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A Theoretical Development of the Relationship Between Ethnic Identity and
Psychological Health

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ABSTRACT OF THE DISSERTATION

A Theoretical Examination of the Relationship Between Ethnic Identity and
Psychological Health

by

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This research aimed to clarify the relationship between ethnic identity and
psychological health by addressing two theoretical issues. First, the construct of
ethnic identity was conceptualized by distilling the underlying developmental
process theorized in past work to generate a secure, stable, and positively defined
self-concept, and to thus lead to improved psychological health. This developmental
process, or ethnic identity achievement, occurs as people develop a commitment to
their ethnic group derived from exploring its meaning and social significance.

With this conceptualization in hand, two theoretical processes connecting
ethnic identity achievement to improved psychological health were tested: identity
change and the development of positive relations with other ethnic groups. Ethnic
identity achievement was theorized to foster improved psychological health by
facilitating a definitional change in one's ethnic identity to one that is more likely to
positively evaluated and verified, thus contributing to a stable and positively
defined self-concept. In addition, the process of ethnic identity achievement was
theorized to improve psychological health by fostering a more sophisticated

understanding of how relations with other ethnic groups are informed by social context, and thus leading to a greater appreciation of other ethnic groups and a diminished likelihood to perceive interactions with other groups as threatening.

Using survey data drawn from an ethnically diverse sample of college students (N = 427), these processes were tested with structural equation modeling. The results showed that the theoretical model, specified by both processes, adequately fit the data and that the hypothesized path coefficients were generally supported. The final chapter discusses the theoretical contributions to the ethnic identity literature, identity theory and social identity theory, while closing with directions for future research.

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Introduction

The ethnic diversity of the United States population has increased drastically over the last forty years -- a continuing trend which is expected to result in people of color outnumbering non-Hispanic whites by mid-century (U. S. Census Bureau 2004). Given this and the persistence of discrimination directed against ethnic and racial minority groups (Pager and Shephard 2008), many people are increasingly likely to have their ethnic identity implicated in everyday interactions, often in threatening contexts. Accordingly, there has been an increased focus in the social psychological and developmental literatures to understand how one's ethnic identity – or, the part of a person's self concept that derives from the knowledge, emotional significance, and value of one's ethnic group membership (Phinney and Ong 2007; Tajfel 1981) – influences a variety of psychological health outcomes, including self-esteem (Costigan et al. 2010; Jones and Galliher 2007), positive affect (Kiang et. al. 2006), depression (Street, Harris-Britt and Walker-Barnes 2009; Juang, Nyguen, and Lin 2006; Umana-Taylor and Ubdegraff 2007; Williams et al. 2012), anxiety (Williams et al. 2012), and the provision of coping strategies to deal with group-based disadvantage and discrimination (Outten et al. 2009),

Generally speaking, the relationship between a strong ethnic identity (e.g., a high degree of identification, positive evaluation or emotional attachment) and psychological health has been theoretically framed within a risk-and-resilience framework (Hawkins, Catalano, and Miller 1992; Zimmerman and Arunkumar 1994). A strong ethnic identity has been theorized and found to generate a stable,

secure and positively defined self-concept which provides resiliency against the harmful impact of ethnic/racial discrimination (Smith and Silva 2011). However, given past work demonstrating the harmful consequences of being classified into negatively evaluated identities (Goffman 1963; Lemert 1951), the theoretical position that a strong ethnic identity provides resilience for ethnic minorities in the face of discrimination may appear somewhat counterintuitive. Prior work in labeling theory (Lemert 1951), for instance, suggests that strongly identifying with a negatively evaluated group may lead people to internalize the socially-ascribed negative definitions of that group, and thus possibly to diminished psychological health.

What, then, is unique about a strong ethnic identity that allows it to foster resilience against discrimination instead of amplifying its harmful effect? This research takes a two-step approach towards answering this question. It is first necessary to move beyond the conceptualization of ethnic identity as a dispositional trait and instead examine the underlying developmental process that fosters a strong ethnic identity. An ethnic identity is more than the degree to which people identify with their ethnic group, positively evaluate their ethnic group, or feel an emotional attachment to their ethnic group; it also represents the outcome of a process through which people learn more about their ethnic group and develop a secure commitment to their ethnic group, or *ethnic identity achievement* (Phinney 1989; 1990). It is this specific developmental process that has been implicated in

past work as the underlying mechanism linking a strong ethnic identity to positive psychological health outcomes (Smith and Silva 2011).

With ethnic identity conceptually defined as this developmental process, I next examine how and why an achieved ethnic identity might benefit one's psychological health. Drawing on survey data taken from an ethnically diverse sample of college students, this research tested two theoretical mechanisms that may be facilitated by the process of ethnic identity achievement, thus linking ethnic identity achievement to improved psychological health: identity change and the development of positive relations with other ethnic groups.

Chapter one outlines past research studying the construct of ethnic identity. I first review the many conceptualizations and dimensions of ethnic identity that have been adopted in past research. Next, I discuss the work of developmental psychologists, while theorizing that many of these ethnic identity dimensions are manifestations of the developmental process underlying an achieved ethnic identity. Finally, I review the research adopting a risk and resilience framework that has examined the theoretical link between a strong ethnic identity and improved psychological health, while noting the lack of a clear theoretical model examining how an achieved ethnic identity increases psychological health.

Extending on this past work, chapter two presents a theoretical model that outlines two theoretical mechanisms that link the developmental process of ethnic identity achievement to improved psychological health. First, the process of ethnic identity achievement is theorized to facilitate a definitional change in one's ethnic

identity to one that is *both* positively defined and easier to verify – and thus more stable. Essentially, the achievement process unleashes the enhancement and verification motivations (Kwang and Swann 2010), by providing people with the cultural and social capital to define their ethnic identity positively as well as the drive to adopt a definition for their ethnic identity that increases the extent to which others provide verifying reflected appraisals. A positively defined identity and the stable set of identity meanings that comes with identity verification are, in turn, argued to improve psychological health.

The process of ethnic identity achievement is also theorized to foster more positive relations with other ethnic groups. By exploring the meanings of their ethnic group, people with an achieved ethnic identity are argued to develop a more sophisticated understanding of the social context within which relations with other ethnic groups occur. This may lead to an appreciation of other ethnic groups and a decreased likelihood that interactions with other ethnic groups will be viewed as threatening, thus minimizing the tension experienced in inter-ethnic social relations and improving psychological health.

