure was used with some consistency in the quantitative investigations. This measure was the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992).

The MEIM (Phinney, 1992) is a broad measure of ethnic identity that is intended for use with individuals of all ethnic backgrounds. The MEIM assesses the extent to which individuals participate in ethnic behaviors (e.g., involvement in social activities and cultural traditions), have feelings of pride, happiness, and attachment to one's ethnic background, are interested in learning about their background, and feel clarity about what their ethnicity means to them. The MEIM is a general survey, and was not created to

specifically measure the ethnic identity of Multiracial people. The items on the measure are worded in a way that reflects one ethnic group (e.g., “I participate in cultural practices of my own group, such as special food, music, or customs.”) Some Multiracial individuals might experience difficulty answering this question. For example, they might feel uncertain regarding to which ethnic group the item is referring. This might cause confusion for a Multiracial person who is highly involved in the activities of one ethnic background, but not in the activities of their other ethnic backgrounds. Finally, a Multiracial individual might feel alienated by this question because it assumes a single ethnic identity. Therefore, the appropriateness of the use of the MEIM with Multiracial individuals is questionable.

Aside from the MEIM, there are no other empirically validated quantitative measures that have been used with Multiracial participants. No measures have been designed for and validated using Multiracial samples. Thus, measures are needed than assess the specific types of racism, invalidation, negative psychological outcomes, enhanced social functioning, and positive psychological outcomes experienced by Multiracial individuals.

### Conclusion

To conclude, this study seeks to use resilience theory and critical race theory to create a psychometrically sound measure of race-related challenges and resiliencies experienced by Multiracial people. We hope that this measure will help advance knowledge and promote further empirical study of the experiences of Multiracial people. The knowledge gleaned from such studies can enable counseling psychologists to develop therapeutic interventions for this growing segment of the United States’ population.

## Literature Review

The purpose of this study was to create a psychometrically sound measure assessing race-related challenges encountered by Multiracial people and the types of resilience developed in the presence of these challenges. This review will describe what is currently known about the race-related experiences of Multiracial adults. First, a summary of resilience and critical race theories will be provided. Second, a discussion of race-related challenges will be presented and will include an overview of the theoretical and empirical literature examining racism, social invalidation, and negative psychological outcomes among Multiracial adults. After that, positive adaptations, or resilience, will be discussed. Specifically, summaries of theoretical and empirical literature investigating enhanced social functioning and positive psychological outcomes among Multiracial adults will be provided. Next, a summary of a comprehensive review of the literature examining Multiracial experiences will be presented. Finally, existing measures used to assess Multiracial experiences will be critiqued.

Several inclusion and exclusion criteria were used in the selection of empirical articles for this review. All studies examining the experiences of Biracial or Multiracial adults living in the continental United States were included. The review was confined to adults because the purpose of this study is to create measures assessing challenges and resilience as experienced specifically by Multiracial adults. The review also was limited to people living in the continental United States because the experience and meaning of race is culturally bound and may differ by social context (Helms, 1995). All studies were identified from computer searches on PsycINFO and ERIC (Educational Resources

Information Center), which are both comprehensive electronic databases including journals from psychology, education, and related fields.

Studies excluded from this review were those that did not provide information about challenges encountered by Multiracial adults or resiliencies developed. Finally, research on samples in Hawaii, Puerto Rico, or outside the United States also were excluded because the racial climates in these areas might differ from that of the continental United States.

Using the stated inclusion and exclusion criteria, a total of 16 studies were identified for inclusion in this review. This review is organized by content area (e.g., racism, social invalidation, negative psychological outcomes, enhanced social functioning and positive psychological outcomes). Thus, those studies that investigated more than one of these topics are discussed in more than one section of this review (e.g., if a study addressed racism and social invalidation, it was discussed under both sections).

### Resilience Theory and Critical Race Theory

#### *Resilience Theory*

Resilience refers to the common phenomenon of positive adaptation despite exposure to adversity. The indirect model of resilience, described by Masten (2001) will be used as a framework for the present investigation. There are three important components of this model: risk, protective factors, and outcomes. A risk factor is any kind of adversity that is like to increase the likelihood of a negative outcome. In the lives of Multiracial individuals, racism and social invalidation can be considered risk factors because they may be associated with increased distress.

Protective factors are those assets that buffer against the impact of adversity by mediating or moderating the relationship between the adversity and outcome. For example, a supportive parent that is able to help their Multiracial child cope with racist or invalidating experiences might serve as a protective factor against the negative outcomes the child might otherwise encounter.

Outcomes refer to the specific variable that is believed to be at risk in the presence of adversity. For example, a Multiracial Asian and Black child might be teased by Asian American and African American students at school and have difficulty entering either social circle. This adversity might put the child at risk for low self-esteem (a negative outcome). However, the child might have a supportive and involved parent who is able to help the child find ways to preserve a positive sense of self (e.g., maybe by providing a sense of belonging within the family and with a close network of Multiracial family friends). Thus, the parent might serve as a protective factor, and the child might develop healthy self-esteem. If this process were to occur successfully, the child would be considered resilient.

### *Resilience and Critical Race Theory*

Critical Race Theory can be used in conjunction with resilience theory to understand the experiences of Multiracial individuals. A basic premise of critical race theory is that racism is a deeply embedded component of American society (DeCuir & Dixson, 2004). Racism is pervasive and a part of all social and political structures (Bell, 1992; DeCuir & Dixson, 2004; Delgado & Stefancic, 2001). Because racism is so “normal,” it is often extremely difficult to recognize or address (Delgado & Stefancic, 2001). The most pervasive forms of racism often are unintentional and can be the result of

'color-blind' ideologies, practices, and policies. The insidious quality of these forms of racism makes them especially difficult to identify and confront, while also making them all the more important to understand (Crenshaw, 1988; DeCuir & Dixson, 2004; Delgado & Stefancic, 2001, Williams, 1997). Thus, critical race theory recognizes racism as a constant risk-factor present in the lives of Multiracial individuals.

Critical race theory conceptualizes 'race' as a socially constructed category that is created and re-created as needed by society. Who belongs to a particular racial group and where racial groups are positioned in the social hierarchy changes along with the political and economic climate of the time (Bell, 1980, DeCuir & Dixson, 2004; Delgado & Stefancic, 2001). Thus, race must be discussed within a specific cultural context and time period.

Critical race theory provides a useful context for understanding the experiences of Multiracial people. The centrality of racism in critical race theory is appropriate for conceptualizing the race-related challenges and resiliencies Multiracial people confront, because racism is at the crux of those experiences. Critical race theory also asserts that although racism is ever-present in the lives of people of color, many people of color continue to thrive and are high functioning. Thus, people of color develop resilience in the presence of the challenge of racism. The remainder of this paper will more closely examine the race-related challenges (e.g., racism, social invalidation, and negative psychological outcomes) as well as resilience (e.g., enhanced social functioning and positive psychological outcomes) encountered by Multiracial people living in the continental United States.

## Race-related Challenges

Resilience can only exist in the context of risk (Masten, 2001). Critical race theory proposes that racism is a challenge experienced by all people of color (Delgado & Stefancic, 2001). Multiracial people experience the forms of racism experienced by other people of color, and also face a unique brand of racism reserved specifically for people of mixed racial backgrounds (Miville, et al. 2005). These racist experiences also can lead to social invalidation and negative psychological health. A summary of the literature examining these challenges is provided next.

### *Racism*

Racism has been defined in a variety of ways, and little consensus exists about what types of behaviors actually constitute racism (Ridley, 2005). Ridley (2005) proposed a definition of racism that encompassed the varied behaviors that may be considered racist. Ridley (2005) defined racism as “any behavior or pattern of behavior that tends to systematically deny access to opportunities or privileges to members of one racial group while allowing members of another racial group to enjoy those opportunities or privileges” (p. 29). There are two main types of racism: Individual and institutional. Individual racism refers to racism perpetrated by one person or a small group of people, whereas institutional racism refers to racism perpetrated by organizations and institutions. Both individual and institutional racism can be overt or covert. Overt racism is always the result of malicious intent, whereas covert racism might be either intentional and malicious or unintentional and without malice (Ridley, 2005). For example, when a Biracial high school student is asked to indicate her race on a college application and feels invisible or invalid because she cannot find a box that describes her, the student has experienced unintentional, covert,

institutional racism. If this student then attends this university and is paired with a residential hall roommate who chooses to keep her possessions locked away from her because she does not trust people of her racial group, the student has been a victim of intentional, individual racism. If this student goes to the campus counseling center to seek assistance related to these issues and the counselor interprets her complaints as rooted in individual psychopathology rather than in a racist environment, then the student has suffered unintentional individual racism.

Utsey and Ponterotto (1996) identified another type of racism, which they called cultural racism. Cultural racism refers to the practice of upholding one particular culture as the ideal, while devaluing other cultures as inferior. Individual, institutional, and cultural racism are a part of the daily experiences of people of color living in the United States (DeCuir & Dixson, 2004; Delgado & Stefancic, 2001; Utsey & Ponterotto, 1996). These racist experiences are theorized to be sources of trauma (Bryant-Davis & Ocampo, 2005), and have been found to relate to higher blood pressure (Krieger & Sidney, 1996), stress (Utsey & Ponterotto, 1996), lower reported feelings of happiness and less life satisfaction (Jackson, Williams, & Torres, 1995) and lower self-esteem (Fernando, 1984).

*Empirical research on racism and Multiracial individuals.* Collins (2000) conducted a qualitative exploration of racial identity development among Biracial adults with one parent of Japanese descent and one parent without Asian ancestry. Participants were recruited from the San Francisco bay area and included eight men and seven women. Participants recounted experiences with discrimination and rejection by individuals representing each of their racial backgrounds. The participants reported feeling denigrated and humiliated as a result of the racial discrimination they encountered.

Rockquemore and Brunnsma (2002) conducted a quantitative inquiry of the negative interactions Biracial (Black/White) college students have experienced with Black individuals and White individuals. Participants included 177 (60% were women) Biracial students enrolled at a small liberal arts college and community college in the Detroit metropolitan area. The researchers found that many participants reported experiencing hostility and/or discrimination from both Black and White individuals.

Henriksen and Trusty (2004) explored factors contributing to racial identity development among seven Black and White Biracial adults living in a college town in the Southwestern part of the United States. Six of these participants were women and all identified as middle class. The participants in this qualitative study described experiences with several forms of monoracial and Multiracial racism. One participant described an experience in elementary school when she was told that she was unwelcome inside a White classmate's house because she is Black.

The participants in Henriksen and Trusty's (2004) study also described several types of Multiracial racism. Participants reported difficulties finding partners to date and marry. The women recalled being treated as unacceptable to date by White men whose families considered these Biracial women Black. On the other hand, these women also often felt unaccepted by Black men and families who felt they were not Black enough. Participants also described frequent confrontations with others' curiosity about their racial background.

Buckley and Carter (2004) conducted a qualitative investigation of challenges with racial identity development among five Biracial (Black and White) women residing in New York City. All participants expressed feeling pressured by others to choose a single racial

group with which to identify. The participants reported perceiving societal messages indicating that identification with two or more racial groups was not a possibility. At the same time, these participants reported feeling a lack of readiness to choose a racial group. Buckley and Carter (2004) also found that participants' disclosure of their Biracial identity was often followed by many personal questions that often felt intrusive, such as, "How do your parents get along?" Thus, participants often avoided disclosing their Biracial identity.

Miville et al. (2005) conducted a qualitative investigation of experiences relating to identity development among 10 Multiracial individuals representing diverse racial backgrounds. Each of the 10 respondents reported experiences with racism, and generally reported experiences with both monoracial and Multiracial racism. Some examples of monoracial racism expressed by these participants were job discrimination and not being accepted into someone's home due to race. As far as Multiracial racism, many participants discussed experiences of being directly asked, "What are you?" Participants also recalled incidents of institutional racism such as not having appropriate options to designate race on college applications. Participants expressed feelings of hurt and anger in response to these incidents.

In summary, five studies examined racism among Multiracial adults. Of these studies, one was quantitative and four were qualitative in design. These studies indicated that Multiracial individuals experienced racism due to their minority status, as well as their Multiracial status. The qualitative studies suggested that racist experiences were met with powerful feelings of humiliation, denigration, hurt, and anger. A quantitative measure assessing the specific types of racism Multiracial people experience could help advance

knowledge about the role of racist experiences in the lives of Multiracial people and how these experiences relate to psychological functioning.

### *Social Invalidation*

Social invalidation is commonly experienced by Multiracial individuals (Rockquemore & Laszloffy, 2003). Social invalidation refers to the systematic invalidation of racial identity that many Multiracial people encounter. This social invalidation might take the form of rejection from racial groups with whom an individual identifies, others challenging one's racial self-identification, and a lack of recognition of the existence of Multiracial people (Shih & Sanchez, 2005). Social validation, acceptance, and approval are important to an individual's identity development because people create self-definitions in part based upon how others react to them (Rockquemore & Laszloffy, 2003; Root, 1994). More specifically, Multiracial individuals learn what it means to be Multiracial and the value of being Multiracial in part through their perception of how others view them. Thus, positive interactions with others are theorized to result in positive perceptions of one's identity.

*Summary of empirical research examining social invalidation among Multiracial individuals.* Root (1998) conducted a qualitative investigation of the social experiences of 40 (26 women) Biracial adults residing in the state of Washington. Respondents participated in two 2-hour interviews. The results of these interviews revealed that many of the participants in Root's study felt they were often pressured to "prove" their racial group membership. The participants felt that they were not initially accepted by members of either racial group that represented their racial heritage and described social interactions in which their "insider" status to particular racial groups was tested.

Additionally, participants often felt great pressure to conform to racial group norms that did not completely fit. For example, a woman of Black and White ancestry might feel pressured to deny the White part of her and conform to a Black American community's norms. She might feel she has to disassociate herself from and denigrate all White people (including her White parent and family) to be accepted by her minority community. This process of denying a part of one's identity was experienced as traumatic by many of the respondents (Root, 1998). Root also found that many participants reported feeling pressured to listen to certain types of music, wear specific clothes, and participate in particular cultural activities to prove their membership in a group. These types of cultural pressures were experienced as stressful, but not necessarily traumatic (Root, 1998).

Collins (2000) conducted a qualitative exploration of racial identity development among Biracial adults with one parent of Japanese descent and one parent without Asian ancestry. Participants were recruited from the San Francisco bay area and included seven women and eight men. In the interviews, respondents reported feeling rejected by their Japanese American peers as well as peers who represented the other part of their racial ancestry. Participants were not considered part of either of these groups. These rejection experiences were met with a sense of isolation. Respondents also discussed constant confrontations with "What are you" questions, which led to questioning one's identity.

Thornton and Gates (2001) conducted a qualitative investigation of the racial identities of 35 Biracial adults. All participants represented African American and Japanese American heritages and ranged in age from 20 to 23 years. No further demographic information was provided in this publication. The primary author conducted individual interviews with participants between 1982 and 1983. The authors found that most

respondents reported feeling a lack of acceptance by African American and Japanese American communities and felt disconnected from both groups.

Rockquemore (2002) conducted a qualitative study of racial identity development among Biracial individuals who identified one parent as Black and one parent as White. Participants included 16 (12 women) recruited from the midwestern, northeastern, and southern parts of the U.S. These Biracial women reported powerful, and sometimes frequent, negative experiences with Black women. These women felt rejected and ridiculed by Black women due to their physical appearance (e.g., lighter skin, curly hair). Often these women reported facing accusations of considering themselves superior to Black women because their physical features might more closely resemble White standards of beauty. To Biracial women, these interactions might be interpreted as an assault on their membership in the Black community and may lead to feelings of isolation and distress. On the other hand, Biracial men did not report rejection due to physical appearance. Biracial men reported feeling more desirable to Black women and also reported more acceptance by Black men.

Tashiro (2002) conducted a qualitative investigation of social rejection experienced by seven Black and White Biracial adults and 13 Asian and White Biracial adults. Eleven of the participants were women and nine were men. The number of women and men represented in each racial group was unreported. Participants ranged in age from 45 to 94 years and most represented working class or midlevel professional backgrounds. Each respondent participated in one to three 1-hour interviews. Tashiro found that many participants reported being perceived as people of color by Whites, while also not being accepted by African or Asian Americans. Often, the participants felt their identities as

Black or Asian American were challenged by members of those racial groups. Thus, these participants tended to feel 'different' from Whites as well as from people of color.

Henriksen and Trusty (2004) conducted a qualitative study which included an investigation of social isolation experienced by seven Biracial adults with Black and White ancestry. Six of the participants were women and all were middle class. The participants reported experiences during middle and high schools where they felt particularly excluded from social circles. These participants felt as if they did not belong with the White or Black students, which contributed to feelings of isolation. These participants also reported frequently confronting questions reflecting others' lack of understanding about their racial backgrounds. For example, one person recounted a day in elementary school when all students shared their family trees with the class. When this student shared her family ancestry, she was met with many questions such as "If you are Black, why are there White people in your family?"

Rockquemore and Brunnsma (2004) conducted a multi-method investigation of factors contributing to the racial identity development of Biracial adults. The authors interviewed 14 (gender unreported) individuals for the qualitative portion of their study, and surveyed 177 (107 women and 70 men) participants for the quantitative portion. All respondents identified one parent as Black and one as White and were recruited from the Midwestern portion of the United States. These researchers also found that many participants reported rejection by Black individuals who did not accept them as Black, while at the same time feeling rejected by White individuals who perceived them as Black. These findings were consistent with the results reported by Collins (2000), Rockquemore (2002), and Henrikson and Trusty (2004).

Khanna (2005) was interested in understanding factors that contributed to the racial self-identification of Asian and White Biracial adults. Khanna (2005) conducted a multi-method study, including both quantitative and qualitative components. The study included 110 Asian and White Biracial adults. Fifty-three percent of the sample consisted of women and most were middle class. Participants were recruited from universities, and magazines and websites geared toward Multiracial readers.

Khanna (2005) hypothesized that those individuals who perceived that others viewed them as a member of one particular racial group (Asian or White) would be more likely to identify with that part of their ancestry. Likewise, Khanna (2005) hypothesized that if the individual perceived others as rejecting or invalidating their Asian or White identity, they would be less likely to self-identify as a member of the unaccepted racial group. The researcher's hypotheses were supported. Multiple regressions indicated that the greatest predictor of racial self-identification was the individual's phenotype and cultural exposure. Qualitative results illustrated these findings. One participant stated that she does not relate to Asian culture and does not consider herself Asian. She elaborates, "...The reaction I get from most people when I tell them I'm half Chinese is "Oh really? You don't act or look Chinese"...when I was younger the older Chinese people in the community used to poke fun at me because of my lighter skin and brownish-black hair" (Khanna, 2005, p. 125).