Chapters three and four outline the methodological approach and empirical findings from this study. Chapter three provides an extensive discussion of the measures used in the study and bivariate analyses of the study variables. Chapter four outlines the findings from the test of the theoretical model. Structural equation modeling was used to test the causal mechanisms of identity change and positive intergroup relations theorized to link the process of ethnic identity achievement to

improved psychological health. Tests of the model revealed that it was a good fit to the data, and that most of the hypothesized effects were supported. Chapter five concludes this study with a discussion of the theoretical contributions, its limitations, and finally suggestions for future research that can address these limitations and provide further theoretical extensions.

Chapter One: Background

Ethnic Identity as a Theoretical Construct and its Link to Psychological Health

Generally speaking, the construct of ethnic identity has been defined as the part of a person's self concept that derives from the knowledge, emotional significance, and value of one's ethnic group membership (Phinney and Ong 2007; Tajfel 1981). As implied by this definition, ethnic identity is regarded as a multidimensional construct containing cognitive, affective, evaluative, cultural, and behavioral components (Ashmore, Deaux, McLaughlin-Volpe 2004; Phinney 1990; Phinney and Ong 2007).

This chapter first reviews the prominent dimensions of ethnic identity used in past research, and then provides a theoretical integration of these dimensions suggested by past scholars -- conceptualizing ethnic identity as a developmental process through which people develop an increased commitment to their ethnic group through an exploration of its social meanings and significance, or an achieved ethnic identity (Phinney and Ong 2007). Next, I review past research that has examined how a strong ethnic identity helps promote positive psychological health outcomes, while noting the lack of an explicit theoretical framework by which to explain these results. By conceptualizing ethnic identity as a developmental process, this chapter lays the groundwork for understanding the two theoretical mechanisms (presented in chapter two) that link a strong ethnic identity to improved psychological health.

Ethnic Identity as a Theoretical Construct

At its most basic level, one's ethnic identity may be understood as the categorical label people use to identify themselves as members of an ethnic group (Phinney and Ong 2007). However, the extent to which people categorize and recognize themselves as members of their ethnic group does not address the underlying meaning of one's ethnic group membership (Phinney and Ong 2007). This has led some scholars to suggest that self-categorization into an ethnic group is a necessary prerequisite for ethnic identification, but nonetheless conceptually distinct from the construct of ethnic identity (Ellemers and Haslam 2012; Phinney and Ong 2007). In other words, people must recognize they belong to an ethnic group before the deeper meaning of one's ethnic identity can be understood.

Reviews of the ethnic identity (and broader social identity) literature have long acknowledged the complex and multidimensional nature of ethnic identity (Ashmore, Deaux, McLaughlin-Volpe 2004; Phinney 1990; Phinney and Ong 2007). Among the dimensions discussed in this chapter are commitment and attachment, ethnic behaviors and behavioral involvement, evaluation and ingroup attitudes, psychological centrality and salience, content and values, identity verification, and achievement[1]. Most prior work has treated these dimensions as either separate

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[1] This review includes dimensions discussed in both the ethnic identity and racial identity literature. While similar, there are two key distinctions between these concepts, Conceptualizations of racial identity usually focus on the unique experiences of disadvantage individuals face based on their racial group membership; whereas the ethnic identity literature examines the general affective and cognitive processes which apply to individuals of all ethnic groups. Thus, measures of racial identity tend to be specific to individual groups whereas measures of ethnic identity are generalizable across ethnic groups (see French, Kim, and Pillado 2006 for a full discussion).

orthogonal predictors of an outcome (Sellers et al. 1998) or additive elements of a global ethnic identity construct (Phinney 1992). However, no known research has examined how these different dimensions are causally related within a larger theoretical model. In this chapter, I argue that ethnic identity achievement, and its emphasis on ethnic identity as an underlying developmental process, allows for the integration of the above dimensions into a general theoretical model. Prior to presenting this integration, however, I first outline the above dimensions of ethnic identity as they have been utilized in past work.

Commitment/Attachment: Commitment and attachment have both been used to describe a wide range of cognitive and affective elements underlying people's sense of belonging to their ethnic group, or the extent to which they feel as one with their ethnic group (Ashmore, Deaux, McLaughlin-Volpe 2004; Phinney and Ong 2007). These may include individuals from the same ethnic group perceiving a shared common experience, feeling an emotional attachment to their ethnic group and members of their ethnic group, and merging their sense of self with their ethnic group. While related, commitment and attachment are conceptually distinct from the values or attitudes one derives from their ethnic group membership, and do not necessarily imply an increased understanding of what it means to be a member of one's ethnic group (Cokley 2005; Phinney and Ong 2007). Commitment and attachment strictly denote the sense of inclusion with one's ethnic group and the interconnectedness people fell with other members of their ethnic group.

Ethnic Behaviors and Behavioral Involvement: Other conceptualizations of ethnic identity have focused on participating in ethnic behaviors, or the behavioral involvement in the practices of one's ethnic group. Ashmore and colleagues (2004) define this as the extent to which individuals partake in interactions and behaviors which implicate one as a member of the collective group. With respect to ethnic identity, these behaviors may include the use of language and language proficiency (De la Garza, Newcomb and Myers 1995) as well as cultural practices such as consuming foods and music from one's ethnic group (Phinney 1992). While a traditionally popular way of measuring ethnic identity, recently scholars have started to argue against behavioral involvement as an actual component of ethnic identity, rather seeing it as an expression of one's investment in their ethnic identity (Ashmore, Deaux, McLaughlin-Volpe. 2004; Phinney and Ong 2007).

Evaluation and Positive Ingroup Atittudes: Conceptualizations of ethnic identity have also addressed an evaluative dimension, or the positive and negative attitudes people hold for their ethnic group and ethnic group membership. Within the racial identity literature, a further distinction has been drawn between private regard and public regard (Ashmore, Deaux, McLaughlin-Volpe 2004; Sellers et al. 1998). Private regard is the positive or negative evaluation an individual holds for her ethnic group; whereas public regard is an individual's perception of how *others outside her ethnic group* evaluate her ethnic group. While the former component has been studied more frequently than the latter, it has been noted that both private regard and public regard lend theoretical insight into the consequences of belonging

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to a low-status ethnic group in a pluralistic society (Ashmore, Deaux, McLaughlin-Volpe 2004). Where discrimination and negative stereotypes are directed against individuals based on their ethnic group membership, people are more likely to perceive greater negative evaluations of their ethnic group as well as develop negative attitudes towards their ethnic group.