To summarize, eight studies examined social invalidation among Multiracial adults. Two of these studies included a quantitative component, whereas all of the studies incorporated qualitative methodologies. These studies suggested that Multiracial people often experienced a lack of acceptance from the monoracial groups that composed their

racial backgrounds, which tended to result in feelings of rejection and isolation. These individuals sometimes felt as if they had to give up part of their identity to be accepted by one particular group. However, doing so was often experienced as traumatic. Multiracial people also tended not to identify with a particular racial group if they experienced many negative interactions with individuals of that racial group. Further research should try to explicate the experience of social invalidation more completely. Currently, no quantitative measures exist to assess this experience. It seems the creation of a measure to assess this construct could promote more extensive research in this area.

#### *Negative Psychological Outcomes*

Because of the various forms of racism and social invalidation that are often a part of the daily lives of Multiracial people, most of the psychological literature examining Multiracial experiences has focused on the challenges of the racial identity processes among these individuals. It is generally predicted that the challenges Multiracial people experience result in negative psychological outcomes such as identity confusion and low self esteem (Shih & Sanchez, 2005). A review of the empirical literature identifying these negative psychological outcomes follows.

*Summary of empirical research examining negative psychological outcomes among Multiracial individuals.* McKelvy and Webb (1996) conducted a quantitative investigation of the negative psychological outcomes of 140 Vietnamese Amerasian adults, 71 non-Amerasian adults who were siblings of the Amerasian participants, and 118 Vietnamese immigrant adults. Approximately half of the participants were women, and all participants were recruited from housing projects in Houston and Dallas, Texas. No further demographic information was reported. The researchers assessed levels of depression,

anxiety, alcohol and drug use, trauma, and number of hospitalizations among the participants. The results indicated that the Amerasian adults reported more trauma and hospitalizations than their non-Amerasian siblings and their Vietnamese immigrant peers. The Amerasian participants also scored higher on alcohol consumption than their non-Amerasian siblings, and greater depression than their Vietnamese immigrant peers.

Root (1998) conducted a qualitative exploration of experiences impacting racial identity development among 40 Biracial adults living in Washington state. Family dysfunction surfaced as an important traumatic experience that impacted the respondents' perceptions of race and race relations. More specifically, many Biracial participants tended to color-code their understanding of problems within their family. For example, a Biracial woman with an overly critical Native American mother and passive Black father might internalize this experience to mean that Native Americans dislike Black people. This woman might distance herself from her Native American peers, believing that they will not accept her due to her Black ancestry. Root (1998) hypothesized that this might result in the woman's conscious or unconscious decision to date and marry non-Native American individuals and might also result in internalized racism.

Collins' (2000) conducted a qualitative inquiry of racial identity development among Biracial adults. Participants were recruited from the San Francisco bay area and included eight men and seven women who identified one parent of Japanese ancestry and one parent with non-Asian ancestry. Participants reported phases during which they rejected their Japanese ancestry or their non-Asian ancestry to fit in to a particular context or to avoid stigmatization.

Thornton and Gates (2001) conducted a qualitative investigation of the racial identities of 35 Biracial adults of African American and Japanese American heritage. Participants ranged in age from 20 to 23 years. No further demographic information was provided in this publication. The primary author conducted individual interviews with participants between 1982 and 1983. The interviews suggested that 14% of participants exhibited internalized racism. In general, the participants tended to hold more negative views about African Americans than about Japanese Americans. These participants also reported feeling most comfortable with Whites and believed that race did not play a significant role in their lives.

Rockquemore (2002) conducted a qualitative study of racial identity development among Biracial individuals who identified one parent as Black and one parent as White. Participants included 12 women and four men living in the midwestern, northeastern, and southern parts of the United States. Rockquemore (2002) found that the women in her study experienced numerous negative interactions with Black women. As a result of these negative experiences in which these women often felt rejected and scorned, many Biracial women internalized anti-Black feelings. Women in the interview described Black people in ways that reflected the racist stereotypes of the dominant culture, such as “drug-addicted, ignorant, unemployed, uneducated, impulsive, and ill-mannered” (Rockquemore, 2002, p. 495).

Similar to Root’s (1998) findings, Rockquemore (2002) also found that Biracial individuals tended to “color code” unhealthy family dynamics. Thus, if a Biracial woman’s White mother spoke poorly of her Black father, the Biracial individual might tend to believe that all Black men possess the negative traits her father had. Additionally, some

Biracial individuals reported exposure to overt and covert anti-Black racism by their White parent (e.g., hearing their parents asserting racist beliefs or using derogatory language to describe Black people).

In a quantitative study, Suzuki-Crumly and Hyers (2004) investigated the relationship between racial self-identification and interpersonal anxiety among Biracial individuals representing Black and White racial backgrounds as well as Asian and White backgrounds. Participants included 43 women and 23 men. Participants were asked to identify their race as one of four options: minority (Black or Asian), White, both groups (bicultural), or neither group. The researchers found that minority identified individuals experienced the least anxiety when interacting with White individuals. This relationship was stronger for Asian/White Biracial individuals than for Black/White Biracial individuals. On the other hand, the participants did not report different levels of anxiety when interacting with people of their own minority racial group. The authors also examined levels of anxiety in interacting with members of other racial groups. They found that Black/White Biracial individuals who were biculturally identified reported more anxiety in interactions with people of other racial groups than Black identified Biracial individuals. On the other hand, Asian/White Biracial individuals who were nonidentified reported higher levels of anxiety in cross-racial situations than Asian or biculturally identified individuals.

Buckley and Carter (2004) conducted a qualitative investigation of the experiences of six Biracial women. The participants in this study reported feeling 'forced' by society to choose a single racial identification. These participants also reported frequently encountering many race-related questions such as "What are you?" and "What is it like to

have a White mother?” (Buckley & Carter, 2004, p. 50.) These questions engendered anxiety and distress among these women. These women tended to cope by intellectualizing, denying or minimizing the importance of race.

The women in Buckley and Carter’s (2004) study also reported negative feelings associated with choosing one racial reference group. The women expressed feelings of guilt toward the parent whose racial group was not chosen, as well as personal unease because they were not acknowledging a part of themselves. These women also disclosed childhood memories of being stared at when they were with their White parent. As children, the participants did not understand these stares and confused looks. One participant reported thinking that maybe she was “funny looking” or dressed inappropriately (Buckley & Carter, 2004).

Finally, Buckley and Carter (2004) also found that the women in their study tended to feel like they were “different” or “freaks” and felt as if they did not fit in with any racial group. Four out of five of these women also expressed feeling dissatisfied with their physical appearance. They described their adolescence as a time when they very much wish they had more “White” features, such as lighter skin, eyes, and longer, softer hair. These women wished for physical features that helped them “blend in” rather than look different from others.

Women whose parents did not discuss race and racial issues and did not provide guidance about how to identify and talk about their own race often reported confusion and distress about their own race. The authors concluded that Biracial individuals tended to encounter more questions and confrontations with racial issues than many monoracial

individuals and for this reason tend to develop a hypervigilance about racial issues (Buckley & Carter, 2004).

Roberts-Clarke et al. (2004) conducted a qualitative exploration of the dating and marriage preferences of seven heterosexual and one bisexual, Biracial women of various racial backgrounds. All women were recruited from the east coast of the United States. Three of these women identified some dating challenges. These included not being accepted by some individuals as dating partners, and feeling like every romantic relationship is an interracial relationship (so there is never the ease of being with someone with a familiar culture).

Suyemoto (2004) conducted a multi-method study of the unique experiences of Biracial adults of Japanese and European descent. Suyemoto (2004) interviewed three women and two men recruited from the San Francisco bay area and inquired about life experiences that they believed are most directly associated with being Multiracial. Suyemoto (2004) then used the data from these interviews to develop a 108 item survey including both quantitative and short-answer components. Next, the survey was administered to a national sample of 50 Biracial participants (including 33 women). The respondents only indicated one negative psychological experience associated with being Multiracial: a constant feeling of being 'different' from others.

In summary, nine studies have investigated negative psychological outcomes among Multiracial individuals. Six of these studies were exclusively qualitative in design, whereas two were quantitative and one used some qualitative and some quantitative methods. Generally, these studies found that Multiracial people might be at risk for several negative psychological outcomes. Dysfunction in the family can be "color-coded" which

can relate to negative feelings about one part of one's racial background. Internalized racism also can correspond to negative interactions (e.g., rejection) from members of a racial group. This social invalidation also can be associated with negative feelings about one's physical appearance, intellectualizing, minimizing, or denying race, and feeling rejected, scorned, anxious, and distressed. These individuals might feel pressured to compromise parts of their identity to gain inclusion in a group, which may be traumatizing and relate to feelings of guilt. Further research should seek to more deeply understand the negative psychological outcomes experienced by Multiracial individuals as well as the factors that might buffer against these outcomes.

#### Resilience Gained through Multiracial Experience

Critical race theory posits that people of color develop unique strengths in the presence of racism and oppression (Delgado & Stefancic, 2001). Multiracial theorists have yet to create a framework with which to understand or predict the resilience Multiracial individuals develop as a result of their race-related experiences (Shih & Sanchez, 2004). However, some research indicated that Multiracial people tend to gain skills for living in a multicultural society. The research also suggested that Multiracial people develop positive psychological health. The studies reporting these findings are summarized next.

#### *Enhanced Social Functioning*

Recently, researchers have begun to investigate the strengths of Multiracial individuals, including enhanced social functioning (Edwards & Pedrotti, 2004). However, some theorists have proposed that because Multiracial people often are exposed to or in some way connected with at least two cultures, Multiracial people are likely to exhibit open-mindedness, tolerance, and an ability to utilize the strengths of more than one culture

(Edwards & Pedrotti, 2004; Root, 1994). These characteristics are especially important and valuable in the diverse landscape of the United States.

*Summary of empirical research findings about enhanced social functioning among Multiracial individuals.* Collins (2000) conducted a qualitative exploration of racial identity development among Biracial adults with one parent of Japanese descent and one parent without Asian ancestry. Participants were recruited from the San Francisco bay area and included eight men and seven women. Respondents reported an ability to interact successfully within the context of multiple racial groups. Participants were able to magnify one part of their identity to fit in with one particular racial group in one situation, while maximizing another part of their identity when interacting within another racial context.

Roberts-Clarke et al. (2004) conducted a qualitative exploration of the social worldviews of Biracial women. Participants included seven heterosexual, Biracial women, and one bisexual, Biracial woman. The participants represented various racial backgrounds and were recruited from the eastern coast of the United States. Half of the participants reported that the experience of being Biracial has allowed them to value cultures different from their own. Half of the participants also indicated that they actively searched for dating partners who valued cultural diversity.

The women in Roberts-Clarke et al.'s (2004) study also reported enhanced social functioning with regards to dating and family. For example, the women in the study reported openness to dating partners of other races and an ease in connecting with partners of different backgrounds. The women also described feeling as if they bring an important asset to their romantic relationships and future children: the asset of two cultures.

Suyemoto (2004) conducted a multi-method study of the unique experiences of Multiracial adults of Japanese and European descent. The researcher conducted interviews examining Multiracial experiences with three women and two men recruited from the San Francisco bay area. Suyemoto (2004) then used the data from these interviews to develop a 108 item survey including both quantitative and short-answer components. Next, the survey was administered to a national sample of 50 participants (including 33 women). The study uncovered three positive experiences that respondents strongly associated with being Multiracial. The first of these themes included an ability to identify cultural cues, norms, and expectations. These participants felt they were able to intuit appropriate behavior in different cultural contexts. Participants also reported developing the ability to appreciate multiple points of view and understand things from many different perspectives. Relatedly, these respondents exhibited an ability to tolerate beliefs different than theirs and understood the importance of tolerance. Finally, participants also reported a dislike of exclusion. They did not like feeling left out, and also indicated not wanting to belong to exclusive groups that reject others.

In a qualitative exploration of the experiences relating to identity development among 10 Multiracial individuals, Miville et al. (2005) found that the participants in their study reported developing skills in cross cultural interaction. The respondents described feeling comfortable and “fitting in” with multiple racial groups. The respondents also demonstrated an understanding of racism and how it contributes to segregation between groups, as well as a belief in the importance of building cross-cultural relationships. The respondents also exhibited openness and appreciation of cultural differences.

In summary, four studies examined enhanced social functioning among Multiracial adults. Three of these studies exclusively employed qualitative methodologies, while one combined qualitative and quantitative methods. These studies found that Multiracial adults felt that being Multiracial was an asset. It allows individuals to appreciate different perspectives, tolerate and appreciate diverse people, points of views, and cultures, understand racism, and be able to identify cultural cues that allow individuals to behave appropriately in diverse cultural contexts. Again, further research is needed to replicate these results and to understand how these strengths might impact other areas of functioning for Multiracial people.

#### *Positive Psychological Outcomes*

Although theorists have asserted that Multiracial individuals develop positive psychological health, very few researchers have empirically investigated positive psychological outcomes among Multiracial adults (Edwards & Pedrotti, 2004; Root, 1994). Edwards and Pedrotti (2004) emphasize the importance of investigating the positive psychological health of Multiracial individuals to develop a more complete understanding of the experiences and psychologies of this population. A review of the research examining positive psychological outcomes among Multiracial individuals follows.

*Empirical literature on positive psychological outcomes and Multiracial individuals.* McKelvy and Webb (1996) conducted a quantitative investigation of the negative and positive psychological outcomes of 140 Vietnamese Amerasian adults, 71 non-Amerasian adults who were siblings of the Amerasian participants, and 118 Vietnamese immigrant adults. Participants were recruited from housing projects in Houston and Dallas, Texas, and approximately half of the participants were women. No

further demographic information was reported. The researchers found that although Amerasian adults reported higher levels of trauma, hospitalizations, depression, and alcohol use than their peers, these individuals also demonstrated resilience. More specifically, Amerasian adults reported adjusting to life in the United States equally as well as their non-Amerasian peers. Amerasian adults also were able to secure equal levels of social support as their non-Amerasian peers.

Suzuki-Crumly and Hyers (2004) investigated the relationship between racial self-identification and self-esteem, life satisfaction, and depression among Biracial individuals representing Black and White racial backgrounds as well as Asian and White backgrounds. Participants included 43 women and 23 men. Respondents were asked to identify their race as one of four options: minority (Black or Asian), White, both groups (bicultural), or neither group. The authors found no main effects for self-esteem. The results also indicated that minority identified individuals reported greater satisfaction with life than those who identified with both or neither racial groups. Those who did not identify with either racial group scored the lowest on life satisfaction. Among Asian/White Biracial individuals, those who identified with their minority background or with both their racial backgrounds were less depressed than those who identified with neither group. There were no differences in depression levels among Black/White Biracial individuals who identified with one, both, or neither racial background.

Only two studies have examined positive psychological outcomes among Multiracial adults. Clearly, further research is needed to develop a more holistic understanding of the psychologies of Multiracial individuals. Currently, far more research

exists that investigates the negative psychological outcomes that Multiracial people might develop, which results in a skewed perspective of Multiracial experiences.

#### Shih and Sanchez (2005): A Comprehensive Literature Review

Shih and Sanchez (2005) conducted a comprehensive review of empirical research examining positive and negative psychological outcomes displayed by Multiracial individuals. In their review, Shih and Sanchez included all published and unpublished studies examining psychological processes (including unpublished doctoral dissertations) that used Multiracial adult, adolescent, and child participants from the United States. Despite their broad inclusion criteria, the authors were able to find only 28 studies using qualitative methodology and 15 studies using quantitative methods.

Shih and Sanchez (2005) first analyzed the qualitative studies. Twenty-nine percent of these studies were conducted with clinical samples, whereas 71% used non-clinical samples. The authors found that Multiracial individuals reported many positive and negative experiences associated with their Multiracial status. For example, these individuals tended to exhibit an appreciation of all of their cultural heritages (e.g., Hall, 1992), empathy with cultures different than their own, and an ability to successfully deal with racism and discrimination (e.g., Gaskins, 1999; Salgado de Snyder, Lopez, & Padilla, 1982). On the other hand, the results also indicated that many Multiracial individuals expressed conflict and confusion about their racial identity (e.g., McRoy & Freeman, 1986; Piskacek & Golub, 1973; Teicher, 1968), discomfort responding to questions about their race (e.g., Basu, 2003), and feelings of rejection by peers (e.g., Collins, 2000; Gibbs, 1998; Gibbs & Hines, 1992; Lyles et al., 1985; Sommers, 1964.)

Shih and Sanchez (2005) also observed several differences between types of samples (i.e., clinical versus nonclinical). More specifically, results from studies using clinical samples evidenced more depression (e.g., Sommers, 1964; Teicher, 1968), teenage pregnancy, theft, truancy (Gibbs, 1998), poor academic performance (e.g., McRoy & Freeman, 1986; Piskacek & Golub, 1973), and lower self-esteem (e.g., Gillem, Cohn, & Throne, 2001; Sommers, 1964) than non-clinical samples. Finally, the researchers also reported that studies conducted in the past decade found more feelings of acceptance by peers and society than studies conducted more than 10 years ago (e.g., Basu, 2003; Gillem et al., 2001; Kerwin et al., 1993; Williams & Thornton, 1998). This likely reflects societal changes that include greater acceptance of interracial relationships (Shih & Sanchez, 2005).

Shih and Sanchez (2005) also reviewed quantitative studies. The authors included all published and unpublished studies that incorporated a quantitative component and examined the experiences of Multiracial adults, adolescents, and children. Only studies comparing Multiracial individuals to monoracial individuals were included. This search yielded 15 studies total, all of which used non-clinical samples.

Shih and Sanchez's (2005) search produced 6 studies examining racial identity development among Multiracial individuals. The results of this review revealed few problematic identity development concerns among Multiracial individuals (e.g., Grove, 1991; Herman, 2004). Additionally, Shih and Sanchez found that Multiracial individuals tended to exhibit more depression than monoracial Whites, but similar levels of depression as monoracial minority peers (e.g., Cooney & Radina, 2000; Milan & Keiley, 2000). Multiracial individuals also demonstrated a slightly higher rate of delinquency and

behavior problems, such as alcohol use, drug use and teenage sexual activity, than their monoracial peers (e.g., Cooney & Radina, 2000; McKelvy & Webb, 1996; Milan & Keiley, 2000).

On the other hand, two studies indicated that Multiracial individuals developed strong interpersonal relationships (Cauce, 1992; Chang, 1974). Several studies also found that Multiracial students academically outperformed their monoracial minority peers, but underperformed as compared to monoracial majority peers (Cooney & Radina, 2000; Harris & Thomas, 2002; McKelvey & Webb, 1996). Clearly, further research is needed to replicate these findings and to understand the factors relating to negative and positive psychological outcomes among Multiracial individuals.

Finally, Shih and Sanchez (2005) reviewed nine studies examining self-esteem among Multiracial individuals and found inconsistent results. Several of these studies found that Multiracial individuals exhibited higher self-esteem than their monoracial peers (e.g., Sanchez & Shih, 2004), while others found Multiracial individuals displayed lower levels of self-esteem (e.g., Milan & Keiley, 2000) and still other studies reported no differences between Multiracial and monoracial individuals (e.g., Herman, 2004; Stephan & Stephan, 1989). Further research should seek to understand self-esteem among Multiracial individuals.