Psychological Centrality and Salience: Related to evaluation and ingroup pride some conceptualizations of ethnic identity have addressed the psychological centrality and salience of one's ethnic group membership. Both concepts provide a framework for understanding how a given identity (e.g., an ethnic identity) is hierarchically ranked relative to other identities people may hold. Centrality (or centrality) refers to the importance of an identity in one's self-concept; while salience is defined as the likelihood of an identity being activated across situations (Stets and Serpe 2013; Stryker and Serpe 1994). While these concepts are similar, the centrality of an identity is based on its *internal* sense of subjective importance within the self-concept, whereas the salience of an identity is based on the extent to which people choose to act out a given identity, thus making it more *external*, behavioral, and agentic.

Pure conceptualizations of either centrality or salience are rare in the ethnic identity literature. Where measures do exist, they have sometimes been combined with other conceptually distinct items (Sellers et al. 1998). When research has examined the sole influence of either of these constructs, salience has been found to be positively related to other components of ethnic identity (Yip and Fuligni 2002).

In addition, Phinney and Alpuria (1990) found that ethnic minority group members were more likely to have higher levels of ethnic identity centrality than members of dominant ethnic groups.

Content and Meaning: Other conceptualizations of ethnic identity have focused on the specific content and meaning associated with being a member of an ethnic group. Given the specificity of this conceptualization, these measures have been applied largely to individual ethnic groups (Phinney and Ong 2007). Examining social identities generally, Ashmore and colleagues (2004) define the content and meaning of an identity broadly as the "semantic space in which an identity resides." Conceptualizations of ethnic identity derived from content and meaning can be further subdivided into *self-attributed characteristics* and *ideology*. Self-attributed characteristics are those meanings which compose the stereotypic representations of belonging to a particular identity. For instance, the identity of academic scholar might have certain socially ascribed meanings (e.g., being intelligent and hard working) that people claiming that identity might use to define themselves and seek to maintain.

With respect to self-attributed characteristics, the most prominent conceptualization of ethnic identity has examined the adherence to and endorsement of the cultural values of one's ethnic group. For instance, values-based conceptualizations for the Latino ethnic identity have contained the cultural values of familism, respect for authority, traditional gender roles, and the importance of religion (Felix-Ortiz, Newcomb and Myers 1994; Knight et al. 2010); whereas for

African-Americans value-based conceptualizations have focused on Africentric values such as unity, self-determination, collective work and responsibility, cooperative economics, faith, purpose, and creativity (Grills and Longshore 1996). While the adherence to the cultural values of one's ethnic group might be a key component to one's ethnic identity, scholars have cautioned against this theoretical framing since there is often not a group consensus over what constitutes the cultural values for any given ethnic group. In addition, as mentioned above, due to their specificity such measures inhibit the ability to study multi-ethnic populations (Phinney and Ong 2007).

Conceptualizations examining the content and meaning of one's ethnic identity have also looked at the political meanings of belonging to an ethnic group, or ideology. Specifically, ideology refers to a set of beliefs reflecting a group-based political consciousness which are, in turn, predicated on the position of the group within a larger social dominance hierarchy (Gurin and Townsend 1986). With respect to ethnic identity, in their subscale measuring ideology, Sellers et al. (1998) assess the different beliefs and activities, reflecting varying levels of awareness of the position of African-Americans in American society, along the dimensions of assimilationist, humanist, oppressed minority, and nationalist. Each of these dimensions corresponds to a set of beliefs describing how African Americans might view themselves in relation to other ethnic groups and the larger society and other ethnic groups.

Undergirding some conceptualizations of ethnic identity as an ideology is that individuals in an ethnic group traverse through stages of increasing awareness of their group's position in the larger society. For instance, Cross' Nigrescence Model, operationalized as the Cross Racial Identity Scale (Cross 1971; 1991; 1995; Cross, Parham, and Helms 1991; Vandiver et al. 2002), conceptualizes African-Americans traversing five stages of ethnic identity: Pre-encounter, Encounter, Immersion, Emersion, and Internalization. These stages describe a process whereby individuals are at first unaware of the significance of their ethnic identity (Pre-encounter). After being made aware of their identity, often through an act of racism, the individual's identity develops along a path of being anti-White (Encounter), to a deep exploration and appreciation of the history and culture of the ethnic group (Immersion), to a multicultural appreciation of the values of other ethnic groups (Emersion), to finally a stage of balance where people develop a feeling of comfort with both their own and other ethnic groups (Internalization).

Still other conceptualizations examining ethnic identity content have combined aspects of the above two dimensions of psychological centrality and behavioral involvement. Specifically, Burke, Cerven, and Harrod (2009) has measured ethnic identity as the self-attributed importance (psychological centrality) of particular ethnic practices (behavioral involvement). Framed within identity theory (Burke and Stets 2009) as behavioral meanings, these ethnic practices include listening to the music associated with one's ethnicity, eating the

foods associated with one's ethnicity, maintaining an ethnic home, and dating within one's own ethnic group.

Ethnic Identity Verification: The above conceptualization of ethnic identity content developed by identity theory scholars has been used to examine another dimension of ethnic identity: verification (Burke, Cerven, and Harrod 2009). Identity verification refers to the extent to which people think others see them in the way that they see themselves – i.e., the meanings they use to define their ethnic identity – or alternatively, the ability to obtain confirming reflected appraisals. While this dimension is relatively new in the ethnic identity literature, it is nonetheless vital to understanding the impact of a strong ethnic identity on one's self-concept. The ability to consistently obtain confirming reflected appraisals of one's ethnic identity leads to a secure and stable set of meanings that defines whom one is as a member of their ethnic group, and may thus contribute to a stable self-concept.

Ethnic Identity Achievement: In an attempt to develop an overarching construct of ethnic identity which theoretically integrates these cognitive, affective, evaluative, behavioral, and content-based dimensions, Phinney has proposed the concept of ethnic identity achievement (Phinney 1992; Phinney and Ong 2007). Ethnic identity achievement draws on the ego psychology theory of Erikson (1950; 1968) and Marcia (1966; 1980). For Erikson and Marcia, the central task of adolescence is the development of a stable ego identity – specifically composed of occupational, political, and religious identities. The ego identity is not a static entity, but rather one that develops through adolescence with increasing "reflection and

observation" (Erikson 1968). Through this developmental period, people combine childhood identities with their own talents and interests as well as opportunities afforded by the larger social context (Phinney and Ong 2007). The result of this process is the creation of stable ego identity wherein the occupational, religious, and political components all reflect who the individual is as a unique person. The failure to adequately develop and maintain a stable ego identity leads to identity confusion, whereas successfully developing and maintaining a stable ego identity leads to identity achievement.

Marcia (1966) refined the conceptualization of identity achievement by introducing the themes of commitment and exploration. Exploration involves sorting among multiple identities to find those most congruent with how one defines herself as a unique person, whereas commitment involves the act of choosing one or more of the alternative identities and following through with them (Gaines et al. 2010; Marcia 1966; Schwartz 2001).

Based on these two concepts, Marcia reconceptualized the continuum of identity achievement as a four stage model. Identity diffusion represents the lowest stage of identity achievement where the individual has low levels of exploration and commitment. Identity foreclosure represents the next most advanced stage of identity achievement where the individual has high levels of commitment and low levels of exploration. At this stage, the adolescent usually adopts the political, religious, and occupational identities held by his/her parents. At some point during this second stage, the adolescent enters a crisis phase where the ascribed identities

become irreconcilable with how the adolescent defines herself. This triggers the third stage of identity moratorium. This stage is marked by low commitment and high exploration. During this stage the adolescent searches out and explores multiple identities in an attempt to find the ones which best define her as a unique person. While not committing to any identities initially, as this stage continues and the adolescent feels comfortable with particular identities, she will gradually commit to those identities which best define her. This marks the final stage of identity achievement defined by high levels of commitment to a particular set of identities which best define the individual as a unique person.

Much like the ego identities examined by Erikson and Marcia, ethnic identities are also theorized to go through a developmental process. Although ethnic identities are often ascribed to individuals by virtue of phenotype or cultural heritage, the meanings and attitudes held for an ethnic identity as well as the commitment or sense of belonging to an ethnic identity can fluctuate. In one of the first conceptualizations of ethnic identity achievement, Phinney (1990) theorized that an ethnic identity develops through three stages. The first unexamined ethnic identity stage corresponds to Marcia's identity diffusion and foreclosure stages and represents an ethnic identity which has been unexplored. At this stage, people may not factor their ethnic identity into their global self-concept or may adopt the prevailing social definition for ethnic identity. The second exploration stage corresponds to Marcia's moratorium stage and represents an ethnic identity subject to a crisis – often by an act of discrimination – to which the individual responds with

a de-commitment to their ethnic identity and begins to explore the meanings of her ethnic group membership. Finally, the third achievement stage corresponds to Marcia's achievement stage and represents a recommitment to one's ethnic identity as a result of exploration. Specifically, exploration may result in people redefining their ethnic identity in a more positive light. This ushers in a recommitment to one's ethnic identity reflecting a secure, stable, and positive sense of self and a greater social understanding of one's ethnic group membership.

In her formal conceptualization of ethnic identity achievement -- operationalized within the Multigroup Ethnic Identity Measure (MEIM) – Phinney (1992) moved away from classifying individuals into these developmental stages. Instead, she conceptualized and measured individuals along the two continuous dimensions of ethnic identity achievement: commitment and exploration. The former refers to the sense of belonging to one's ethnic group. The latter refers to the actions and interactions whereby individuals seek to increase their knowledge and understanding of their ethnic group membership. While this dimension is conceptually similar to behavioral involvement, it explicitly involves the desire of people to learn more about their ethnic group. Thus, ethnic identity achievement was conceptually defined as the firm commitment to one's ethnic group derived through exploration (Phinney and Ong 2007), and measured as the extent to which people engage in *both* exploration and are committed to their ethnic group.

Ethnic Identity Achievement and Other Dimensions of Ethnic Identity: Psychometric analyses of the MEIM have informed much of the theoretical

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discussion of how ethnic identity achievement relates to other dimensions of ethnic identity. In the original MEIM scale, ethnic identity achievement was just one dimension in a total measure of ethnic identity, accompanied by two dimensions measuring belonging and affirmation as well as ethnic behaviors and practices. Belonging and affirmation refer to the emotional and evaluative dimensions of one's ethnic identity (similar to attachment and private regard), respectively. Ethnic behaviors and practices correspond to the above component of behavioral involvement. Initial and subsequent factor analyses of the MEIM revealed a one factor structure for these three dimensions of ethnic identity, suggesting a global construct of ethnic identity encompassing achievement, belonging and affirmation, and ethnic behavior and practices (Phinney 1992; Ponterotto et al. 2003; Reese, Vera and Paikoff 1998; Worrell 2000).

However, other analyses of a considerably larger and more ethnically diverse sample dropped two negatively worded items and revealed a two factor structure composed of commitment and exploration, consistent with the conceptualization of an achieved ethnic identity (Roberts et al. 1999). In their 12 item revision of the MEIM, Roberts et al. (1999) found the items contained in the initial dimension of belonging and affirmation loaded on the factor of commitment, whereas the items initially contained in the dimension of ethnic behaviors and practices loaded on the factor of exploration. These findings suggest that the MEIM, and possibly other multidimensional measures of ethnic identity, is assessing one overarching construct of ethnic identity achievement.

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To help reconcile these findings Phinney and Ong (2007) developed the Multigroup Ethnic Identity Measure-Revised (MEIM-R). This six item measure contains two dimensions: commitment and exploration. The dimension of belonging and affirmation was dropped from the original MEIM, with an item measuring belonging included in the commitment dimension of achievement. In addition, the dimension measuring ethnic behaviors and practices was dropped altogether. Factor analyses of the MEIM-R revealed a correlated two factor structure corresponding to the dimensions of commitment and exploration (Phinney and Ong 2007).