The authors concluded that further research was needed to understand the experiences of Multiracial individuals. Shih and Sanchez (2005) also highlighted the fact that current theories of Multiracial identity development tend to focus solely on the challenges Multiracial individuals experience. Although the empirical evidence supported the finding that Multiracial individuals face unique challenges, Shih and Sanchez asserted

that evidence of positive psychological functioning also was present. Thus, the authors urged future researchers and theoreticians to approach research with Multiracial individuals in a more balanced way: emphasizing both the challenges faced as well as the resources, strengths, and resilience Multiracial people exhibit.

#### Current Measures

Currently, no psychometrically sound measures have been developed to investigate the experiences of Multiracial individuals. The vast majority of the research in this area has been qualitative. While this research is vital, quantitative research is needed to provide insight into the generalizability of experiences. Additionally, although qualitative investigations have unearthed some important variables and experiences in the lives of Multiracial individuals, without quantitative research, the relationships between these variables cannot be known.

Several quantitative investigations have been conducted on the experiences of Multiracial children and adolescents. The only empirically validated measure that was used consistently in these studies was the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). The MEIM is a measure of ethnic identity and defines ethnic identity as including three components: affirmation and belonging, ethnic identity achievement, and ethnic behaviors. The measure also assessed other group orientation (i.e., attitudes towards other ethnic groups), a construct that is slightly different from ethnic identity. The author argued that the other group orientation items served “as contrast items to balance ethnic identity items” and also were closely related to ethnic identity (Phinney, 1992, p. 164).

The affirmation and belonging subscale consisted of five items and assessed the feelings of pride, happiness and attachment individuals experience with regard to their

ethnic background (e.g., “I have a lot of pride in my ethnic group and it’s accomplishments.”) The ethnic identity achievement subscale included seven items and measured the extent to which individuals were interested in learning about their ethnic background and experienced clarity about what their ethnicity means to them (e.g., “I have not spent much time trying to learn more about the culture and history of my ethnic group.”) The ethnic behaviors subscale was composed of two items and measured how much individuals participated in ethnic behaviors (e.g., “I am active in organizations or social groups that include mostly members of my own ethnic group.”) Finally, the other group orientation scale consisted of six items and assessed individuals’ attitudes about groups different from their own (e.g., “I sometimes feel it would be better if different ethnic groups didn’t try to mix together.”) Participants responded to all items on a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

*Limitations.* The MEIM (Phinney, 1992) is unique and important because it provides a method for measuring ethnic identity across different ethnic groups. However, the MEIM also has several limitations for use with Multiracial individuals. The MEIM was administered five separate times during its creation and validation phases. During the phases of scale construction, Phinney (1992) administered the MEIM four times to hundreds of high school and undergraduate college students. Phinney (1992) did not report the ethnic backgrounds of the participants in any of these administrations. For only two of the administrations, Phinney (1992) provided some racial information; students represented Asian American, Black, Mexican American, or White “ethnic” groups in one of these administrations, and Hispanic and White students in another administration.

Specific numbers of individuals represented in each racial group were not provided. There is no way to know if students were equally represented or if the samples were highly skewed. Second, although Phinney (1992) created a measure of ethnic identity, the author reported mostly racial demographic information about the participants (e.g., Asian American and Black rather than Chinese American, Vietnamese American, Nigerian American and Jamaican American). Third, Phinney (1992) did not consistently report race: the author discussed race and ethnicity interchangeably. For example, the author reported that Mexican American students were represented in her study (an ethnic group), while reporting only racial categories for all other participants. Considering this measure was developed to assess ethnic identity, clearly defining the construct seemed necessary.

Only in the last phase of scale construction, in which the author obtained reliability information about the MEIM (Phinney, 1992) and investigated the relationship between the construct of interest and other constructs, did Phinney (1992) report inclusion of Multiracial individuals as participants. Of 417 high school and 136 college students, only 41 high school students and 8 college students identified themselves as Multiracial. Although this was not a limitation of the measure itself, it is a potential limitation for the use of this measure with Multiracial individuals, as no specific analyses were conducted to understand if the measure is equally valid for monoracial and Multiracial students.

The instructions and items on the scale itself further call into question the usefulness of this measure in investigations examining the experiences of Multiracial individuals. In the instructions for the MEIM, Phinney (1992) stated:

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American,

Hispanic, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their *ethnicity* is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it (Phinney, 1992, p. 176).

Once again, Phinney (2002) used examples of racial groups (e.g., Black, American Indian, White) and an ethnic group (Mexican–American) interchangeably. The majority of the author’s examples represented racial groups rather than ethnic groups. Thus, individuals might respond to items very differently: some responding as if it was a racial identity measure, while others responding as if it was an ethnic identity measure.

The author also mentioned that individuals sometimes represent two ethnic groups (Phinney, 2002). This statement acknowledged Biracial and bi-ethnic individuals, however, it was exclusive of those whose racial or ethnic backgrounds were composed of more than two groups. Furthermore, although Phinney (1992) attempted to include Biracial and bi-ethnic individuals in the instructions, no direction was provided about how to approach the items if one identified with two or more ethnic groups. Take for example a Biracial Asian American and Hispanic (Columbian) woman whose Asian American parent is of Japanese and Cambodian descent. This woman might respond in a variety of ways to items on the MEIM. For example, when she reads the following item: “I participate in cultural practices of my own group, such as special food, music, or customs,” the woman might be uncertain as to how to respond. Perhaps she is highly involved in Japanese culture and traditions, and fairly uninvolved in Cambodian and Columbian traditions.

The woman in the above example also might feel alienated by the MEIM. Perhaps she feels it is impossible for her as a multi-ethnic person to complete the items. She might

feel angry, invalidated, or a variety of other emotions because the measure failed to capture her experience. Thus, the measure might replicate her experiences with Multiracial racism (reminding her of other times her experience or existence has been invalidated). This experience might be compounded because the measure claimed to capture bi-ethnic experiences (because the instructions mention bi-ethnicity). This woman might feel as if she is unusual or different even as compared to other bi-ethnic individuals. On the other hand, this woman might only identify with her Japanese ancestry and have no problems completing the measure. Perhaps she responded to all the questions as if she is only of Japanese ancestry and never thinks twice about the assessment. She may score very high on this measure because she is very connected to her Japanese ethnicity. However, it does not seem that this high score accurately reflects her actual ethnic identity, given that she might be disengaged with the other parts of her ethnic background. Therefore, her score on the MEIM might not mean the same thing as a mono-ethnic individual's score on this measure. Thus, the MEIM (Phinney, 1992) does not appear to be an appropriate measure for use with Multiracial individuals and the psychometric properties of this measure for use with Multiracial individuals has not been established.

### Conclusion

No quantitative measures have been created specifically to capture the experiences of Multiracial individuals. A comprehensive review of the literature of Multiracial experiences concluded that Multiracial individuals experience unique challenges and develop unique resiliencies in the face of racism (Shih & Sanchez, 2005). Shih and Sanchez (2005) also urged researchers to take a balanced approach to investigating Multiracial experiences, studying both difficulties and strengths in the lives of Multiracial

individuals. Thus, the present study will seek to develop a measure examining the race-related experiences of both the challenges (e.g., racism, social invalidation, negative psychological outcomes) and resiliencies (e.g., enhanced social functioning, positive psychological outcomes) experienced by Multiracial individuals. These challenges and resilience are expected to change over an individual's lifespan, along with an individual's racial identity. For example, if a Multiracial individual is minimizing the importance of race, they may report less distress from racism in their environment and if a person is feeling proud and confident in their Multiracial identity, they may be less impacted by social invalidation while reporting greater positive psychological outcomes. Thus, the challenges and resilience are conceptualized to be only somewhat stable over time. It is our hope that this measure will stimulate a more balanced investigation of Multiracial experiences and that additional quantitative research in this area will be conducted so that relations among variables will be elucidated.

## Chapter 3

### METHOD

The method for this study included three separate phases. In Phase 1, items were generated for the Multiracial Challenges and Resilience Scale (MCRS). Phase 2 was the main administration of the MCRS. In this phase, data were collected from a large sample of Multiracial adults. Internal consistency and convergent and discriminant validity estimates were computed. Finally, in Phase 3, the test-retest reliability of the MCRS was assessed. The following sections describe the specific method and results of each phase individually.

#### Phase One: MCRS Item Development

##### *Phase One Method*

The purpose of this study was to create a measure of race-related challenges and resilience experienced by Multiracial individuals living in large metropolitan areas within the continental United States. First, a review of the empirical, theoretical, and autobiographical literature examining the race-related experiences of Multiracial individuals was conducted and themes emerging from the literature were generated. Five autobiographies were reviewed, including Barack Obama's *Dreams from my Father*, and James McBride's *The Color of Water*.

Three databases were used to identify the empirical and theoretical literature discussing race-related experiences of Multiracial people: PsycInfo, ERIC (Educational Resources Information Center), and Sociological Abstracts. These search engines are comprehensive databases of literature in psychology, education, sociology, and related fields. All articles containing the terms "Multiracial" or "Biracial" were examined for

information regarding the difficulties faced by Multiracial adults as a result of their mixed-race status (e.g., experience with racism, social invalidation, negative psychological outcomes), as well as common types of resilience Multiracial people may develop as a result of their experiences as mixed-race people (e.g., enhanced functioning in society, positive psychological outcomes).

Second, eight Multiracial individuals were recruited to participate in two focus groups to discuss challenges and resilience experienced in their lives. Both women and men were invited to participate in the focus groups, however, only women volunteered. Therefore, each focus group consisted of four Multiracial women. Prior to attending the focus group meeting, members were asked to generate a list of challenges and strengths that they believed they developed as a result of their experiences as Multiracial people. During the focus group meetings, participants were videotaped as they discussed these experiences.

The principal investigator and her advisor, a professor in counseling psychology, independently viewed the video of each focus group and generated themes to represent topics discussed. The researchers came to a consensus about the themes that emerged during the focus groups. Next, the researchers created several items to represent each theme. These items were then evaluated by experts. Expert feedback was used to generate the final list of items for the MCRS.

### *Phase One Hypotheses*

The first hypotheses was that the analysis of the literature review and focus group discussions would yield themes representing challenges unique to the experiences of Multiracial adults living in the large metropolitan areas within the continental United States.

Second, it was hypothesized that Multiracial adults would report strengths that they developed and attributed to their experiences as Multiracial people. Finally, we hypothesized that themes emerging from the focus group discussions would overlap greatly with the types of challenges and resilience identified in the literature review.

### *Phase One Results*

The researchers had identified five thematic categories from their review of the literature. These categories included three types of challenges and two types of resilience. The challenges included: perceived racism, social invalidation and negative psychological outcomes. The resilience themes were enhanced social functioning and positive psychological outcomes. Each of these challenges also was represented in the focus group discussions. Additionally, one other type of challenge emerged in the focus group discussion. Specifically, the focus group members talked about the daily hassles that they experienced. These daily hassles referred to the many ways Multiracial individuals faced other peoples' surprise or discomfort when their Multiracial background was disclosed.

Next, items were created to represent each of the themes that surfaced from the literature review and focus group discussions (totaling 109 initial items). The 109 initial items were presented to four independent raters. Three raters were Biracial counseling psychologists with expertise in multicultural issues. Two of these raters were women and their racial backgrounds were as follows: African American and White and African American and Japanese American. The third counseling psychologist was male and his racial background was Japanese American and White. The fourth and final rater was an administrator in a department of psychology who is a White parent of adolescent biracial

children (African American and White), and who discussed the items with her two children.

Expert raters were asked to review the items for relevance in the lives of Multiracial individuals, comment on the readability and clarity of items, and sort items into thematic categories. Raters also were asked for feedback regarding which items should be discarded, altered, or added to the instrument. Generally, the experts were in agreement in their evaluation of the items. Based on careful consideration of rater feedback, 35 items were discarded (due to redundancy, ambiguity, or notable rater disagreement). Thus, the initial version of the MCRS scale consisted of 74 items. Twenty five of these items represented challenges experienced by Multiracial individuals and 49 items represented resilience. The resilience items greatly outnumbered the challenge items because so little is known about positive functioning in multiracial adults. For this reason, we chose to oversample the types of resilience that surfaced from the focus group discussions and literature.

#### Phase Two: Factor Analysis and Initial Reliability and Validity Estimates

##### *Phase Two Method*

The purpose of phase 2 was to investigate the factor structure of the MCRS, and to collect reliability and validity data. First, the MCRS was administered via the internet to 317 Multiracial adults residing in metropolitan areas across the continental United States. Next, factor analyses were performed and reliability estimates were calculated. To assess convergent validity, measures of social disconnectedness, depression, satisfaction with life, ethnic identity, other group orientation, social self-efficacy, and self-esteem were included

in the on-line survey. Additionally, to study discriminant validity, measures of orderliness and social desirability also were administered.

### *Participants*

Participants included 317 individuals over the age of 18 who identified their biological mother and father as representing different racial groups. All participants resided in large metropolitan areas within the continental United States at the time of survey administration. Seventy-one percent of respondents were women, 28.4% were men, and .6% were transgendered. Specific efforts were made to target male participants. Specifically, advertisements to women were temporarily halted for three weeks and all recruitment was directed toward men. When this failed to yield results, women were again invited to participate. Participants ranged in age from 18 to 53 years, with a mean age of 22 (SD = 5.21).

### *Procedure*

All participants were recruited through advertisements on the social networking website, Facebook. According to the Facebook website, 85% of 4-year college students in the United States are Facebook users (Facebook.com, 2007). Additionally, over 150,000 new users are creating Facebook accounts each day (Locke, 2007), and the fastest growing segment of Facebook users are adults over the age of 25. Thus, advertisements on Facebook are likely to be viewed by the overwhelming majority of college students and an ever growing proportion of adults who are not in college, but who have regular access to the internet.

A Facebook Flyer was created to advertise this study. The Facebook Flyer is a short advertisement that is presented to individual Facebook users who match specific

demographic criteria. Specifically, the Flyer was visible to women and men who were over the age of 18 and who lived in the 50 largest metropolitan areas within the continental United States. The advertisement read, “WE WANT TO HEAR YOUR VOICE! Do your biological parents represent two or more different racial groups? If yes, click here to take a survey (conducted by researchers at UMD) and you could WIN \$50!!.” The number of individuals who met the inclusion criteria for participation (Multiracial, over 18, and living in large metropolitan area within the continental United States) and who indicated interest in participating equaled 858 people. However, 414 individuals discontinued participation in the study prior to completing the MCRS. Therefore, 444 individuals successfully completed the MCRS scale. Another 109 individuals ended participation prior to completing the entire survey packet. This resulted in 335 completed surveys. Participants were able to send the primary researcher messages via Facebook or email if they desired. Several participants indicated that the survey felt too long, which may explain the attrition. Finally, 17 surveys were eliminated due to insufficient information (i.e., five respondents did not provide information about one or more parent’s racial background, 10 respondents listed both their parents as belonging to the same racial groups), and unlikely response patterns (i.e., two respondents chose the same response for every item on a scale). Additionally, one survey was eliminated because the participant indicated that he was raised by two white adoptive parents from a very young age. Thus, 317 surveys were retained. These 317 surveys included no missing data, because participants needed to answer all questions to submit the survey.

Finally, participants who successfully completed the entire survey had the option of sending an email to the primary researcher to enter their names into a lottery to win one of two \$50 cash prizes.

### *Measures*

*Multiracial challenges and resiliencies scale (MCRS).* This instrument contained a total of 74 items. Twenty-five of the items assessed challenges that Multiracial individuals commonly experience related to their mixed-race backgrounds. Forty-nine items measured the types of resilience Multiracial people develop related to the experience of living as a mixed-race person in the United States. We hypothesized that the measure would be composed of numerous subscales, including: experiences with racism, social invalidation, negative psychological outcomes, enhanced social functioning, and positive psychological outcomes.

*Social connectedness.* The Social Connectedness Scale (SCS; Lee & Robbins, 1995) measured general feelings of interpersonal belonging. The scale consisted of 8 items, all of which were worded negatively. An example of an item from this scale read, “Even around people I know, I don’t feel that I really belong.” The response choices ranged from 1 to 6, where 1 represented “agree” and 6 indicated “disagree.” Responses were summed and high scores represented strong feelings of social connectedness. Lee and Robbins (1995) reported an internal consistency estimate of .91 for this scale and a two-week test-retest correlation of .96 among a college student sample. The SCS demonstrated positive correlations with measures of social identity and social self-esteem, providing support for the validity of the measure (Lee & Robbins, 1998).

*Life satisfaction.* Life satisfaction was measured using the five-item Satisfaction with Life Scale (SWLS; Diener, Emmons, Larson & Griffen, 1985). An example of an item on this scale read, “The conditions of my life are excellent.” Response options were provided on a 7-point Likert scale where 1 indicated “strongly disagree” and 7 represented “strongly agree.” Scores were computed by summing all responses, with high scores representing strong levels of life satisfaction. Pavot et al. (1991) reported that the SWLS correlated positively with several other measures of positive well-being, thus lending support for the validity of the measure. Finally, an alpha coefficient of .85 was reported for an undergraduate sample (Pavot et al., 1991).

*Depression.* Depression was assessed using a seven-item short form of the originally 20-item Center for Epidemiological Studies-Depression Scale (Radloff, 1977). The 7-item short form of the CES-D was recommended by Santor and Coyne (1997) due to efficiency in measuring depressive symptoms. The short form of the CES-D contained three items measuring dysphoric mood (e.g., I felt depressed), and one item each measuring motivation (i.e., I felt that everything I did was an effort), pleasure, (i.e., I enjoyed life) and concentration (i.e., I had trouble keeping my mind on what I was doing). Participants were asked how many times in the past week they experienced each symptom of depression listed in the items. Response options ranged from 0 (Rarely or none of the time-less than one day) to 3 (Most or all of the time-five to seven days). Scores were summed and high scores indicated many depressive symptoms. A Cronbach’s alpha coefficient of .82 was reported for this short form of the CES-D (Herrero & Meneses, 2006), supporting the internal consistency of the measure. Herrero and Meneses also found that the format of administration (i.e., internet vs. paper and pencil) of the CES-D did not

change the internal consistency estimates. Additionally, the long form of the CES-D has been found to have a similar factor structure among racially diverse samples and is related strongly and positively to the Beck Depression Inventory, thus supporting the construct validity of the scale (Izquierdo-Porrera et al., 2002; Santor et al., 1995).

*Ethnic Identity and Other-Group Orientation.* The Multi-Ethnic Identity Measure (MEIM; Phinney, 1992) included two scales: one measuring ethnic identity and the other measuring other-group orientation. The ethnic identity measure was composed of three subscales: ethnic identity achievement (7 items), affiliation and belonging (5 items), and ethnic behaviors (2 items). A sample item from the ethnic identity achievement subscale read, "I have a clear sense of my ethnic background and what it means to me." A sample item from the affiliation and belonging subscale was, "I am happy that I am a member of the group I belong to." Finally, an example of an item from the ethnic behaviors subscale read, "I am active in organizations or social groups that include mostly members of my own ethnic group." Response options ranged from 1 to 4, where 1 indicated "strongly disagree" and 4 represented "strongly agree." Scores were averaged across each of the three subscales separately. Scores closer to four indicated high levels of ethnic identity. A review of 12 studies using the MEIM-EI with high school and college samples found that the internal consistency estimates for this study varied between .81 and .92 (Ponterotto et al., 2003). The MEIM-EI was found to relate to racial identity development (Goodstein & Ponterotto, 1997), and acculturation (Cuellar et al., 1997), lending support for the validity of the measure.