A General Model of Ethnic Identity: Based on these psychometric findings of the MEIM, the concept of ethnic identity achievement may tie together the other components of ethnic identity initially discussed in this review. Although ethnic identity achievement ostensibly incorporates only one of the above dimensions (commitment), past research shows positive ingroup attitudes are conceptually similar to commitment and belonging (Roberts et al. 1999) and are associated with ethnic identity achievement (Phinney, Ferguson and Tate 1997). In addition, ethnic behaviors and practices have been shown as conceptually similar to the achievement dimension of exploration (Roberts et al. 1999). With respect to psychological centrality, an achieved ethnic identity has been associated with higher levels of ethnic identity salience (Yip and Fuligni 2002). Finally, past work has found that ethnic identity achievement is positively associated with one's ability to verify their identity (Grindal 2013).

The one dimension of ethnic identity discussed above which has not been studied in relation to ethnic identity achievement is that focusing on content and meaning. Ironically, many of the conceptualizations of ethnic identity using these approaches – such as the Nigrescence Model (Cross 1991) discussed above -- also adopt the developmental stage model of Erickson and Marcia utilized by Phinney. However, these conceptualizations examine the beliefs specific to the shared experiences of a particular ethnic group, whereas Phinney's achieved identity examines processes (commitment and exploration) that are generalizable to all ethnic groups. (Ong, Fuller-Rowell and Phinney 2010; Phinney 1990). However, one could theorize that the developmental process producing an achieved ethnic identity would be related to these content-based conceptualizations – such as a greater endorsement of cultural values. As people develop the stable and secure sense of self, greater understanding of their ethnic identity, and a stronger commitment to their ethnic group, they may be more likely to endorse and adhere to the cultural values of their ethnic group.

In short, ethnic identity achievement is a theoretical construct that helps bring together the many dimensions of ethnic identity. By conceptualizing ethnic identity as a process through which individuals become more committed to their ethnic group by exploring the meanings of their ethnic identity, and thus developing a secure, stable, and positively defined self-concept (Martinez and Dukes 1997; Phinney and Chavira 1992; Phinney, Cantu, and Kurtz 1997). Consequentially, an achieved ethnic identity may foster the development of the characteristics that mark

the other ethnic identity dimensions – including an ethnic identity that is positively defined, psychologically central, and easier to verify as well as a greater participation in ethnic behavioral practices and greater endorsement of the cultural values of one's ethnic group. This general model for ethnic identity is displayed in Figure 1. 1.

Figure 1.1: General Model of Ethnic Identity
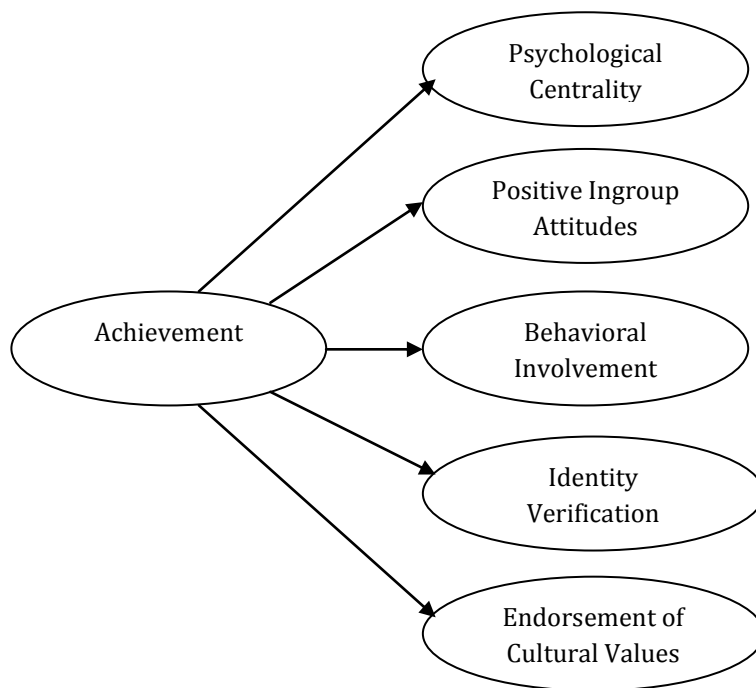
While this model provides an initial explanation for how the dimensions of ethnic identity are interrelated, there are three caveats. First, ethnic identity achievement is not a necessary mechanism for the other dimensions of ethnic identity. As outlined above, while achievement is a sufficient cause to heighten the five subsequent dimensions, it is not a necessary cause. People may have a psychologically central ethnic identity, absent an achieved identity, because of

constant exposure to racial discrimination. Similarly, people may engage in ethnic

behaviors because they feel pressured to do so by family and peers, and not because

they have high levels of achievement. Second, these effects are likely reciprocal. For

instance, as people positively evaluate their ethnic group membership, this might

drive them to further explore their ethnic identity meanings, thus becoming more

committed to their ethnic group and leading to greater levels of achievement.

Finally, the five outcome dimensions within the model may themselves be

interrelated. For instance, research in social identity theory (Tajfel and Turner

1986) has found that merely making a nominal group distinction salient

(psychological centrality) can drive people to evaluate members of the ingroup

more favorably than members of the outgroup.

In short, this model does not offer a comprehensive explanation for all ethnic

identity dynamics, but rather a starting point for understanding how the process of

ethnic identity achievement can lead to the development of the characteristics

marking the other five dimensions. More importantly, this theoretical framework

isolates the general process underlying the development of a strong ethnic identity

(ethnic identity achievement) that has been implied to promote greater

psychological health (Smith and Silva 2011). Understanding this general process

allows for the theoretical elaboration of the causal mechanisms linking an achieved

ethnic identity to improved psychological health. These theoretical mechanisms will

be discussed fully in the next chapter. Before that, I review the literature exploring

the link between ethnic identity and psychological health, and how this connection

can be theoretically informed by treating ethnic identity as a developmental process.

The Link between Ethnic Identity and Psychological Health: The Risk and Resiliency Model

The central push of the ethnic identity literature has been to assess how the construct of ethnic identity relates to psychological and behavioral health outcomes. Although the conceptualization of ethnic identity varies across studies, a strong ethnic identity has been found to be associated with higher levels of self-esteem (Martinez and Dukes 1997; Phinney 1990; 1991; Phinney and Chavira 1992; Phinney, Cantu, and Kurtz 1997), and psychological health (Branscombe, Schmitt and Harvey 1999; Kiang et al. 2006), as well behavioral health outcomes such as academic performance (Chavous et al. 2003; Sellers), and lower levels of substance use, substance use attitudes and aggressive behavior (Belgrave, Brome, and Hampton 2000; McMahon and Watts 2002).

Given these findings, it appears that possessing a strong ethnic identity exerts a positive influence on one's psychological and behavioral health. In the ethnic identity literature, the risk and resiliency model (Bogenschneider 1996; Hawkins, Catalano, and Miller 1992; Zimmerman and Arunkumar 1994; Zimmerman, Bingenheimer, and Notaro 2002) has been the primary theoretical framework used to assess the relationship between ethnic identity and psychological health. In general, the risk and resiliency model has two foci. First, it identifies the presence of certain risk factors that generate strain for an individual,

and thus may adversely affect psychological and behavioral health. Second, it identifies sources of resilience which may be used by individuals to counteract the psychological impact of the risk, and thus help explain why different people exposed to the same risk might be impacted differently.

Specifically, sources of resiliency may operate orthogonally to the risk factors to generate unique positive psychological health outcomes that simply "cancel out" the detrimental outcomes created by the risk factor. Alternatively, the source of resilience may directly neutralize the psychological harm associated with the risk. These two approaches have been termed the compensatory model and the protective model, respectively (Sellers et al. 2006, Zimmerman, Bingenheimer, and Notaro 2002).

Theoretically, the compensatory model implies that the beneficial impact of the resiliency factor exists irrespective of risk factor; whereas the protective model implies that the beneficial impact of resiliency factor exists *only* insofar as a risk factor is present, and is thus able to neutralize its harmful impact. Analytically, the distinction lies in comparing direct effects of the sources of risk and resiliency on psychological health (compensatory model) versus the interaction of the resilience and risk factors on psychological health (protective model).

Within the ethnic identity literature, the risk and resiliency model has framed ethnic/racial discrimination as the primary risk factor. This has been conceptualized as either the perception of past experiences with discrimination or as the willingness to make attributions of prejudice of others in future situations

(Branscombe, Scmhitt, and Harvey 1999). Ethnic identity, in turn, is argued to act as a source of resilience against the psychological harm brought on by discrimination. In line with the developmental perspectives that inform the process of ethnic identity achievement (Phinney 1990), a committed ethnic identity derived from high levels exploration is theorized to generate a stable and positive self-concept and thus a greater sense of confidence and efficacy when interacting with others. In addition to a stable and positive self-concept, a strong identification to a larger collective group has been argued to increase one's sense of belonging and social support (Smith and Silva 2011, p. 1-2).

Empirical work adopting the compensatory approach discussed above has found that ethnic identity is directly related to higher levels of psychological health constructs such as positive affect (Kiang et al 2006), self-esteem (Costigan et al. 2010; Jones and Galliher 2007; Street, Harris-Britt and Walker-Barnes 2009; Umana-Taylor, Diversi, and Fine 2002; Umana-Taylor and Ubdegraff 2007), and overall health (French and Chavez 2010). In addition, ethnic identity has been associated with lower levels of depression (Costigan et al. 2010; Street, Harris-Britt & Walker-Barnes 2009; Juang, Nyguen, and Lin 2006; Umana-Taylor & Ubdegraff 2009; Williams et al. 2012) and anxiety (Williams et al. 2012).

Ethnic identity has also been found to directly relate to lower levels of behavioral health constructs such as substance use (Belgrave, Brome, and Hampton 2000; Brook and Pahl 2005; Love et al. 2006; Marsiglia, Kulis, and Hecht 2001; Marsiglia et al. 2004; Pugh and Bry 2007; Smith, Phillips, and Brown 2008) and

aggressive and problem behaviors (McMahon and Watts 2002; Resnicow et al. 1999). In addition, a strong ethnic identity has been found to promote higher levels of pro-academic attitudes, academic efficacy, academic performance, academic self-concept, and future academic orientation (Cokley and Chapman 2008; Chavous et al. 2003; Fuligini, Witgow, and Garcia 2005; Kerpelman, Eryigit, and Stephens 2008).

Other research adopting the protective model approach has assessed the influence of ethnic identity in suppressing the harmful influence of perceived discrimination on psychological health. The detrimental effect of perceived discrimination on psychological health has been well documented among ethnic minorities (Branscombe, Schmitt and Harvey 1999; Kulis, Marsiglia, and Nieri 2009; Romero and Roberts 2003; Smith and Silva 2011; Yoo and Lee; 2008). The nature of these threats or stressors, such as negative evaluations, specifically targets individuals based on their ethnic group membership. However, a strong ethnic identity, and the accompanying stable and positive self-concept, is theorized to neutralize the harmful effect of threats to one's ethnic identity.

Although empirical work testing this proposition is not as common, research has been generally supportive of the utility of one's ethnic identity to have such a suppressing effect. Ethnic identity has been found to attenuate the harmful effect perceived discrimination has on psychological health outcomes such as self-esteem (Lee 2005; Tynes et al. 2012), psychological distress (Yip, Gee, and Takeuchi 2008), post-traumatic stress disorder (Khaylis, Waelde, and Bruce 2007), and depression (Mossakowski 2003).

A notable critique of the above literature, and one echoed here, is the lack of conceptual clarity and consistency when defining ethnic identity (Smith and Silva 2011). While most of this work adopts the developmental narrative that informs the process of identity achievement, a lack of measurement consistency across studies makes it unclear why a strong ethnic identity should lead to a heightened resiliency against adverse psychological outcomes.

For instance, some research reveals that ethnic identity, instead of buffering the effect of perceived discrimination on negative psychological health outcomes, actually exacerbates its effect (McCoy and Major 2003; Sellers and Shelton 2003; Yoo and Lee 2008). These counterintuitive findings could possibly be the result of how ethnic identity was measured. In one study, Sellers and Shelton (2003) found that ethnic identity centrality heightened the detrimental effect of perceived discrimination on psychological health. While a central ethnic identity may result from the achievement process, not everyone who has a central ethnic identity will necessarily hold an achieved ethnic identity and the resiliency that it provides. For instance, an ethnic identity might be psychologically central solely because people are victims of discrimination, and they are compelled to think of their identity in terms of these negative evaluations. Indeed, where research has modeled the effects of psychological centrality together with positive ingroup feelings, not only was the latter shown to produce enhanced psychological health, but psychological centrality was actually shown to diminish health (Bombay, Matheson, and Anisman 2010).