The other-group orientation scale consisted of six items that assessed the individual's attitudes towards interactions with members of other ethnic groups. A sample

item from this scale read, “I like meeting and getting to know people of ethnic groups other than my own.” Response options and scoring procedures were identical to that of the ethnic identity scale reported in the above paragraph. A review of the literature using the MEIM-OGO found the internal consistency estimate to range from .35 to .82, with a mean of .69 (Ponterotto et al., 2003). The MEIM-OGO scale demonstrated positive correlations with a measure of social connectedness and negative relations with a measure of perceived ethnic discrimination (Lee, 2003), thus supporting the validity of the scale.

*Social self-efficacy.* Social self-efficacy was assessed using the Social Self-Efficacy subscale of Sherer et al.’s (1982) self-efficacy scale (SES; Sherer et al., 1982). This subscale consisted of six items. A sample item from this measure read, “I have acquired my friends through my personal abilities at making friends.” Response options were originally provided on a 14-point Likert scale, however a 5-point Likert scale was used in other studies (e.g., Mallinckrodt & Wei, 2005; Wei, Russell, & Zakalik, 2005). The present study also employed a 5-point Likert format to simplify the response format, where 1 represented “strongly disagree” and 5 represented “strongly agree.” Negatively worded items were reverse scored, and a mean for the scale was computed. A score closer to 5 indicated strong levels of social self-efficacy. The authors reported a Cronbach’s alpha coefficient of .71 (Sherer et al., 1982). The scale demonstrated positive relations with measures of interpersonal competence and personal self-esteem, lending support for construct validity.

*Self-esteem.* Self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965). This scale was composed of 10 items assessing personal self-esteem. A sample item from the measure read, “On the whole, I am satisfied with myself.”

Response options ranged from 1 to 4, where 1 indicated “strongly disagree” and 4 represented “strongly agree.” To score the measure, negatively worded items were reverse coded, then averaged. Scores closer to 4 indicated high personal self-esteem. In previous studies, Cronbach’s alpha coefficients ranged from .74 to .87 (Wylie, 1989). The RSE demonstrated positive relations with measures of life satisfaction and pleasant affect (Schimmack & Diener, 2003), lending support for construct validity.

*Orderliness.* Preference for Order was assessed using the four-item Order subscale of the Almost Perfect Scale-Revised (APS-R; Slaney et al., 2001). A sample item in the order subscale was “Neatness is important to me.” (Slaney et al., 2001). Response options were provided on a Likert scale and ranged from 1 to 7, where 1 equaled “strongly disagree” and 7 represented “strongly agree.” Scores were summed and high scores indicated a strong need for order. Slaney et al. (2001) reported a Cronbach alpha coefficient of .86 for the Order subscale, supporting the internal consistency of this scale. Secondly, Order was found to relate positively to Life Satisfaction and negatively related to depression, thus supporting the validity of this scale (Mobley, Slaney, & Rice, 2005).

*Social desirability.* The 13 item short form of the Marlowe-Crowne Social Desirability Scale was used to assess participants’ tendency to respond to items with a positive self-presentation bias (Reynolds, 1982). Sample items from the scale read, “No matter who I am talking to, I’m always a good listener,” and “I have never deliberately said something that hurt someone’s feelings.” Response options were provided in a true/false format. The true responses were summed to produce a total score. High scores indicated the tendency to respond in a socially desirable manner. An internal consistency reliability estimate of .76 was reported by Reynolds (1982). Additionally, the measure was positively

related to Edwards Social Desirability Scale and to the Marlowe-Crowne long form. These correlations provided support for the validity of the Marlowe-Crowne short form.

*Demographic questionnaire.* The demographic form solicited the following information: age, gender, race(s), mother's race(s), father's race(s), city and state of residence, relationship status, race of partner, education level, type of work, generation status, neighborhood racial composition, and yearly household income.

### *Phase Two Hypotheses*

First, the Multiracial Challenges and Resilience Scale was hypothesized to be composed of several subscales. Specifically, four types of challenges and two types of resilience factors were anticipated to emerge. The challenge factors were hypothesized to include experiences with racism, social invalidation, multiracial hassles, and negative psychological outcomes. The resilience factors that were anticipated included enhanced social functioning and positive psychological outcomes.

Second, it was hypothesized that the MCRS would exhibit robust psychometric properties, including a replicable factor structure, and strong internal consistency reliability. It also was expected that the Challenge factors would relate positively to depression and demonstrate inverse relationships with social connectedness, satisfaction with life, social self-efficacy, self-esteem, ethnic identity achievement, ethnic affiliation and belonging, ethnic behaviors, and other group orientation. Additionally, the Challenge factors were anticipated to be positively related to each other. Finally, the Challenge factors were not expected to relate to preference for order and social desirability.

It also was expected that the Resilience factors would exhibit positive relations with social connectedness, satisfaction with life, social self-efficacy, self-esteem, ethnic

identity achievement, ethnic affiliation and belonging, ethnic behaviors, and other group orientation. Resilience factors also were anticipated to relate inversely to depression. Finally, Resilience factors were expected to relate positively to each other and were not hypothesized to relate to preference for order or social desirability.

It also was anticipated that each subscale of the MCRS would demonstrate unique relations with the measures included to assess validity. The hypotheses remained tentative because we had not established that the expected scales for the MCR would be supported by factor analyses. Specifically, if the predicted subscales emerged, we hypothesized that Experiences with Racism would negatively relate to Other Group Orientation, Social Connectedness, and Self-Esteem, and positively relate to Depression. On the other hand, Experiences with Racism was expected not to relate to Orderliness or Social Desirability.

The hypothesized subscale of Social Invalidation was expected to negatively relate most strongly to Social Connectedness, and to show negative relations with Satisfaction With Life, Depression, Self-Esteem, Ethnic Identity, and Other Group Orientation. On the other hand, Social Invalidation was expected to show no relationships with Social Desirability, and Orderliness.

The hypothesized subscale of Negative Psychological Outcomes was expected to show strong positive relations with Depression, and strong negative relations with Satisfaction With Life, Self-Esteem, Ethnic Identity, and Social Connectedness. Negative Psychological Outcomes were not expected to relate to Social Desirability or Orderliness.

The expected subscale of Enhanced Social Functioning was expected to most strongly exhibit positive relations with Other Group Orientation, Social Connectedness, and Social Self-Efficacy, but was also expected to positively relate to Satisfaction With

Life, Self-Esteem and Ethnic Identity. On the other hand, Social Desirability and Orderliness were not expected to relate to Enhanced Social Functioning.

Finally, the hypothesized Positive Psychological Outcomes subscale was expected to most strongly relate positively to Satisfaction With Life, Self-Esteem, and Ethnic Identity, and negatively to Depression, but also was expected to relate positively to Social Connectedness. Positive Psychological Outcomes was not expected to relate to social desirability.

### *Phase Two Analyses*

The data set was randomly split in half, and descriptive statistics and factor analysis were computed on each half of the data set separately.

#### Phase Two: Results

##### *Demographic information for Sample A*

Sample A consisted of 165 (122 female, 43 male) participants. Participants ranged in age from 18 to 53 years old, with a mean age of 22 (SD=5.5 years). Sample A represented a national sample, with 30% of participants residing in the Western United States, whereas 22% lived in the Midwest, 23% in the South, and 24% in the Northeast or the Washington, DC metropolitan area. All participants lived in large metropolitan areas within the continental United States. Approximately 50% of participants reported their family income as greater than \$70,000 per year, while 22.5% earned \$40-60,000 and 17.5% averaged a family income below \$40,000.

Participants reported a total of 24 different racial backgrounds. The ten largest racial backgrounds represented were as follows: Asian/White (27.3%), Black/White (17%), Latina(o)/White (14.5%), Black/White/Native American (5.5%), Asian American and

Black (4.8%), White/Middle Eastern (3.6%), Black/Latin American (3.6%), Black/White/Latin American (3.6%), and Black/White/Asian American (1.8%). Based on their physical appearances, others' perceived the participants to be African American (21.8%), Latina/o (11.9%), Asian (10.9%), White (19.4%), Multiracial (5.5%), or Middle Eastern (2.4). Additionally, 29% indicated that people have numerous different assumptions about their racial group or are unsure of what racial group to place them in.

Participants indicated that their biological mothers' racial groups were as follows: 4.2% African American, 12.1% Latina, 23.6% Asian, 28.5% White, 28.6% Multiracial, 2.4% Middle Eastern, and .6% Native American. The participants reported their biological father's racial groups as the following: 21% African American, 5.5% Latina, 9.7% Asian, 23.9% White, 24.2% Multiracial, 4.2% Middle Eastern, and 1.2% Native American.

Finally, 49% of respondents identified the largest racial group in the neighborhood they were raised as White, 8.4% Black, 5.4% Latina(o), 3.6% Asian American, 18.1% described the neighborhood they grew up in as racially diverse, and 15% of participants stated that they lived in several different neighborhoods with several different racial compositions. At the time of data collection, 52% stated that that the predominant racial group represented in the area they lived in was White, 6.6% said Black, 7.3% Latina(o) and 1.8% Asian American, while 32% reported living in a racially diverse neighborhood at the time of data collection.

#### *Factor Analyses for Challenges Scale: Sample A*

Prior to running the factor analyses, the factorability of the data set for Sample A was assessed. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity were used to assess the appropriateness of the use of factor

analyses with the present sample. The KMO assesses the probability that a data set contains factors as opposed to correlations based purely on chance. This test yields a score between 0 and 1, with values closer to 1 indicating a greater likelihood of the presence of true factors. A minimum KMO score of .60 is needed to determine that the sample is adequate for a factor analysis. The KMO score for sample A in the present study was .87.

Bartlett's (1950) test of sphericity is used to test the null hypothesis that the correlation matrix is random. Bartlett's test is very sensitive to the case to item ratio and is useful when the item to case ratio is between 1:3 and 1:5. The case to item ratio for the Challenges scale (25 items) in Sample A (165 cases) falls within this range. Thus, Bartlett's test was used and the results were significant,  $\chi^2$  (df 300,  $N = 165$ ) = 1986.40,  $p < .01$ . Thus the KMO score and Bartlett's test confirmed the factorability of the data set for Sample A.

Exploratory factor analyses were used to examine the factor structure of the Challenges Scale of the Multiracial Challenges and Resilience Scale (MCRS). The method of extraction employed was Principal axis factor analysis, which examines only shared variance among items. As the purpose of the factor analysis was to uncover latent variables represented by the items on the MCRS, principal axis factor analysis was the most appropriate method of extraction (Kahn, 2006; Worthington & Whittaker, 2006).

The Promax rotation was selected because the hypothesized factors of the MCRS were expected to be correlated. Kahn (2006) recommends the Promax procedure as superior to other oblique rotations because using this method with orthogonal and correlated factors can provide a truer fit for the data than other rotations.

A Principal axis factor analysis with the Promax rotation (number of factors unspecified) was computed on the Challenge scale for Sample A. The scree plot was

examined using a scree line to determine the point at which the variance contributed by the factors leveled off. The results of this assessment suggested a three or four factor solution. Next, the variance accounted for by each solution was considered. The three factor solution accounted for 49.8% of the total variance, whereas the four factor solution accounted for 55.4%.

Two Principal axis factor analyses with Promax rotations were computed, with three and four factors extracted. Each factor solution was independently considered by each researcher to determine the most promising solution. Special attention was given to find the solution with the highest loading items with fewest cross-loadings, and greatest variance explained while maintaining parsimony. Finally, it was desirable for each factor to contain a minimum of 5 items to increase the likelihood of factor reliability. Based upon these criteria, both researchers independently selected the three factor solution as the best fit for the data.

The Challenge subscale contained 25 original items. To retain only the most robust items in the three-factor solution, all items loading below .50 on any factor were eliminated. This resulted in the retention of 15 items (six items on factor 1; six items on factor 2; and three items on factor 3). To increase the number of items of factor 3, the two items loading highest below .50 were added (items number 2 and 3). The factor loadings for both of these items were .42. These factor loadings were well above the generally accepted cutoff value of .30. The factor analysis was re-run with only the 17 retained items. With only 17 items included in the factor analysis, item 8 loaded slightly below .50. Thus, item 8 was eliminated. Finally, the factor analysis was run again with the 16 retained

items. All items (except for the two items added to increase the number of items on factor 3) loaded above .50, thus all 16 items were retained.

#### *Demographic Information for Sample B*

Participants included 152 individuals (103 female, 47 male, 2 transgendered). The mean age of this sample was 22 (SD = 4.81), and ranged from 18 to 46 years old. All respondents resided in large metropolitan areas within the continental United States. Twenty-seven percent of the participants lived in the West, 20.4% in the Midwest, 25.7% in the South, and 27% in the Northeast and the Washington, DC metropolitan area. Approximately 50% of the sample reported their yearly family income as \$80,000 or above, whereas about 27% earned between \$40,000 and \$60,000 and nearly 17% earned less than \$40,000 per year.

Participants indicated a total of 22 different racial backgrounds. The ten largest racial backgrounds represented by this sample were as follows: Asian/White (27.6%), Black/White (16.4%), Latina(o)/White (14.5%), Black/White/Native American (7.2%), Asian/Black (4.6%), White/Native American (3.3%), Black/White/Latina(o) (3.3%), White/Middle Eastern (2.6%), Black/Latino(a) (2.6%), Latino(a)/White/Asian American (2.6%). Participants stated that, based on their physical features, others perceived their racial backgrounds as the following: 17.8% African American, 17.8% Latina/o, 12.5% Asian American, 23.7% White, 3.9% Multiracial, and 2% Middle Eastern. Additionally, 22.4% said that others make many different assumptions about their racial backgrounds or are unsure of how make sense of their racial group membership based on the respondent's appearance.

Participants reported their biological mother's racial groups as follows: 7.2% African American, 9.9% Latina, 33.4% Asian, 28.3% White, 29% Multiracial, 2% Native American, and .7% Middle Eastern. Respondents indicated their biological father's racial backgrounds as follows: 18.4% African American, 9.9% Latino, 11.2% Asian American, 36.8% White, 17.8% Multiracial, 4.6% Middle Eastern, and 1.3% Native American.

Finally, 46.7% of respondents reported being raised in a predominantly White neighborhood, 26% described the neighborhood they grew up in as diverse, 6.6% said their neighborhood was mostly Black, 4.6 indicated mostly Latina(o), and 2.6% said mostly Asian American. Lastly, almost 14% stated they lived in several different neighborhoods with several different racial compositions. At the time of data collection, 43.4% reported the largest racial group in their neighborhood as White, 10% as Black, 10% as Latino, 2% Asian American, and 34% reported living in a racially diverse neighborhood.

#### *Factor Analysis for Challenges: Sample B*

A factor analysis was conducted on data collected from Sample B. The KMO score for Sample B was .86 and Bartlett's test of sphericity was significant,  $\chi^2$  (df 300,  $N = 152$ ) = 1803.10,  $p < .01$ , thus supporting the factorability of the data set. A Principal axis factor analysis with Promax rotation was then computed on Sample B. All 25 original items on the Challenge scale were included in this analysis. The scree plot and amount of variance accounted for by each factor was considered. Consistent with Sample A, assessment of the scree plot and amount of variance accounted for by each factor suggested a three or four factor solution. The three factor solution for Sample B accounted for 50.3% of the total variance, whereas the four factor solution accounted for 55.5%.

Two principal axis factor analysis with Promax rotations were computed (one with three factors extracted and one with four factors extracted) on the data from Sample B. The researchers independently considered the three and four factor solutions to determine which produced a better fit for the data. A factor solution was considered superior if the following criteria were present: higher factor loadings on single factors, fewer cross-loadings, at least 5 items loading uniquely on each factor. Based upon these criteria, both researchers independently chose the three factor solution as the superior solution. This yielded 5 items loading above .50 on factor one, 6 items on factor two and 5 items on factor three. All items loaded on the same factors as they did in Sample A. Thus, the three factor structure was replicated. To obtain an equal number of items across all factors, the lowest loading item on factor 2 (item 15, factor loading .51) was eliminated. This created a final total of 15 items, with 5 items on each factor.

Finally, a factor analysis was run with only the final 15 items on Sample A, yielding 5 items on each factor. A factor analysis including only these 15 items also was performed on the data set from Sample B to assess the replicability of the factor structure. All items loaded on the same factors in Sample B as they did in Sample A. Final items and factor loadings for Sample A and Sample B are reported in Table 1.

#### *Factor Analysis for Resilience Scale: Sample A*

Principal axis factor analysis was used to examine the factor structure of the Resilience scale of the MCRS. The factorability of the data for Sample A was assessed using the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity. The KMO score for sample A was .85, thus providing support for the normality of the sample. Bartlett's test of sphericity was significant,  $\chi^2$  (df 1225,  $N = 165$ )

= 4757.68,  $p < .01$ , thus suggesting the null hypothesis that correlations existing in the data set are the result of chance can be rejected. The results of the KMO and Bartlett's test supported the use of factor analyses on the data set.

A principal axis factor analysis with the Promax rotation (number of factors unspecified) was computed on the Resilience scale for Sample A. The scree plot indicated a clear "elbow" or leveling off after the third factor, suggesting a three factor solution. The percentage of total variance accounted for by the three factors was 42.2%.

A principal axis factor analysis with Promax rotation was computed with three factors extracted. All items loading below .50 on any item were eliminated. Items loading above .30 on more than one factor were identified as a cross-loading items, and also were eliminated. After eliminating all cross-loading and low loading items, the final three factor solution yielded a total of 30 items. Fifteen of these items loaded on factor one, 12 items on factor two, and six items on factor 3.

#### *Factor Analyses for Resilience Scale: Sample B*

The factorability of data set for Sample B was assessed using the KMO and Bartlett's test of sphericity. The KMO score for the data for Sample B was .86 and Bartlett's test of sphericity was significant,  $\chi^2$  (df 1176, N = 152) = 4198.82,  $p < .01$ , thus confirming the appropriateness of running a factor analysis on the data set. A principal axis factor analysis with Promax rotation (number of factors unspecified) was calculated on the data from Sample B, with all 49 original items included. Consistent with the results from sample A, examination of the scree plot indicated a three factor solution, accounting for 42.2% of the total variance.

To test the replicability of the three factor solution retained with Sample A, a Principal axis factor analysis with Promax rotation was run on the data for Sample B with three factors extracted. All items loading below .50 and cross-loading items were eliminated. This resulted in the retention of the same 30 items retained in Sample A. The factor analyses were re-run with only the strongest 30 items. This analysis yielded 15 items on factor one, 11 items on factor 2, and 7 items on factor three. This solution was compared to the three factor solution obtained with Sample A. All items in Sample B loaded on the same factors that they loaded on in Sample A, with the exception of a single item. Item number 50 loaded on factor 2 in Sample A and on factor 3 in Sample B. For this reason, item 50 was eliminated. Therefore, a total of 29 items were retained on the Resilience measure.