In order to fully understand the relationship between ethnic identity and psychological health, a theoretical model needs to explicitly conceptualize and measure ethnic identity as the process of ethnic identity achievement – the process implied in past work to promote psychological health -- and then map out the ways in which the achievement process causally links ethnic identity achievement to heightened resiliency and improved psychological health.

The goal of this research is to address both of these drawbacks to the current literature. Why should the developmental process of an increasing commitment to one's ethnic group through an exploration of meaning provide resiliency against discrimination and promote psychological health? This research formalizes and tests a theoretical model that answers this question. In chapter two, I develop a theoretical model that presents ethnic identity achievement as: 1) a process of identity change that facilitates a stable and positively defined ethnic identity, and 2) a process that fosters positive relations with members of other ethnic groups, thus producing positive feelings for other ethnic groups and diminishing perceptions of intergroup threat. Analytically, four proximate mechanisms are then argued to link ethnic identity achievement to psychological health: positive ingroup attitudes, ease in verifying one's ethnic identity (thus producing a stable set of identity meanings), positive feelings for other ethnic groups, and diminished perceptions of intergroup threat.

Chapter Two: Theory

In the last chapter, I reviewed the numerous conceptualizations of ethnic identity adopted in past research along with the issues and problems of each. I then drew upon a conceptualization of ethnic identity that centers on the developmental process of ethnic identity achievement; a conceptualization that provides both theoretical and empirical advantages. By examining the underlying process of ethnic identity achievement, I embed this conceptualization within a larger theoretical framework that specifies and tests the effects of two sets of causal mechanisms accounting for how the process of ethnic identity achievement fosters greater psychological health.

This chapter presents a general theoretical model that outlines two processes that map out the relationship between ethnic identity and psychological health. First, distilling three primary dimensions of the ethnic identity construct -- achievement, private regard, and identity verification -- I treat ethnic identity achievement as a process of identity change which fosters a definition of one's ethnic identity that is both positively defined and more easily verified -- thus leading to a stable set of identity meanings. In other words, increased private regard (positive evaluation of one's ethnic group) and identity verification are outcomes of an identity change process that increases psychological health by providing resilience against perceived discrimination.

Second, I treat ethnic identity achievement as a process that increases positive intergroup relations and psychological health by fostering more positive

evaluations of other ethnic groups and diminishing the tension that accompanies

interactions with other ethnic groups. Towards this goal, I provide a theoretical

framing that also helps reconcile a literature suggesting that a strong ethnic identity

may either promote or inhibit positive relations with other ethnic groups. By

incorporating the concept of perceived threat, examining two dimensions of ethnic

identity (achievement and psychological centrality), and distinguishing between

ingroup bias and outgroup derogation, this part of the theoretical framework

addresses how an achieved ethnic identity fosters healthy relations with other

ethnic groups, but also the conditions under which antagonistic relations might

occur.

Ethnic Identity Achievement as Identity Change

The terminology of identity change, while often implied, is not explicitly

invoked in the developmental literature. The process of ethnic identity

development theorizes a change in the understanding of the meaning and social

significance of one's ethnic group through the exploration process (Phinney and Ong

2007). For this study, the term identity change is used to examine this

developmental process and explicitly references a shift in one's ethnic identity, such

that it is more positively evaluated (private regard) and easier to verify[2].

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[2] It is noted that this definition of identity change differs from how identity change has been
conventionally defined. Identity change is usually conceptualized as the shift in the meanings people
use to define an identity, with research examining the different identity processes responsible for
this shift (Burke and Cast 1997; Burke and Stets 2009; Cast and Cantwell 2007). While related, this
process is nonetheless distinct from how identity change is used in this research. Shifts in the
evaluation of and ability to verify an identity do not necessarily indicate that the meanings of an
identity have changed, simply that the identity is more positively evaluated and easier to verify.

Scholars adopting the developmental approach to ethnic identity have theorized that people are motivated to explore the meanings of their ethnic identity when they encounter a crisis which makes them receptive to a reinterpretation of their ethnic identity (Cross 1981). The source of this crisis may include experiences of discrimination and prejudice that threaten the positive feelings they hold for their ethnic identity (Arce 1981; Mendelberg 1986). These negative evaluations may drive people to explore the meaning and social significance of their ethnic identity in an effort to change their understanding of it. The exploration process involves a greater involvement in the cultural practices of one's ethnic group as well as a greater exposure to one's ethnic group's heritage and values. This heightened exposure to one's ethnic group's culture provides a supportive and informative context in which people may change how they view their ethnic identity. As a result, people may develop a stable and positive definition of their ethnic identity.

Accordingly, the theoretical model in this study posits that the achievement process fosters a change in one's ethnic identity that one is more likely to positively evaluate, and from which one is more likely to receive verifying reflected appraisals from others -- thus contributing to a positively defined and stable self-concept. In turn, these proximate mechanisms may provide resilience against discrimination and thus foster greater psychological health. However, when changing one's identity, what drives people to view their identity more positively and seek verification?

Scholars examining the global self-concept have traditionally viewed self-relevant action as driven by two motivations: self-enhancement and self-verification (Sedikides 1999; Swann and Buhrmester 2011). The enhancement perspective posits that people are motivated to seek feedback from others that increase the positive feelings they hold for themselves. The verification perspective posits that people are motivated to seek feedback from others that confirm their existing self-concept – regardless of whether it is positive or negative. While often treated as competing explanations (Heine 2005; Sedikides, Gaertner, and Toguchi 2003; Sedikides, Gaertner, and Vevea 2005), recent research has begun to view these motivations as conditional, examining the contexts under which one motivation might be more prevalent than the other (Kwang and Swann 2010; Stets and Ascensio 2008; Swann et al. 1999).