To assess the replicability of the structure of the Resilience scale with the 29 retained items, a Principal axis factor analysis with Promax rotation and three factors extracted was performed on the 29 retained items with Sample A. This yielded fifteen items on factor 1, eleven items on factor 2, and six items on factor 3. The factor analysis was re-run on the 29 retained items in Sample B. This yielded a solution consistent with the solution produced with the data from Sample A. Specifically, the same fifteen items loaded on factor 1, eleven items on factor 2, and six items on factor 3.

To keep only the strongest items and reduce the length of the scale, only the five highest loading items on Sample A that also were among the top loading items on Sample B were retained. A factor analysis was computed on the data for Sample A with only these 15 items. This produced factor loading above .50 for all items. A factor analysis including only the 15 retained items also was run on the data from Sample B. All items, except for 1

(item 55) loaded above .50. Item 55 was not eliminated because its factor loading (.39) was above the generally accepted cutoff of .30. Also, the researchers decided to keep an equal number of items across factors. All items loaded on the same factors across both data sets. Final items and factor loadings for Sample A and Sample B are reported in Table 2.

*Description of Factors on the Multiracial Challenges and Resilience Scale (MCRS)*

When the items on the MCRS were first developed, the hypotheses posed that six factors would emerge from the 74 original items. The six hypothesized factors included four challenges (Experiences with Racism, Social Invalidation, and Negative Psychological Outcomes) and two types of resilience (Enhanced Social Functioning and Positive Psychological Outcomes). Although the hypothesis about the numbers of Challenge factors and Resilience factors were supported, the specific factors that emerged did not match the hypotheses. Thus, the specific hypotheses regarding the subscales and their relations with the measures included to assess validity cannot be assessed. However, the relationships among the actual MCRS factors and the scales used to assess construct validity showed patterns that were generally consistent with our hypotheses.

*Factor 1: Others' Surprise/Disbelief Regarding Racial Heritage.* Factor 1 appeared to assess others' surprised and disbelieving reactions when an individual's racial heritage was disclosed. The reliability of this factor was .83. This factor related slightly and positively to depression and slightly negatively to satisfaction with life and social desirability. This factor also correlated moderately and negatively to social connectedness. On average, participants reported being slightly bothered by dealing with others' responses to their racial background.

*Factor 2: Lack of Acceptance from Family.* Factor 2 seemed to measure family members' statements or behaviors that indicated a lack of acceptance of the individual's racial background. The alpha coefficient for this factor was .82. Lack of Acceptance from Family exhibited a slight negative correlation with social connectedness and self-esteem and was moderately and positively related to depression. On the whole, the participants in study expressed that lack of acceptance from family members was a small concern for them.

*Factor 3: Multiracial Discrimination.* Factor 3 appeared to measure racially discriminatory treatment or statements by family and non-family members. The reliability of this factor was .76. Due to the relatively low reliability of this subscale, attempts were made to improve the internal consistency of this factor. Specifically, the reliability analysis was examined to determine if adding items would improve reliability of this subscale. The addition of items would not notably increase the reliability of the subscale. Thus, the original five items were maintained on this scale.

Multiracial Discrimination showed a slight positive correlation with depression and slight negative correlations with social connectedness and social desirability. Overall, respondents in this study reported being slightly bothered by Multiracial discrimination.

*Factor 4: Appreciation of Human Differences.* Factor 4 seemed to assess the extent to which individuals believe their experiences as a Multiracial person allowed them to develop an appreciation for cultural and individual differences. The alpha coefficient for this factor was .89. Appreciation for Human Differences was slightly positively related to preference for orderliness, satisfaction with life and involvement in ethnic behaviors, and moderately positively related to social connectedness, social self-efficacy, ethnic identity

achievement, ethnic affiliation and belonging, and other group orientation. On average, participants reported that their experiences as Multiracial individuals allowed them to develop a strong sense of appreciation for human differences.

*Factor 5: Disconnection from Family and Friends.* Factor five seemed to reflect a sense of disconnection from others due to having a different racial background from their family and friends. The alpha coefficient for factor 5 was .83. This factor exhibited slight negative correlations with social self-efficacy, self-esteem, ethnic affiliation and belonging, and other group orientation and a moderate negative correlation with satisfaction with life. Feeling disconnected from family and friends also had slight positive correlations with social desirability and a moderate positive correlation with depression. On the whole, the participants in this study endorsed “slightly disagree” regarding feeling disconnected from friends and family. Thus, overall, they did not feel disconnected to salient others in their lives.

*Factor 6: Multiracial Pride.* Factor six appeared to measure pride about being Multiracial. The reliability for this factor was .80. Multiracial Pride was slightly positively related to preference for orderliness, self-esteem, and engaging in ethnic behaviors (i.e., involvement with organizations and participation in cultural practices reflective of one’s ethnic groups). This factor was correlated moderately and positively with social connectedness, satisfaction with life, social self-efficacy, ethnic identity achievement, ethnic affiliation and belonging and other group orientation. On average, these participants reported moderate levels of pride related to being Multiracial.

*Descriptive Analyses: Description of Sample*

For the descriptive and correlational analyses, Sample A and Sample B were combined. The remainder of the paper will discuss the descriptive data and the relations among variables as they occurred in the entire data set (see Table 3).

Overall, the participants reported low distress associated with race-related challenges and high resilience. Specifically, the sample demonstrated slight distress related to Others' Surprise/Disbelief Reactions, Multiracial Discrimination, and Feelings of Disconnection from Family/Friends and minimal distress related to Lack of Family Acceptance/Understanding. The sample also indicated strong Appreciation of Human Differences and moderately high levels of Multiracial Pride.

Additionally, the sample exhibited moderate levels of social self-efficacy and preference for orderliness. The respondents indicated moderately high feelings of self-esteem, social connectedness, and satisfaction with life. As a group, the participants highly valued interactions with persons from diverse ethnic backgrounds. Finally, this sample reported low levels of depressive symptoms and did not appear to respond to the MCERS questionnaire in a socially desirable manner. The tendency to respond in a socially desirable manner appeared to be greater for the established scales than for the MCERS.

Two subscales of the Multiracial Ethnic Identity Measure (i.e., Ethnic Identity Achievement, and Ethnic Behaviors) exhibited poor reliability, each with an internal consistency estimate of .55. Thus, these subscales were excluded from all analyses.

#### *Relationships between Factors on the Multiracial Risk and Resilience Scale*

As predicted, the factors on the Multiracial Risk and Resilience Scale exhibited several intercorrelations. Others' Surprise/Disbelief Regarding Racial Heritage was related moderately and positively to Lack of Acceptance from Family, Multiracial Discrimination,

and Disconnection from Family and Friends and was not related to Appreciation of Human Differences and Multiracial Pride. Lack of Acceptance from Family was moderately positively related to Multiracial Discrimination and strongly related to Disconnection from Family and Friends and was not related to Lack of Acceptance from Family or Multiracial Pride. Unexpectedly, Multiracial Discrimination was slightly positively related to Appreciation of Human Differences. Finally, a slight negative relationship emerged between Disconnection from Family and Friends and Multiracial Pride. Finally, with regard to the Resilience factors, Appreciation of Human Differences related moderately and positively with Multiracial Pride and was unrelated to Others' Surprise/Disbelief Regarding Racial Heritage or Lack of Acceptance from Family.

### Phase Three: Additional Reliability Estimates

#### *Phase Three Method*

The purpose of this study was to obtain additional reliability estimates for the MCRS scale. Internal consistency reliability estimates were reassessed and test-retest reliability was computed.

#### *Participants*

Participants included 19 Multiracial adults, including 15 women, 3 men, and 1 transgendered individual. Respondents ranged from 18 to 32 years in age, with a mean age of 22.4 (SD = 4.24). Participants reported their mothers' racial groups as the following: Black (6.3%), White, (18.8%), Asian (37.5%), Middle Eastern (6.3%), and Multiracial (25.0%). One person failed to indicate their mother's racial group. Respondents indicated their father's racial groups as follows: Black (12.5%), White (25%), Asian (25%), and Multiracial (31%). One person failed to report their father's racial background.

### *Procedures*

Seventy eight individuals who participated in Phase 2 of this study, and who submitted their contact information to the researchers to enter the lottery to win one of two \$50 gift certificates were invited to complete the Multiracial Risk and Resilience Scale for a second time, approximately two months after their initial participation. Participants were offered an additional chance at winning a \$50 gift certificate in exchange for their participation. Nineteen individuals successfully completed the survey at Time 2. This represents a 24.4% response rate.

### *Measures*

*Multiracial Challenges and Resilience.* The original 74-item MCRS was administered.

*Demographic questionnaire.* The demographic form solicited the following information: age, gender, race(s), mother's race(s), father's race(s), city and state of residence, sexual orientation, relationship status, race of partner, education level, type of work, generation status, neighborhood racial composition, and yearly household income.

### *Phase Three Hypotheses*

It was hypothesized that the MCRS would demonstrate adequate internal consistency and test-retest reliability because test-retest data were collected over a short span of time. However, the constructs assessed by the MCRS subscales were not expected to remain stable over longer periods of time (e.g., years) because perceptions of race-related challenges and resilience are likely to fluctuate as individuals' racial identity develops. Additionally, under times of stress, some individuals may report greater distress from challenges and difficulty maintaining resilience.

### *Analyses*

First, descriptive statistics were computed and internal consistency reliability estimates were calculated using the data collected at time two. Second, correlations were computed for the MCRS scale scores at time 1 and time 2 to assess the test-retest reliability of the measure.

#### Phase Three: Results

Means, standard deviations, and internal consistency estimates are reported in Table 4. All subscales of the Multiracial Risk and Resilience Scale exhibited adequate reliability (alphas ranging from .86 to .90), except for the Multiracial Discrimination scale, which had an alpha coefficient of .62. The two month test-retest reliability estimates for the subscales were as follows: Others' Surprise/Disbelief Reactions Regarding Racial Heritage (.84), Lack of Family Acceptance (.54), Multiracial Discrimination (.71), Appreciation of Differences (.80), Disconnection from Family and Friends (.67), and Multiracial Pride (.70). Each of these correlations was significant at the  $p < .01$  level, except Lack of Family Acceptance (which was significant at the .05 level).

#### Post Hoc Analyses

For exploratory purposes, several post-hoc analyses were computed. First, differences in responses to the MCRS subscales based upon demographic characteristics were assessed. Secondly, the usefulness of the MCRS subscales in predicting self-esteem and satisfaction with life were explored.

#### *Assessment of Mean Differences in MCRS scores*

First, two multivariate analyses of variance (MANOVA) were run to ascertain differences in responses to the MCRS subscales. In the first MANOVA, gender and

phenotype (i.e., the racial group the respondent appeared to belong to based on their physical characteristics), were included as independent variables and the MCRS subscales (i.e., Others' Surprise/Disbelief Reactions, Lack of Family Acceptance, Multiracial Discrimination, Disconnection from Family/Friends, Appreciation of Human Differences, and Multiracial Pride) were entered as dependent variables. Using Wilks' Lambda test statistic, differences at the  $p < .01$  level were only found based upon and phenotype.

Differences based on phenotype surfaced only on the Multiracial Discrimination scale,  $F(6, 302) = 7.30, p < .01$ . The Tukey Honestly Significant Difference Test revealed that individuals who were perceived as part of the Black racial group ( $M = 1.97; SD = .99$ ) reported greater Multiracial Racism than individuals who were perceived as White ( $M = .72; SD = .89$ ). Additionally, individuals who were perceived as Black ( $M = 1.97; SD = .99$ ) also reported greater Multiracial Racism than those who had more racially ambiguous physical features ( $M = .73; SD = .89$ ). Finally, respondents who looked Latina(o) ( $M = .95; SD = .95$ ) reported more Multiracial Racism than did individuals who were perceived as White ( $M = .72; SD = .89$ ).

The second MANOVA included family income, region of residence (i.e., Northeast, South, West, Midwest), and racial composition of current neighborhood as independent variables and the MCRS subscales as dependent variables. No differences emerged based upon family income, region of residence or racial composition of current neighborhood.

Two additional MANOVAs were computed to assess differences in responses to the convergent and discriminant validity measures. The first MANOVA included gender and phenotype as independent variables and social connectedness, ethnic affiliation and

belonging, other group orientation, social self-efficacy, self-esteem, satisfaction with life, and depression as dependent variables. No differences based upon sex or phenotype were found on any of these measures.

Finally, a MANOVA was computed with family income, region of residence, and racial composition of current neighborhood as independent variables. The dependent variables were: social connectedness, ethnic affiliation and belonging, other group orientation, social self-efficacy, self-esteem, satisfaction with life, and depression. No differences were found based upon these independent variables.

#### *Assessment of the Usefulness of MCRS Subscales as Predictors of Self-esteem*

One hierarchical multiple regression analysis was computed to assess the proportion of variance accounted for in self-esteem by the MCRS factors. To control for the contribution of demographic variables, sex, age and income were entered in the first block. Next, the 6 MCRS factors, Others' Surprise/Disbelief Reactions Regarding Racial Heritage, Lack of Family Acceptance, Multiracial Discrimination, Disconnection from Family/Friends, Appreciation of Differences, and Multiracial Pride, were included in the second block.

The MCRS factors accounted for 11.4% of the total variance in self-esteem, after controlling for the contributions of demographic variables. Disconnection from Family/Friends and Multiracial Pride emerged as unique predictors of self-esteem. Others' Surprise/Disbelief Reactions Regarding Racial Heritage, Lack of Family Acceptance, Multiracial Discrimination, and Appreciation of Differences did not contribute unique variance over and above that accounted for by Disconnection from Family/Friends and Multiracial Pride (see Table 5).

*Further investigation of the relationships of Disconnection and Multiracial Pride to Self-Esteem*

The relationships between the MCRS subscales and self-esteem were further explored. First, Multiracial Pride was tested as a moderator of the relationship between Disconnection from Family and Friends and self-esteem. Barron and Kenny's (1986) recommendations were used to assess the hypothesized model. First, the variables used in the analyses were "centered" by subtracting the mean of each scale from the total scale scores. This yielded a deviation score for each variable, which were used in the regression analyses used to test the hypothesis that Multiracial Pride moderated the relationship between Disconnection and Self-esteem. Self-esteem was entered as the dependent variable in a hierarchical multiple regression. Disconnection and Multiracial Pride were entered as predictors in the first block. The interaction term (Disconnection\*Multiracial Pride) was entered as a predictor in the second block. The results indicated that the interaction term did not account for unique variance above and beyond the variance accounted for by Disconnection and Multiracial Pride in the prediction of Self-esteem. Thus, the moderator hypothesis was not supported (see Table 6).

Next, self-esteem was assessed as a moderator of the relationship between Disconnection and Multiracial Pride. This relationship was supported (see Table 7). After controlling for the variance accounted for by Disconnection and Multiracial Pride, the interaction term Disconnection\*Self-esteem explained additional variance in the prediction of Multiracial Pride.

## DISCUSSION

The purpose of this study was to create a psychometrically sound measure of race-related challenges and resilience experienced by Multiracial individuals. The results of this study suggested that the MCRS demonstrated satisfactory psychometric properties when used with urban Multiracial adults of diverse backgrounds. Factor analyses suggested a six factor structure of the MCRS, including four Challenge factors (Other's Surprise/Disbelief Regarding Racial Heritage, Lack of Acceptance from Family, Multiracial Discrimination, Disconnection from Family and Friends) and two Resilience factors (Appreciation of Human Differences and Multiracial Pride). This structure was replicated with a second subset of participants, lending support to the stability of the factor structure. Internal consistency estimates for the subscales of the MCRS were moderate to high and the test-retest reliability scores over a two-month period were adequate.

### *Description of Sample*

Participants reported being slightly bothered by others' surprise regarding their racial heritage, lack of family acceptance, and multiracial discrimination and indicated feeling minimally disconnected from friends and family. Additionally, these participants reported great appreciation of human differences and high Multiracial pride. Thus, it seemed that the sample was highly resilient. It is possible that Multiracial people living in diverse cities have developed healthy coping strategies and experienced little distress due to challenges. It is also possible that individuals who felt positively about their Multiracial identities chose to participate in this study, and that these individuals were less impacted by challenges. Finally, it is equally possible that participants tended to use denial to protect

themselves against the impact of these challenges. Finally, the sampling procedures used may have created a bias in the sample.

Participants' responses to the validity measures provided further support that this sample seemed to be healthy and functioning well. The participants exhibited very positive attitudes about interacting with individuals from other ethnic groups. This is consistent with the participants' high scores on the Appreciation of Human Differences subscale of the MCRS and also is consonant with previous research suggesting that Multiracial individuals reported strong valuing of diversity (Miville et al., 2005; Roberts-Clarke et al., 2004).

Participants also indicated feeling moderate levels of social connection with others and confidence in their social skills, while also exhibiting strong self-esteem and satisfaction with life. Thus, it seems that this sample was well-adjusted. It is possible that the procedures used to recruit participants influenced responses on these scales. For example, participants viewed the advertisement for this study while they were using Facebook—a website that was created for social networking. Therefore, maybe participants' responses were influenced by a “Facebook effect”—feelings of social connectedness and social competence stimulated by Facebook use. Future research should diverse avenues of recruiting participants to minimize the possibility of such an effect.

The Ethnic Identity Achievement and Ethnic Behaviors subscales of the Multiethnic Identity Measure exhibited poor internal consistency reliability among this sample of Multiracial individuals, and were eliminated from the analyses. The poor reliability of these measures could be due to the wording of the items on these scales, which seemed to assume membership to a single ethnic group. As discussed earlier, the

MEIM has been used to assess ethnic identity among Multiracial individuals, although the instrument was not created for or validated upon Multiracial or Biracial samples. The poor internal consistency estimates obtained in this study suggest that this measure may not be appropriate for use with Multiracial individuals. Future research should further investigate the usefulness of the MEIM for assessing ethnic identity among Multiracial individuals.

*Potential Biases in the Data Due to Sampling Procedure*

The sample of Multiracial adults represented in this study included only individuals living in large, metropolitan areas within the continental United States. The experiences of Multiracial individuals living outside large metropolitan areas within the continental United States might differ significantly from the experiences of these participants. Smaller towns with less racial diversity might present different challenges for Multiracial individuals. There might be fewer Multiracial people living in these towns and perhaps it would be harder for Multiracial people to find a supportive and diverse community. Thus, Multiracial individuals living in these towns might face greater discrimination and lack of acceptance. On the other hand, perhaps Multiracial people living in small towns face fewer challenges. For example, if the members of the town know each other, people might respond with less surprise or disbelief to the Multiracial person.

The experiences of Multiracial people living outside the continental United States also is likely to differ from the experiences of the participants in this study. For example, approximately one in five people living in Hawaii are Multiracial (Jones & Smith, 2001). It is likely that Multiracial individuals living in Hawaii are less likely to encounter surprise or lack of acceptance than are individuals living within the continental United States. Thus,

the MCRS may not capture the challenges and strengths that are most relevant for individuals living in varied racial environments.

Additionally, participation in this study relied on an individual's willingness to respond to the advertisement and volunteer to complete the survey. Thus, the sample probably reflects a selection bias. For example, it is likely that individuals who volunteered to participate in this study may be comfortable acknowledging their Multiracial identity and are interested in thinking about and sharing their experiences as Multiracial people. It is possible that this sample's high scores on Multiracial Pride and Appreciation of Human Differences are reflective of the sample obtained in this study due to the advertising strategies employed. Thus, a limitation to the sampling strategy used in this study was the range restriction in the variability of scores on the measures included in the survey (i.e., low scores on Challenges and depression and high scores on Resilience and assessments of positive psychological functioning). Range restriction results in an underestimation of the relationships between variables (Sackett et al., 2007), making it more difficult for significant findings to surface. This suggests that the relationships that emerged in this study may be even stronger in a more representative sample of urban Multiracial adults. Additionally, it is possible that additional relationships may emerge that were not found in this study.

#### *Hypothesized and Actual Factor Structures*

It was hypothesized that the Multiracial Challenges and Resilience Scale would have a six factor structure with four Challenge subscales and two Resilience subscales. This hypothesis was confirmed. However, the actual constructs that were originally hypothesized to be represented by the factors were very broad and tentative, as there was

little research to guide our hypotheses in this area. Perhaps for this reason, the proposed factors (experiences with racism, social invalidation, negative psychological outcomes, multiracial hassles, enhanced social functioning, and positive psychological outcomes) were not supported.

Instead, the factors that emerged were similar to the hypothesized factors, but reflected more specific constructs. For example, it was expected that experiences with racism would emerge as an important factor and that this subscale would include items assessing a Multiracial individual's encounters with discrimination, neglect, and biases, regardless of the source of these microaggressions. However, in this study, racist acts (i.e., derogatory or hurtful statements) from family members did not load on the same factor as other types of racist or discriminatory experiences. Instead, racism from within the family loaded on a separate factor with other items reflecting invalidating experiences within the family (Lack of Acceptance from Family). This suggested that experiences of racism from within the family represent a qualitatively different experience for the participants in this study than other types of racism and discrimination. Additionally, Lack of Family Acceptance was inversely related to personal self-esteem, whereas Multiracial Racism was unrelated to this variable. Thus, it is possible that racism within the family is more personally destructive on an individual's sense of self-worth than racism from others. On the other hand, it is possible that people with low self-esteem are more sensitive to and report greater lack of acceptance from family members. It is also possible that Multiracial Racism and self-esteem are indirectly related. For example, the relationship with these variables might be mediated by internalized racism. Perhaps Multiracial Racism is related to lowered self-esteem among individuals who exhibit greater internalized racism. On the

other hand, perhaps low internalized racism buffers against the impact of Multiracial Racism on self-esteem. Future research should investigate the role of the risks posed by racism from within and outside of the family and also explicate the relationship between Lack of Family Acceptance and Multiracial Racism and self-esteem.

Social invalidation of racial identity also was a hypothesized factor. This factor was expected to include items assessing the extent to which an individual experienced rejection by members of the group with whom one identifies, lack of acceptance as a member of their proclaimed racial group, and challenging one's "choice" of racial identification. Invalidating experiences perpetrated by family members and non-family members were anticipated to fall on this factor. This factor was not supported. In this study, only lack of family acceptance emerged as a factor. This included the extent to which one's family pressured, challenged, or degraded one's racial identification. Parallel items were included on the original MCRS scale to reflect invalidating experiences from non-family members. However, those items did not load highly on any factor. Again, it seems that lack of acceptance from family was more important in the lives of the individuals in this study than invalidation from non-family members.

Multiracial hassles also were expected to emerge as a factor. It was anticipated that this factor would include items representing common experiences encountered by Multiracial individuals that reflect the societal schema that racial categories are mutually exclusive. Since racial groups are treated as distinct categories, others' tend to assume each person belongs to a single racial group and that members of one family will look racially similar (James & Tucker, 2003). When this schema is contradicted, others may respond with surprise or discomfort. This hypothesis was partially supported. The factor Other's

Surprise/Disbelief Reactions is similar to the hypothesized Multiracial hassles factor. The main difference is that the Multiracial hassles factor was expected to include institutionalized hassles as well, such as the experience of having to check one box to represent one's racial background. Perhaps the individual-level responses are more salient for Multiracial persons because they are more personal and require an actual interaction and response from the Multiracial individual, thus probably causing these incidents to feel more taxing. Additionally, these individual-level responses are likely to occur more regularly and blatantly than institutional hassles.

Another hypothesized factor included negative psychological outcomes. It was expected that items assessing disconnectedness, pressure to conform, invisibility, hypervisibility, and negative attitudes toward Multiracial identity would load on this factor. Only feelings of disconnectedness emerged as important. Perhaps disconnection/connection was particularly important to this sample of respondents, given that they were recruited from a popular social-networking website. Whether people join Facebook to maintain connections with people, or to make new connections by meeting new people—one thing that most users probably have in common is that connecting with others is valued. Thus, future research should seek to study additional samples of Multiracial individuals to assess if the importance of the Disconnection from Family/Friends factor is replicated.

Another factor that was hypothesized to emerge was enhanced social functioning. This factor was expected to include items reflecting an individual's perceptions of their ability to comfortably, successfully, and respectfully interact with diverse individuals, including those who are racially, culturally, or ideologically different. This construct was

very similar to the Appreciation of Human Differences scale. The major difference was that Appreciation of Human Differences emphasized positive attitudes towards human and cultural differences, whereas the hypothesized factor emphasized perceived skillfulness in cross-cultural interactions. Perhaps due to their interest in and appreciation of cultures, Multiracial individuals understand that developing cross-cultural skillfulness is a difficult and lifelong learning process. Thus, perhaps they more strongly endorsed the items assessing values. Further research should inquire about the different dimensions of cross-cultural competence (attitudes versus skills) among Multiracial people.

Finally, the last hypothesized factor was positive psychological outcomes. This factor was expected to include racial pride and recognition of personal strengths (independence, courage) developed as a result of life experiences as a Multiracial/Biracial person. Only Racial Pride emerged as important. This might be due to the fact that the other types of strengths were less clearly related to one's experiences as a Multiracial person. For example, one eliminated item read, "My experience as a Multiracial person has taught me to be courageous." One participant responded that although she believes she is courageous, she is not sure that her experiences as a Multiracial person has taught her to be so. It is possible that other respondents had a similar reaction to these items.

#### *Convergent and Discriminant Validity of the MCRS*

The convergent validity of the MCRS scales was supported by their relations with other variables with which they were expected to relate. Specifically, Others' Surprise/Disbelief Reactions Regarding Racial Heritage, Lack of Family Acceptance/Understanding, Multiracial Discrimination, and Disconnection from Family/Friends related positively to depression and negatively to social connectedness.

Discriminant validity was supported by the lack of relationship between these subscales and preference for order.

The convergent validity of the Appreciation of Human Differences and Multiracial Pride subscales was supported by their positive relations with satisfaction with life, social connectedness and social self-efficacy and the discriminant validity of these scales was supported by their lack of relationship with social desirability. Interestingly, Appreciation of Differences and Multiracial Pride were not related to depression. This is surprising because it would seem that the ability to truly value differences in others and to experience positive feelings about one's own racial identity might be inconsistent with the negative thoughts, loss of interest, and sadness that characterize depression. One reason Appreciation of Human Differences and Multiracial Pride did not exhibit relations with depression might be because overall, this sample was not depressed. Thus, range restriction may have prevented the emergence of a relationship between these scales and depression. Future research should investigate the relationship between the Appreciation of Human Differences and Multiracial Pride with a less well-adjusted sample of Multiracial individuals.

#### *Test Re-test Reliability*

Five of the six subscales appeared to be stable over a two-month time period. The Lack of Family Acceptance scale scores were not stable over time. It is possible that this scale assessed conflict with family that can change over time. For example, respondents may report greater distress related to lack of family acceptance if conflict had occurred in close proximity to the time that the participant completed the survey. As more time passed, participants might have worked through the painful incident with their family member, or

may have had the chance to forget or deny the impact of the incident. Future research should investigate the stability of lack of family acceptance related to Multiracial individuals.

#### *Post-hoc Analyses*

Multiracial people who were perceived as Black or Latina/o reported experiencing more racism/discrimination than those who were perceived as White. Additionally, individuals who were perceived as Black also reported greater Multiracial Racism than those who had more racially ambiguous physical features. Finally, respondents who looked Latina(o) reported more Multiracial Racism than did individuals who were perceived as White. These results may have interesting implications for family relationships. For example, it is possible that one Multiracial sibling is perceived by others as Black, while their siblings share physical features that are associated with a White racial group. This person may feel isolated or disconnected from their siblings who may not understand or empathize with their experiences of racism. Additionally, it is possible that an individual's physical appearance related to race may be associated with feelings of connection with a parent(s) that the individual resembles, whereas Multiracial people might feel disconnected from parents if they look racially dissimilar. Future research should investigate the relations between phenotype, experiences of discrimination, feelings of disconnection. Finally, the findings that Black and Latina/o physical features are associated with greater experiences with discrimination are consistent with Critical Race Theory's proposition that racial hierarchies exist, with light, White features being privileged over darker skin and non-White features (Delgado & Stefancic, 2001; James & Tucker, 2003).

Differences based on phenotype were not found for the scales used to assess convergent and discriminant validity (i.e., social connectedness, ethnic affiliation and belonging, ethnic behaviors, ethnic identity achievement, other group orientation, social self-efficacy, self-esteem, satisfaction with life, and depression). Thus, Multiracial individuals who experience greater levels of racism appear to be resilient. It may be that these individuals develop effective coping strategies or employ other protective factors that relate to positive psychological functioning. Further research should investigate the processes by which these individuals maintain social connections, ethnic identity, social self-efficacy, self-esteem and satisfaction with life while warding off depression in the presence of racial discrimination.

Interestingly, regional differences were not found on any of the MCRS subscales or in the scales used to assess convergent and discriminant validity. This might be due to the fact that all participants resided in large, metropolitan areas within the continental United States, and the racial context of these cities may be similar. For example, attitudes towards Multiracial people and quality of race-relations may be more or less the same across these cities.

Gender differences in response patterns to the MCRS and scales used to assess convergent and discriminant validity also did not emerge. It is possible that the types of race-related experiences measured by the MCRS are equally applicable to men and women. For example, families might be equally accepting (or rejecting) of Multiracial individuals regardless of their sex. On the other hand, it is also possible that gender differences were not found due to the small proportion of male respondents included in this

study. Future research should use more balanced samples to investigate the role of sex in the experiences of Multiracial individuals.

Additionally, differences were not found on the MCRS scales or measures of convergent or discriminant validity based upon family income or racial composition of current neighborhood. The vast majority of participants reported high family income levels and most participants reported living in majority White neighborhoods. Thus, it is possible that the lack of diversity represented in this sample resulted in range restrictions that did not allow differences based on income or neighborhood racial composition to emerge. On the other hand, it is possible that family income level and neighborhood racial composition do not influence scores on the scales in this study. This might be because racism exists at all income levels and within all communities, despite the diversity of the communities, and that individuals learn to adapt despite their financial resources and neighborhood composition. Future research should sample Multiracial individuals from a wider range of social classes and who live in a more varied racial environments to assess whether differences in MCRS scores or the scales used to assess convergent and discriminant validity (i.e., social connectedness, ethnic affiliation and belonging, ethnic behaviors, ethnic identity achievement, other group orientation, social self-efficacy, self-esteem, satisfaction with life, and depression) might be influenced by these factors.

The usefulness of the MCRS in predicting self-esteem was also assessed. Disconnection from Family/Friends and Multiracial Pride predicted self-esteem, whereas the other MCRS scales did not contribute to the prediction of self-esteem. If a person feels different and distant from loved ones, it is possible that the individual may internalize these interpersonal issues and feel negatively about themselves. On the other hand, it is possible

that people who tend to hold negative attitudes about themselves are likely to distance themselves from others and feel interpersonally disconnected. Future research should investigate the direction of the relationship between self-esteem and disconnection.

Similarly, individuals who feel positively about themselves may tend to be more likely to appreciate the positive aspects of a Multiracial identity. On the other hand, an individual who is able to value their Multiracial heritage may be able to draw on this pride to boost their personal self-esteem. Future research should also explicate the direction of the relations between self-esteem and Multiracial Pride.

Finally, Disconnection and Multiracial Pride were the two MCRS subscales that reflected an individual's feelings about themselves (e.g., "I feel different than others..." or "Being Multiracial makes me feel special"). The self-esteem scale also assessed feelings about oneself, (e.g., "At times I think I am no good at all"). Thus, it is not surprising that disconnection and Multiracial Pride were predictive of self-esteem, whereas the other factors did not predict this variable. The other three challenge factors on the MCRS (i.e., Others' Surprise Reactions Regarding Racial Heritage, Lack of Family Acceptance, and Multiracial Discrimination) assessed incidents that occurred in people's lives. It is possible that the relationship between these scales and self-esteem is indirect. Perhaps the relationship is moderated by coping styles. Future research should investigate paths between challenges, coping styles, and self-esteem.

The Appreciation of Differences subscale assessed the individual's attitudes towards others, whereas self-esteem assessed feelings about oneself. It seems possible that people might have very different feelings about themselves than they do about others. Thus, the fact that Appreciation of Differences did not emerge as a factor predicting self-

esteem is not surprising. Finally, disconnection and multiracial pride provided a small contribution to self-esteem. Future research should investigate other variables that contribute to the development of this variable.

The nature of the relationships between disconnection from family and friends, multiracial pride and self-esteem were further explored. It was expected that Multiracial pride may buffer against the impact of disconnection from family and friends to protect and individual's self-esteem. However, this hypothesis was not supported. Instead, self-esteem was found to moderate the relationship between disconnection and multiracial pride. High self-esteem protected an individual's multiracial pride against the impact of disconnection from family and friends. On the other hand the multiracial pride of individuals with low self-esteem was negatively affected in the presence of disconnection with family and friends. In a similar fashion, self-esteem also buffered against the impact of Multiracial discrimination on Multiracial pride. These results underscore the importance of interventions aimed at bolstering or protecting the self-esteem of Multiracial individuals.

#### *Future Research and Possible Interventions*

First, the psychometric properties of the MCRS should be tested on other samples through the use of confirmatory factor analysis. If replicated, the Multiracial Challenges and Resilience Scale can be used to further knowledge regarding psychological functioning and identity development among Multiracial individuals. Resilience researchers might use the MCRS to identify relations between risks, protective factors, and resilience as they exist in the lives of Multiracial people. For example, perhaps confirmatory factor analytic procedures (i.e., structural equation modeling) could be employed to explicate the relations

between risk factors, protective factors, and outcomes. Others' Surprise Reactions, Lack of Family Acceptance, and Multiracial Discrimination might represent risk factors, whereas Feelings of Disconnection, Multiracial Pride, and Appreciation of Human Differences might represent outcome variables. Future research should explore which, if any, protective factors (for example, self-esteem or social support) facilitate the development of resilience and prevent feelings of disconnection.

Additionally, the relations between the scales on the MCRS and other desired outcomes can be assessed. For example, Shih and Sanchez' (2005) reported mixed findings with regard to self-esteem among Multiracial samples. Some studies found that Multiracial individuals had greater self-esteem than their monoracial counterparts, while others found equal or lower levels of self-esteem. The MCRS might help us understand the role of self-esteem in the psychological lives of Multiracial people, including what factors support, hinder, or predict the development of positive self-esteem. For example, MCRS scales were entered into a multiple regression analysis to predict self-esteem among Multiracial individuals. This identified feelings of disconnection and Multiracial pride as important predictors of self-esteem. This information may be used to design interventions to increase self-esteem among Multiracial individuals who suffer from low self-worth. For example, clinicians may choose to develop interpersonal process therapy groups for Multiracial people with low self-esteem. These groups could increase feelings of connectedness, understanding which may increase self-esteem. Clinicians may also encourage Multiracial clients to join cultural activities or organizations, which may strengthen Multiracial Pride. Future research could use the MCRS scales to predict other dimensions of psychological well-being or distress experienced by Multiracial people.

Future research also might investigate methods of intervention related to the challenges assessed on the MCRS. For example, if further research finds that the challenge factors relate to negative outcomes (i.e., depression) and that the resilience factors relate to positive outcomes (e.g., satisfaction with life, social self-efficacy), then these results might be useful in designing interventions promoting resilience. For example, therapists might work with Multiracial clients or parents of Multiracial children to help individuals make meaning of their experiences as Multiracial people and develop insight about the unique perspective and strengths they may develop. Another example of a possible intervention is including Multiracial issues in diversity missions in schools, colleges, and workplaces. This might decrease the amount of Others' Surprise/Disbelief Reactions Regarding Racial Heritage individuals encounter in these spaces.

Additionally, because Lack of Family Acceptance was associated with several negative outcomes (i.e., feelings of disconnection, depression, low self-esteem), family-based interventions seem especially important. Parents might be encouraged to facilitate the development of Multiracial pride in their children and foster a Multicultural family identity. Parents might educate their families about all races and cultures represented within the family. Parents could make an effort to create relationships with friends or family members who are Multiracial to help build a supportive community for their Multiracial children. Families might also learn about the unique issues faced by Multiracial people so they might be empathic and available for their children when they encounter these challenges.

Additionally, a stress and coping framework might be useful in identifying healthy coping strategies that could reduce the amount of distress related to challenges. For

example, perhaps using cognitive reframing to understand the discriminatory or surprise experiences as a lack of awareness in the perpetrator instead of internalizing these experiences as a personal shortcoming would be related to less distress. Additionally, perhaps active coping strategies, such as being prepared with a thoughtful response to discrimination, surprise/disbelief, lack of acceptance could reduce the distress in these situations. Identification of effective coping strategies can assist clinicians in helping Multiracial clients successfully negotiate the challenges they may face. Future research should investigate if a stress and coping framework may be useful to understand the challenges and resilience experiences of Multiracial people. Moreover, researchers could identify healthy and unhealthy coping strategies and test the effectiveness of such interventions.

### *Limitations*

*Limitations related to internet-based data collected.* There were several limitations to this study. First, internet-based data collection poses several concerns. Although the number of Americans with access to the internet is increasing, demographic discrepancies in internet use remain. Young, and highly educated households that earned an above average salary were far more likely to have internet access in their homes than older, lower class, or less educated individuals (U.S. Department of Commerce, 2002). Furthermore, less than half (44% each) of Black and Hispanic households have internet access, whereas 67% of White and 74% of Asian households have internet access (Day, Janis, & Davis, 2003). Therefore, internet-based research tends to miss the experiences of the majority of Black and Hispanic individuals as well as older, lower class, or less educated people. Thus, the present study may also reflect the experiences of a unique segment of the Multiracial

population (young, highly educated, high income). However, traditional psychological research methodology also sampled heavily from middle class, White and college student populations (Lee & Dean, 2004). It is of extreme importance to capture the experiences of people at different from a wide range of economic levels as well as individuals from diverse racial backgrounds, a problem not unique to web-based studies.

A closely related problem with internet-based research is that no procedures have been developed to obtain representative or random samples of participants. Thus, the generalizability of internet-based data should be carefully considered (Kraut et al., 2004). The results of the present study may be generalizable to Multiracial adults living in large metropolitan areas within the United States whose earn an above average income. Future research should replicate this study on other samples so that further information about the generalizability of these findings may be obtained. However, web-based samples do provide the opportunity to obtain a more diverse sample with respect to age, location, and occupation or major than traditional college student samples. The internet can be instrumental in obtaining large sample sizes of minority populations that could otherwise be difficult to study. Specifically, Multiracial individuals represent 2.6% of the total U. S. population. Traditional paper and pencil methods of data collection may not easily yield an adequate number of Multiracial participants.

Another concern for internet-based research is that return rates tend to be lower than for paper and pencil surveys (Kraut, et al., 2004). Additionally, the return rate for internet surveys can be more difficult to assess. In the present study, it was impossible to know how many Multiracial individuals viewed the recruitment advertisement and chose not to participate. Thus, a true return rate was not assessed. Relatedly, participants tend to

prematurely terminate participation in internet-based research at a higher rate than for paper and pencil measures (Kraut et al., 2004). The premature termination rate in this study was 61%. Thus, the results of this study are based on the self-reports of the individuals that persisted through the entire survey. Perhaps these individuals had some quality in common that affected the results of this study. For example, it is possible that individuals who were most excited and positive about their experiences as Multiracial people were more likely to successfully complete the survey. Thus, the high premature termination rate potentially biased the sample of Multiracial people included in this study, and it is not possible to know if and how individuals who completed the survey differed from those who chose to end their participation prior to completion.

Finally, another limitation to internet-based surveys is that researchers have minimal control over the research conditions. Participants might complete the survey in a variety of different environments (i.e., alone in their homes, or in the middle of a loud coffee shop). Responses might be influenced by the setting in which the participant completes the survey. Additionally, the same participant may complete the survey more than once without the researcher's knowledge (Gosling et al., 2004; Kraut et al., 2004). To limit the possibility of individuals participating in this study more than one time, IP addresses and demographic information were examined. If an IP address and/or demographic for two participants seemed similar, only the first set of responses was retained (only one case was excluded due to a possible repeated participation). This method of detecting repeat responders was recommended by Gosling et al. 2004.

A final common concern about web-based data collection is whether or not the data is equivalent to data collected through paper-and-pencil methods. For example, will a web-

based version of a paper and pencil measure be equally valid as the original? Likewise, can similar relationships between variables be found? Some research has supported the equivalence of web-based and paper and pencil approaches. For example, Herrero and Meneses (2006) found equal internal consistency estimates for the internet based and paper-and-pencil versions of the Perceived Stress Scale and the Center for Epidemiological Studies-Depression (CES-D) scale. Similarly, Reynolds and Stiles (2007) reported comparable means on web-based and paper-and-pencil versions of psychotherapy process measures. Although the body of support for the equivalence of web-based data is growing, further research is needed before definitive conclusions can be stated (Gosling et al., 2004; Reynolds & Stiles, 2007).

*Other limitations.* In addition to the potential drawbacks inherent in internet-based data collection, there are several other limitations to this study. Multiracial people represent an extremely diverse group. There are numerous unique experiences that Multiracial people of a given racial background encounter that are not measured by the MCRS. For example, individuals with one Asian American parent and one African American parent are likely to face challenges and develop strengths that differ from individuals whose parents are Native American and White, because the types of racism encountered will differ. Due to unique socio-political histories, people of color experience unique types of racism and other challenges based upon the racial group the individual's phenotype most closely resembles. Thus, individuals perceived as African American experience different challenges than people who are perceived as Middle Eastern. The unique and important challenges and resilience experienced by individuals perceived to belong to specific racial groups were not assessed in this study. The purpose of this the

MCRS was to capture the experiences that might be common to Multiracial people across specific racial backgrounds, and it is important to remember that more group-specific experiences (which could possibly be equally or more important in the lives of some Multiracial people) are not represented.

Similarly, the MCRS was created to understand the experiences of Multiracial people whose parents identify as belonging to two different racial groups. Thus, the experiences of a Middle Eastern and Latina person whose mother and father are both Biracial (both are Middle Eastern and Latino) will not be represented on the items on the MCRS. Such individuals are probably less likely to feel disconnected or a lack of family acceptance, for example. Thus the MCRS is inappropriate for use in understanding the experiences of such individuals.

Additionally, this study failed to collect information regarding whether participants were raised by their biological parent(s), as well as data about the race and genders of caregivers. It is possible that individuals raised by a single parent and exposed to family of a single racial group may encounter separate challenges and types of resilience than individuals who were raised by both biological parents and were equally exposed to family members representing multiple racial backgrounds. For example, perhaps Multiracial individuals who are equally connected to family members of different racial backgrounds are more likely to report higher Appreciation of Differences than those who are connected to family members of one racial background. Future research should assess whether differences emerge based on the race(s) of caregivers.

Also, the majority of the participants represented in the development of the MCRS were women. The present study did not find sex differences in responses to the MCRS

scales. However, research suggested that sex differences in race-related challenges experienced by Multiracial people might be important. Specifically, one qualitative study found that biracial women of Black and White ancestry reported powerful experiences of rejection from their Black peers based upon their physical appearance (e.g., lighter skin, curly hair). On the other hand, biracial men in the same study reported a sense that their physical appearance was an asset and felt more accepted by their Black peers (Rockquemore, 2002). It is possible that sex differences were masked in this study due to the small proportion of male participants. Perhaps Multiracial men would report fewer feelings of rejection and lack of acceptance than Multiracial women. Additionally, perhaps an investigation of challenges and resilience among Multiracial men might reveal different factors. Future research should investigate gender differences in responses to the MCRS.

The participants in this sample also over-represented Americans who earn high incomes and who are highly formally educated (i.e., some college or beyond). Individuals who earn above the mean income and greater education have access to resources that are not available to people with less money and education. Thus, high-income parents of Multiracial children might choose to send their children to diverse schools, select to live in diverse areas, and have the time and resources to expose their children to different cultures to help cultivate an appreciation of human differences and multiracial pride. Parents with less money and fewer resources may have few childcare options and may need to allow less accepting family members to care for their child. These parents might also be unable to choose to send their children to diverse schools and may have to live in more homogenous environments. They may also not have the time or resources to expose their children to cultural experiences to foster appreciation of differences or Multiracial pride.

Thus, the specific types of resilience less affluent Multiracial people develop might differ from those represented in this study. The types of challenges or distress related to the challenges might also differ, since people earning lower incomes may not have the option to avoid some of these challenges (i.e., chose not to interact with an unaccepting family member). Differences based on income or educational attainment were not found in this study, but this may be due to the lack of variability represented by this sample. Future research should investigate challenges and resilience among Multiracial individuals representing greater social class diversity.

Alternatively, high-income earners might be concentrated in White neighborhoods due to financial resources available to Whites. The identity development of Multiracial individuals living in White contexts might differ from Multiracial individuals living in communities of color. Perhaps those living in White neighborhoods tend to be more minority identified because they are more likely to be identified as people of color. Future research should assess if and how the identity development as well as the specific types of challenges and resilience encountered by high income-earning Multiracial adults differ from the experiences of lower income-earners.

Finally, the MCRS is a first-step at identifying unique challenges and resilience experienced by urban Multiracial individuals. The categories of race-related “challenges” and “resilience” are extremely complex and broad in scope. Thus, the MCRS does not represent an exhaustive set of race-related challenges and resilience experienced by this population. The final version of the MCRS does not fully capture the themes that had emerged in the literature review and focus group discussions in phase 1 of this study. For example, items assessing social invalidation and enhanced social functioning did not load

on any factors in this study, but were cited as important in the literature and focus group discussions. The expansion of theory to guide the study of race-related experiences of Multiracial individuals is critical, as the complexity of these issues may be lost or oversimplified by relying on resilience and critical race theories.

Racial identity theories may provide a useful framework for capturing the complexity of race-related experiences of Multiracial individuals. For example, Helms' (1995) People of Color racial identity model, which assesses schemata used to understand race-related stimuli are described. Some of the schemata or statuses discussed in Helms' theory share some overlap with factors on the MCRS. For example, Helms' Integrative Awareness status describes the tendency for People of Color to feel positively about their own racial group membership and empathy and appreciation for other racial groups. The Multiracial Pride and Appreciation of Human Differences subscales may capture similar concepts as Helms' Integrative Awareness status. Additionally, racial identity may impact an individual's responses to the challenges subscales of the MCRS. If participants are operating out of Helm's Conformity status, they are likely to minimize the impact of race and deny the existence of racism. Such individuals may report low Multiracial Discrimination. Future research should assess the utility of Helms' People of Color Racial Identity model in understanding the unique experiences of Multiracial people.

### *Conclusion*

Counseling psychologists have a long history of involvement in social justice work, such as the development of Multicultural counseling and Feminist counseling (Goodman, et al., 2004). To respond to the demands of the changing demographics of our time, it is critical that counseling psychologists study the experiences of Multiracial individuals, an

understudied and rapidly growing population. The development of this instrument will provide a tool for future quantitative investigations and theory building regarding the psychological functioning of Multiracial people living in the United States. Furthermore, this scale can assist in the development of interventions aimed at decreasing distress resulting from challenges and increasing resilience among Multiracial people.

*Table 1: Final items retained on Challenges scale for Sample A and Sample B*

Item	Factor loadings	
	Sample A	Sample B
<i>FACTOR 1: Other's Surprise/Disbelief Regarding Racial Heritage</i>		
23. Someone did NOT believe I was related to a family member because we look like we belong to different racial groups.	.86	.87
24. An individual acted surprised when they saw me with a family member because we look like we belong to different racial group(s).	.86	.89
18. I told someone about my racial background(s), but they did NOT believe me.	.67	.60
10. When I disclosed my racial background, someone acted surprised.	.65	.50
20. Someone placed me in a racial category based on their assumptions about my race.	.53	.42
<i>FACTOR 2: Lack of Family Acceptance</i>		
14. A family member said that I am NOT a "real" member of a racial group(s) with whom I identify.	.90	.60
21. A member of my family treated me like an "outsider" because I am Multiracial.	.75	.76
19. A member of my family expected me to "choose" one racial group with whom to identify.	.59	.70
4. A family member said something negative about Multiracial/Biracial people.	.54	.69
9. Someone in my family made a hurtful statement about one of the racial group(s) with whom I identify.	.51	.78
<i>FACTOR 3: Multiracial Discrimination</i>		
7. I was discriminated against because of one or more of my racial backgrounds.	.89	.75
22. I was the victim of discrimination because I am Multiracial.	.79	.81
6. Someone outside my family said something derogatory about Multiracial/Biracial people.	.53	.55
3. A person outside of my family made a hurtful statement about one of the racial group(s) with whom I identify.	.45	.55
2. Someone chose NOT to date me because I am Multiracial.	.31	.51

*Table 2: Final items retained on Resilience scale on Sample A and Sample B.*

Item	Factor loadings	
	Sample A	Sample B
<i>FACTOR 4: Appreciation of Human Differences</i>		
63. Being Multiracial has taught me to understand multiple perspectives.	.89	.92
62. Because of my experiences as a Multiracial person, I value human differences.	.87	.78
65. As a Multiracial person, I have developed an appreciation of different cultures.	.82	.75
70. Because of my experiences as a Multiracial person, I have compassion for people who are different than myself.	.76	.75
73. Being Multiracial has taught me to adapt to a variety of cultural situations.	.61	.65
<i>FACTOR 5: Disconnection from Family and Friends</i>		
30. I feel different than my family because of my race(s).	.79	.77
38. I feel alone because some members of my family do NOT understand my experiences as a Multiracial person.	.79	.78
53. I do NOT feel connected to my parent(s) because my race(s) are different than their race(s).	.74	.75
58. I do NOT feel connected to my extended family members because my racial backgrounds are different than their racial backgrounds.	.68	.79
55. Because I am Multiracial, I feel misunderstood by some friends.	.60	.39
<i>FACTOR 6: Multiracial Pride</i>		
49. I love being Multiracial.	.84	.92
51. I am proud that I am Multiracial.	.84	.76
44. Being Multiracial makes me feel MORE attractive to romantic partners.	.54	.52
47. Being Multiracial makes me feel special.	.54	.57
46. I wish I was not Multiracial.	-.50	-.72

Table 3

Bivariate Correlations Among Scales and Internal Consistency Estimates, Means, Standard Deviations, Actual Ranges, and Possible Ranges of Measured Variables

Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1. Sex	1.00																			
2. Age	.08	1.00																		
3. Income	.20*	-.04	1.00																	
4. Education	-.09	.29*	-.06	1.00																
5. Others' surprise	-.17*	-.12	-.11	-.07	1.00															
6. Lack of family acceptance	-.12	.03	-.12	.03	.48*	1.00														
7. Multiracial Discrimination	-.07	.04	-.08	.13	.45*	.43*	1.00													
8. Appreciation of differences	-.14	.11	-.09	.10	.11	.11	.18*	1.00												
9. Disconnection	-.08	.05	-.06	.06	.49*	.55*	.40*	.08	1.00											
10. Multiracial Pride	-.17*	.03	.04	.01	-.09	-.10	.03	.46*	-.16*	1.00										
11. Social Connectedness	-.05	.05	.07	-.01	-.27*	-.24*	-.22*	.26*	-.46*	.35*	1.00									
12. Order	-.14	-.02	.01	.05	.02	.10	.05	.23*	.04	.21*	.14	1.00								
13. Satisfaction with Life	-.06	-.09	.11	-.04	-.15*	-.07	-.10	.15*	-.27*	.27*	.52*	.20*	1.00							
14. Depression	-.02	-.08	-.11	.03	.23*	.26*	.24*	.07	.33*	-.12	-.42*	-.08	-.36	1.00						
15. Social Self-Efficacy	.01	.01	.04	-.01	-.13	-.13	-.02	.26*	-.20*	.26*	.68*	.08	.38*	-.22*	1.00					
16. Self-Esteem	-.03	.05	.06	-.04	-.10	-.16*	-.03	.09	-.24*	.22*	.37*	.16*	.40*	-.37*	.30*	1.00				
17. Social Desirability	.02	.13	.00	.05	-.18*	-.12	-.17*	.14	.20*	.06	.28*	.22*	.24*	-.27*	.30*	-.26*	1.00			
18. Affiliation and Belonging	-.14	-.02	-.01	.01	-.08	-.02	.01	.35*	-.21*	.48*	.46*	.24*	.35*	-.15*	.33*	-.22*	.09	1.00		
19. Other Group Orientation	-.09	.02	-.09	.09	-.10	-.09	.02	.46*	-.24*	.32*	.43*	.16*	.21*	-.12	.33*	-.20*	.16*	.35*	1.00	
Mean	n/a	22.37	n/a	n/a	1.62	.83	1.54	4.07	1.72	3.78	4.38	4.85	4.73	.90	3.30	3.04	6.00	3.04	3.55	
Standard Deviation	n/a	5.69	n/a	n/a	1.0	.98	1.01	.87	1.21	.94	.86	1.52	1.39	.66	.84	.61	2.93	.64	.47	
Actual Range	n/a	18-53	n/a	n/a	0-4	0-4	0-3.8	0-5	0-5	0-5	1.9-5.9	1-7	1-7	0-3	1.17-5	1-4	0-13	1-4	2-4	
Possible Range	n/a	18+	n/a	n/a	0-4	0-4	0-4	0-5	0-5	0-5	1-6	1-7	1-7	0-3	1-5	1-4	0-13	1-4	1-4	
Alpha	n/a	n/a	n/a	n/a	.83	.82	.76	.89	.83	.80	.93	.94	.89	.83	.81	.91	.71	.76	.72	

Note. \*p < .01

Table 4

Test Re-test Reliability Estimates for the Multiracial Risk and Resilience Subscales and Means, Standard Deviations, Actual Range, Possible Range, and Alpha Coefficients at Time 2

	Others Surprise	Lack of Family Acceptance	Multiracial Discrimination	Appreciation of Differences	Disconnection	Multiracial Pride
Test Re-test Reliability	.84*	0.54	.71*	.80*	.67*	.70*
Time 2 Mean	3.01	2.38	2.87	4.14	2.34	3.77
Time 2 Standard deviation	0.99	1.34	0.8	0.74	1.18	0.97
Time 2 Actual Range	1.8-5.0	1.0-5.0	1.2-4.0	2.6-5.0	.20-4.0	1.6-5.0
Time 2 Possible Range	0-4	0-4	0-4	0-5	0-5	0-5
Time 2 Alpha	0.87	0.88	0.62	0.90	0.86	0.89

Note. \*p < .01.

Table 5

*Summary of Hierarchical Regression Analysis Predicting Self-esteem*

Predictor Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	<i>Sig F</i>	<i>R</i> <sup>2</sup> Change	<i>F Change</i>	<i>Sig. F Change</i>	<i>Beta</i>	<i>Sig. Beta</i>
Demographics	.09	.01	.80	.50	.01	.80	.05		
Sex								-.02	.67
Age								.05	.35
Income								.05	.37
MCRS variables	.34	.11	4.39	.00	.10	3.59	.50		
Disconnection								-.25	.00
Multiracial Pride								.17	.01
Others' Surprise/Disbelief								.01	.86
Lack of Family Acceptance								-.05	.49
Multiracial Discrimination								.08	.19
Appreciation of Differences								.03	.60

Table 6

*Summary of the Hierarchical Multiple Regression Analyses Testing Multiracial Pride as a Moderator of the Relationship between Disconnection from Family and Friends and Self-esteem.*

Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	<i>Sig F</i>	<i>R</i> <sup>2</sup> Change	<i>F Change</i>	<i>Sig. F Change</i>	<i>Beta</i>	<i>Sig. Beta</i>
Predictor variables	.32	.10	17.79	.00	.10	17.79	.00		
Disconnection								-.21	.00
Multiracial Pride								.19	.00
Interaction term									
Disconnection X Multiracial Pride	.32	.11	12.23	.00	.00	1.09	.29	.15	.29

Table 7

*Summary of the Hierarchical Multiple Regression Analyses Testing Self-esteem as a Moderator of the Relationship between Disconnection from Family and Friends and Multiracial Pride.*

Variable	<i>R</i>	<i>R</i> <sup>2</sup>	<i>F</i>	<i>Sig F</i>	<i>R</i> <sup>2</sup> Change	<i>F Change</i>	<i>Sig. F Change</i>	<i>Beta</i>	<i>Sig. Beta</i>
Predictor variables	.25	.06	10.18	.00	.06	10.18	.00		
Disconnection								-.07	.22
Self-esteem								.23	.00
Interaction term									
Disconnection X Self-esteem	.29	.09	9.64	.00	.03	.54	.00	.16	.01

APPENDIX A  
Multiracial Challenges and Resilience Scale (MCRS) Part 1

Multiracial Challenges and Resilience Scale (MCRS)

The term “Multiracial” refers to an individual whose biological parents represent two or more different racial groups (e.g., your mother is Black, White, Asian, Native American, Middle Eastern, Latino, or biracial and your father is a different race than your mother).

Please think about your experiences as a Multiracial individual and respond to items 1-15 using the following 5-point scale.

- 0 = This NEVER happened to me  
 1 = This happened, but I was NOT upset by it  
 2 = This happened, and I was SLIGHTLY upset by it  
 3 = This happened, and I was upset by it  
 4 = This happened, and I was EXTREMELY upset by it

<b>1. Someone chose NOT to date me because I am Multiracial.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
2. An individual acted surprised when they saw me with a family member because we look like we belong to different racial group(s).	0	1	2	3	4
<b>3. A family member said something negative about Multiracial/Biracial people.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
4. Someone outside my family said something derogatory about Multiracial/Biracial people.	0	1	2	3	4
<b>5. I was discriminated against because of one or more of my racial backgrounds.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
6. Someone in my family made a hurtful statement about one of the racial group(s) with whom I identify.	0	1	2	3	4
<b>7. When I disclosed my racial background, someone acted surprised.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
8. A family member said that I am NOT a “real” member of a racial group(s)with whom I identify.	0	1	2	3	4
<b>9. I told someone about my racial background(s), but they did NOT believe me.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
10. A member of my family expected me to “choose” one racial group with whom to identify.	0	1	2	3	4
<b>11. Someone placed me in a racial category based on their assumptions about my race.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
12. A member of my family treated me like an “outsider” because I am Multiracial.	0	1	2	3	4
<b>13. I was the victim of discrimination because I am Multiracial.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
14. A person outside of my family made a hurtful statement about one of the racial group(s) with whom I identify.	0	1	2	3	4
<b>15. Someone did NOT believe I was related to a family member because we look like we belong to different racial groups.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

Others’ Surprise/Disbelief Reactions Regarding Racial Heritage: 1, 2, 9, 7, 11, 15  
 Lack of Family Acceptance: 3, 6, 8, 10, 12  
 Multiracial Discrimination: 1, 4, 5, 13, 14

APPENDIX A continued  
Multiracial Challenges and Resilience Scale (MCRS) part 2

Based on your experiences as a Multiracial person, please indicate how strongly you agree or disagree with each of the following statements.

Please respond to items 26-35 use the following 6 point scale, indicating how strongly you agree or disagree with each of the statements below.

- 0= Strongly disagree  
1= Disagree  
2= Slightly disagree  
3= Slightly agree  
4= Agree  
5= Strongly Agree

16. I love being Multiracial.	0	1	2	3	4	5
<b>17. I feel different than my family because of my race(s).</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
18. Being Multiracial makes me feel MORE attractive to romantic partners.	0	1	2	3	4	5
<b>19. I do NOT feel connected to my parent(s) because my race(s) are different than their race(s).</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
20. As a Multiracial person, I have developed an appreciation of different cultures.	0	1	2	3	4	5
<b>21. Because I am Multiracial, I feel misunderstood by some friends.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
22. Because of my experiences as a Multiracial person, I value human differences.	0	1	2	3	4	5
<b>23. I am proud that I am Multiracial.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
24. Being Multiracial has taught me to understand multiple perspectives.	0	1	2	3	4	5
<b>25. I feel alone because some members of my family do NOT understand my experiences as a Multiracial person.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
26. I wish I was not Multiracial.	0	1	2	3	4	5
<b>27. Because of my experiences as a Multiracial person, I have compassion for people who are different than myself.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
28. Being Multiracial makes me feel special.	0	1	2	3	4	5
<b>29. Being Multiracial has taught me to adapt to a variety of cultural situations.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
30. I do NOT feel connected to my extended family members because my racial backgrounds are different than their racial backgrounds.	0	1	2	3	4	5

Disconnection: 17, 19, 21, 25, 30

Appreciation of Human Differences: 20, 22, 24, 27, 29

Multiracial Pride: 16, 18, 23, 26\*, 28

\*Item 26 should be reverse scored. Scores are obtained by computing the mean for each subscale separately.

## APPENDIX B

### Social Connectedness

The following are a number of statements that reflect various ways in which we view ourselves. Rate the degree to which you agree or disagree with each statement using the following scale (1=Strongly Disagree and 6=Strongly Agree). There is no right or wrong answer. Do not spend too much time on any one statement and do not leave any unanswered.

	Strongly Disagree 1	Disagree 2	Mildly Disagree 3	Mildly Agree 4	Agree 5	Strongly Agree 6
				<u>Strongly disagree</u>		<u>Strongly agree</u>
1. I feel comfortable in the presence of strangers.	1	2	3	4	5	6
<b>2. I am in tune with the world.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
3. Even among my friends, there is no sense of brother/sisterhood.	1	2	3	4	5	6
<b>4. I fit in well in new situations.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
5. I feel close to people.	1	2	3	4	5	6
<b>6. I feel disconnected from the world around me.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
7. Even around people I know, I don't feel that I really belong.	1	2	3	4	5	6
<b>8. I see people as friendly and approachable.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
9. I feel like an outsider.	1	2	3	4	5	6
<b>10. I feel understood by the people I know.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
11. I feel distant from people.	1	2	3	4	5	6
<b>12. I am able to relate to my peers.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
13. I have little sense of togetherness with my peers.	1	2	3	4	5	6
<b>14. I find myself actively involved in people's lives.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
15. I catch myself losing a sense of connectedness with society.	1	2	3	4	5	6
<b>16. I am able to connect with other people.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
17. I see myself as a loner.	1	2	3	4	5	6
<b>18. I don't feel related to most people.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
19. My friends feel like family.	1	2	3	4	5	6
<b>20. I don't feel I participate with anyone or any group.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

APPENDIX C  
Satisfaction with Life Scale

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding. The 7-point scale is:

- 1= Strongly disagree
- 2=Strongly agree
- 3=Slightly disagree
- 4=Neither agree or disagree
- 5=Slightly agree
- 6=Agree
- 7=Strongly agree

<b>1. In most ways my life is close to my ideal.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2. The conditions of my life are excellent.	1	2	3	4	5	6	7
<b>3. I am satisfied with my life.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
4. So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
<b>5. If I could live my life over, I would change almost nothing.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

## APPENDIX D

## Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977)

How often was each of the following things true in the last week?

- 0 = Rarely or none of the time (less than 1 day)  
 1 = some or a little of the time (1-2 days)  
 2 = occasionally or a moderate amount of time (3-4 days)  
 3 = Most or all of the time (5-7 days)

1. I felt that I could not shake off the blues even with the help from my family or friends.	0	1	2	3
<b>2. I had trouble keeping my mind on what I was doing.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
3. I felt depressed.	0	1	2	3
<b>4. I felt everything I did was an effort.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
5. My sleep was restless.	0	1	2	3
<b>6. I enjoyed life.</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
7. I felt sad.	0	1	2	3

APPENDIX E  
Multi-Ethnic Ethnic Identity Measure and Other Group Orientation  
(MEIM; Phinney, 1992)

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their *ethnicity* is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in:

In terms of ethnic group, I consider myself to be \_\_\_\_\_

Use the numbers given below to indicate how much you agree or disagree with each statement.

1: Strongly disagree      2: Somewhat disagree      3: Somewhat agree      4: Strongly agree

<u>disagree</u>	<u>agree</u>	Strongly	Strongly	
1. I have spent time trying to find out more about my own ethnic group, such as it's history, traditions, and customs.	1	2	3	4
<b>2. I am active in organizations or social groups that include mostly members of my own ethnic group.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
3. I have a clear sense of my ethnic background and what it means for me.	1	2	3	4
<b>4. I like meeting and getting to know people from ethnic groups other than my own.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
5. I think a lot about how my life will be affected by my ethnic group membership.	1	2	3	4
<b>6. I am happy that I am a member of the group I belong to.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
7. I sometimes feel it would be better if different ethnic group didn't try to mix together.	1	2	3	4
<b>8. I am not very clear about the role of my ethnicity in my life.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
9. I really have not spent much time trying to learn more about the culture and history of my ethnic group.	1	2	3	4
<b>10. I really have not spent much time trying to learn more about the culture and history of my ethnic group.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
11. I have a strong sense of belonging to my own ethnic group.	1	2	3	4
<b>12. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
13. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.	1	2	3	4
<b>14. I have a lot of pride in my ethnic group and its accomplishments.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
15. I don't try to become friends with people from other ethnic groups.	1	2	3	4

APPENDIX E continued  
Multi-Ethnic Ethnic Identity Measure and Other Group Orientation  
(MEIM; Phinney, 1992)

In this country, people come from a lot of different cultures and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of the names of ethnic groups are Mexican-American, Hispanic, Black, Asian-American, American Indian, Anglo-American, and White. Every person is born into an ethnic group, or sometimes two groups, but people differ on how important their *ethnicity* is to them, how they feel about it, and how much their behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Use the numbers given below to indicate how much you agree or disagree with each statement.

1: Strongly disagree      2: Somewhat disagree      3: Somewhat agree      4: Strongly agree

	<u>disagree</u>	<u>agree</u>	Strongly	Strongly
<b>16. I participate in cultural practices of my own group, such as special food, music, or customs.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
17. I am involved in activities with people from other ethnic groups.	1	2	3	4
<b>18. I feel a strong attachment towards my own ethnic group.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
19. I enjoy being around people from ethnic groups other than my own.	1	2	3	4
<b>20. I feel good about my cultural or ethnic background.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

Use the numbers below to indicate the best answer to each question.

21. My ethnicity is

- (1) Asian, Asian American, or Oriental
- (2) Black or African American
- (3) Hispanic or Latino
- (4) White, Caucasian, European, not Hispanic
- (5) American Indian
- (6) Mixed; parents are from two different groups
- (7) Other (type in): \_\_\_\_\_

**22. My father's ethnicity is (use numbers above)** \_\_\_\_\_

23. My mother's ethnicity is (use numbers above) \_\_\_\_\_

APPENDIX F  
Social Self-Efficacy (SES; Sherer et al., 1982)

This questionnaire is a series of statements about your personal attitudes and traits. Each statement represents a commonly held belief. Read each statement and decide to what extent it describes you. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by making the letter that best describes your attitude or feeling. Please be very truthful and describe yourself as you really are, not as you would like to be.

	Strongly disagree	Moderately disagree	Neither agree nor disagree	Moderately agree	Strongly agree
1. It is difficult for me to make new friends.	1	2	3	4	5
<b>2. If I see someone I would like to meet, I go to that person instead of waiting for him or her to come to me.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
3. If I meet someone interesting who is hard to make friends with, I'll soon stop trying to make friends with that person.	1	2	3	4	5
<b>4. When I'm trying to become friends with someone who seems uninterested at first, I don't give up easily.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
5. I do not handle myself well in social gatherings.	1	2	3	4	5
<b>6. I have acquired my friends through my personal abilities at making friends.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

APPENDIX G  
Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1989)

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle 1. If you agree with the statement, circle 2. If you disagree, circle 3. If you strongly disagree, circle 4.

	<u>Strongly agree</u>	agree	disagree	<u>Strongly disagree</u>
1. On the whole, I am satisfied with myself.	1	2	3	4
<b>2. At times I think I am no good at all.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
3. I feel that I have a number of good qualities.	1	2	3	4
<b>4. I am able to do things as well as most other people.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
5. I feel I do not have much to be proud of.	1	2	3	4
<b>6. I certainly feel useless at times.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
7. I feel that I am a person of worth, at least on an equal plane with others.	1	2	3	4
<b>8. I wish I could have more respect for myself.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
9. All in all, I am inclined to feel that I am a failure.	1	2	3	4
<b>10. I take a positive attitude toward myself.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

## APPENDIX H

## Order subscale of Almost Perfect Scale-Revised (APS-R; Slaney et al., 2001)

The following items are designed to measure attitudes people have toward themselves, their performance, and toward others. There are no right or wrong answers. Please respond to all of the items. Use your first impression and do not spend too much time on individual items in responding.

Respond to each of the items using the scale below to describe your degree of agreement with each item.

Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7
				Strongly disagree		Strongly agree

<b>1. I am an orderly person.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
2. Neatness is important to me.	1	2	3	4	5	6	7
<b>3. I think things should be put away in their place.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
4. I like to always be organized and disciplined.	1	2	3	4	5	6	7

APPENDIX I  
Marlowe Crowne Social Desirability Scale Form C (Reynolds, 1982)

Listed below are statements concerning personal attitudes and traits. Please read each item and decide whether the statement is *true* or *false* as it pertains to you personally.

Please respond to the following items as being either True (T) or False (F).

- |   |          |          |
|---|----------|----------|
| 1. It is sometimes hard for me to go on with my work if I am not encouraged.  | T        | F        |
| <b>2. I sometimes feel resentful when I don't get my way.</b>   | <b>T</b> | <b>F</b> |
| 3. On a few occasions, I have given up doing something because I thought too little of my ability.                          | T        | F        |
| <b>4. There have been times when I felt like rebelling against people in authority even though I knew there were right.</b> | <b>T</b> | <b>F</b> |
| 5. No matter who I'm talking to, I'm always a good listener.  | T        | F        |
| <b>6. There have been occasions when I took advantage of someone.</b>   | <b>T</b> | <b>F</b> |
| 7. I'm always willing to admit it when I make a mistake.  | T        | F        |
| <b>8. I sometimes try to get even rather than forgive and forget.</b>   | <b>T</b> | <b>F</b> |
| 9. I am always courteous, even to people who are disagreeable.  | T        | F        |
| <b>10. I have never been irked when people expressed ideas very different from my own.</b>                                  | <b>T</b> | <b>F</b> |
| 11. There have been times when I was quite jealous of the good fortune of others.   | T        | F        |
| <b>12. I am sometimes irritated by people who ask favors of me.</b>   | <b>T</b> | <b>F</b> |
| 13. I have never deliberately said something that hurt someone's feelings.  | T        | F        |

## APPENDIX J Demographic Questionnaire

The following are a few questions about your background. Please remember your answers will be kept anonymous and confidential.

1. Sex: Female \_\_\_\_\_ Male \_\_\_\_\_ Transgender \_\_\_\_\_
2. Age: \_\_\_\_\_
3. What is/are your racial group(s) (Check all that apply):
  - \_\_\_\_\_ Black or African American
  - \_\_\_\_\_ Latina/o or Hispanic
  - \_\_\_\_\_ White or European American
  - \_\_\_\_\_ Asian/Pacific Island American
  - \_\_\_\_\_ Native American
  - \_\_\_\_\_ Middle Eastern American
  - \_\_\_\_\_ Other (please specify) \_\_\_\_\_
4. How do you identify yourself racially? \_\_\_\_\_
5. How do other people tend to identify you racially, based upon your appearance? \_\_\_\_\_
6. What is/are your mother's racial group(s) (Check all that apply):
  - \_\_\_\_\_ Black or African American
  - \_\_\_\_\_ Latina/o or Hispanic
  - \_\_\_\_\_ White or European American
  - \_\_\_\_\_ Asian/Pacific Island American
  - \_\_\_\_\_ Native American
  - \_\_\_\_\_ Middle Eastern American
  - \_\_\_\_\_ Other (please specify) \_\_\_\_\_
7. What is/are your father's racial group(s)? (Check all that apply):
  - \_\_\_\_\_ Black or African American
  - \_\_\_\_\_ Latina/o or Hispanic
  - \_\_\_\_\_ White or European American
  - \_\_\_\_\_ Asian/Pacific Island American
  - \_\_\_\_\_ Native American
  - \_\_\_\_\_ Middle Eastern American
  - \_\_\_\_\_ Other (please specify) \_\_\_\_\_
8. What is your generation status?
  - \_\_\_\_\_ 1<sup>st</sup> generation American (I am an immigrant to the U.S.)
  - \_\_\_\_\_ 2<sup>nd</sup> generation American (I was born in the U.S., and my parent(s) were born outside the U.S.)
  - \_\_\_\_\_ 3<sup>rd</sup> generation American (I was born in the U.S., my grandparents were born outside the U.S.)
  - \_\_\_\_\_ 4<sup>th</sup> generation American
  - \_\_\_\_\_ 5<sup>th</sup> generation or higher
9. What is your sexual orientation?
  - \_\_\_\_\_ Heterosexual
  - \_\_\_\_\_ Gay or Lesbian
  - \_\_\_\_\_ Bisexual

APPENDIX J continued  
Demographic Questionnaire

The following are a few questions about your background. Please remember your answers will be kept anonymous and confidential.

10. In which city and state do you live? City: \_\_\_\_\_ State: \_\_\_\_\_

11. How would you describe the racial composition of the neighborhood you **currently** live in?

- Majority White or European American  
 Majority Black or African American  
 Majority Latino/a or Hispanic  
 Majority Asian American/Pacific Islander American  
 Majority Native American  
 I live in a racially diverse neighborhood (please indicate largest racial groups represented in your neighborhood \_\_\_\_\_)

12. How would you describe the racial composition of the neighborhood you **grew up** in?

- Majority White or European American  
 Majority Black or African American  
 Majority Latino/a or Hispanic  
 Majority Asian American/Pacific Islander American  
 Majority Native American  
 I grew up in a racially diverse neighborhood (please indicate largest racial groups represented in your neighborhood \_\_\_\_\_)  
 I lived in several different neighborhoods with many different racial compositions

13. Relationship status:

- Single, never married  
 Married/partnered/living as married  
 Divorced  
 Separated  
 Widowed  
 Other

14. If you are currently in a romantic relationship, what is/are the racial group(s) of your spouse/partner:

- Black or African American  
 Latina/o or Hispanic  
 White or European American  
 Asian/Pacific Island American  
 Native American  
 Middle Eastern American  
 Other (please specify) \_\_\_\_\_

15. Please indicate your family's approximate yearly income:

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> 0-9,999       | <input type="checkbox"/> 10,000-19,000 | <input type="checkbox"/> 20,000-29,000 |
| <input type="checkbox"/> 30,000-39,000 | <input type="checkbox"/> 40,000-49,000 | <input type="checkbox"/> 50,000-59,000 |
| <input type="checkbox"/> 60,000-69,000 | <input type="checkbox"/> 70,000-79,000 | <input type="checkbox"/> 80,000-89,000 |
| <input type="checkbox"/> 90,000-99,000 | <input type="checkbox"/> over 100,000  |  |

APPENDIX J continued  
Demographic Questionnaire

The following are a few questions about your background. Please remember your answers will be kept anonymous and confidential.

16. What is the highest level of education you have completed:

- Elementary School
- Middle School
- Some High School
- High School
- Associates degree
- Bachelor's degree
- Master's degree
- Doctorate or Professional degree (e.g., MD, PhD, JD, DDS, etc)

17. Are you currently employed?  Yes  No

18. If yes, what is your job title? \_\_\_\_\_

19. Please list any professional or social organizational affiliations \_\_\_\_\_

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