Where these motivations are not in conflict, however, nothing theoretically precludes both motivations from operating simultaneously. One such possibility may exist with those individuals who are in the process of ethnic identity achievement and are open to changing how they view their ethnic identity. In this situation, people may seek an enhanced understanding of their identity that they are also better capable of verifying.

Turning first to the enhancement process, as people develop a growing awareness of prejudice and discrimination directed against their ethnic group, this may trigger a desire to explore the meaning and social significance of their ethnic identity. A prominent dimension of these negative socially ascribed evaluations is

that individuals belonging to these groups are regarded as less moral (Branscombe et al. 1999). Given that people generally rate themselves as moral (Stets and Carter 2011), these negative evaluations may generate dissonance. In response, people may explore the meaning of their ethnic identity in order to eliminate this discrepancy. In other words, the exploration of one's ethnic identity meanings – and subsequent increased commitment – may be driven by the desire to develop an understanding of their ethnic identity that they positively evaluate. Thus, as individuals develop an achieved identity, they should be more likely to positively evaluate the meanings of their ethnic identity, and hold more positive ingroup attitudes, a result consistent with work in the ethnic identity literature (Phinney, Jacoby, and Silva 1997).

For instance, at an early age, Sally, an African American female, may not be fully aware of the social significance her ethnicity plays in her interactions with other people. However, as she grows older, she comes to understand that there are certain negative stereotypes directed against African Americans. She may learn this, for instance, from her own personal interactions with other ethnic groups or from listening to the experiences of friends and relatives who are also African American. These experiences make her self-aware of not only the important role that her ethnicity plays in how others evaluate her, but also that this evaluation may often be negative because she is African American.

As a response, in order to counter this negative evaluation and enhance her understanding of what it is to be African American, she may then be motivated to

explore the meaning and social significance of her ethnic group membership in a number of different ways to expand her knowledge of African American cultural heritage, including speaking to family and friends, attending cultural festivals, and reading books and watching movies produced by prominent African Americans. As she is exposed to African American culture, through this exploration process, she finds herself embedded in the positive meanings of her ethnic culture, thus providing her with the cultural capital to define her identity in a positive manner.

The process of ethnic identity achievement may also enable people to view themselves in a way such that they can more easily obtain verifying feedback from others, thus leading to a stable set of identity meanings and contributing to a stable self-concept. With increased levels of ethnic identity achievement, people develop a stronger attachment and commitment to their ethnic group and thus might come to see their ethnic group membership with more of a collective "we" orientation than an individualistic "I" orientation, and thus define who they are more in terms of their ethnicity and act in ways that take into account the feelings and opinions of other members of their ethnic group.

This is consistent with the social identity theory literature where people who identify strongly with a social group (e.g., ethnicity) have been found to experience depersonalization, defining themselves less in terms of their personal idiosyncratic characteristics and more in terms of characteristics belonging to the prototypical group member (Turner et al. 1987). Thus, as people develop an achieved ethnic identity, they may feel driven to take into account the feelings of other members of

their ethnic group, seek affirmation from these group members, and thus be more likely to view their identity in terms of the group prototype. Empirically, this group or communal orientation has been shown in past work to lead individuals to redefine their identity to better match the expectations of others, and thus better obtain identity verification (Burke and Stets 1999). In addition, with the increased exploration that comes with an achieved identity, people may enter into networks of people (both within and outside of their ethnic group) who are supportive of this identity shift, and thus more willing to provide confirming reflected appraisals As a result, with higher levels of ethnic identity achievement, people should be likely to receive more consistently verifying reflected appraisals, thus contributing to a stable set of identity meanings.

Going back to the example of Sally, as she is exploring the meaning and social significance of her ethnic identity, she begins to feel a strong attachment to other African Americans on the basis of their shared culture and shared experiences in American society. Because of this attachment and shared fate, she develops a communal bond with other African Americans. This closeness drives her to interact more with people of her ethnicity, behave in ways consistent with her ethnic culture, and view her ethnic identity in a way that accentuates her similarities with other African Americans in order to maintain positive social relations. At the same time, she may begin to meet other people more tolerant and accepting of this identity shift; people who provide her with support as she explores the broader significance of her ethnic identity. Ultimately, these elements help her obtain

verifying reflected appraisals from others that confirm her ethnic identity, and contribute to the stability of her identity meanings and global self-concept.

In short, ethnic identity achievement can be first understood as a process of identity change that facilitates a view of one's ethnic identity that is both positively evaluated and easier to verify. On the one hand, the process of exploration exposes people to positive and affirming examples of their ethnic culture and heritage which provide them with the cultural capital to evaluate their ethnic identity in positive ways, even in the face of socially ascribed negative stereotypes directed towards their ethnic group. On the other hand, as people develop an achieved identity, they feel a stronger bond and communal orientation to other members of their ethnic group, which may then motivate them to adopt a view for their ethnic identity that stresses the similarities with other ethnic group members, generates harmonious intragroup relations, and ultimately helps in obtaining verifying reflected appraisals. In addition, via the exploration process, people may encounter others who are more supportive of this identity shift and more willing to provide verifying reflected appraisals. Therefore, it is hypothesized:

H1: Ethnic identity achievement is positively related to ethnic identity private regard.

H2: Ethnic identity achievement is positively related to ethnic identity verification.

The Effects of Ethnic Identity Private Regard and Verification on Psychological Health

An identity that is positively evaluated and easier to verify – and thus provides a stable set of identity meanings – should increase resilience against discrimination, and thus increase psychological health. Turning first to the relationship between identity verification and psychological health, scholars in identity theory have examined the cognitive and affective dynamics that tie the meanings of an activated identity to an individual's behavior. Rooted in the verification literature mentioned above as well as perceptual control theory (Powers 1973), identity theory posits that people seek reflected appraisals that are consistent with the meanings they hold for their identities (i.e., identity verification), thus generating stable sets of identity meanings which may aid in the formation of a stable and secure self-concept (Burke and Stets 2009). Of specific importance here is their research on the affective consequences of verification and non-verification.

Identity theory theorizes that emotional health and self-esteem are a direct function of identity verification. Identity verification helps generate a stable set of identity meanings as others provide reflected appraisals that confirm the definition one holds for their ethnic identity, and is thus theorized to lead to positive emotion and heightened self-esteem. However, an inability to verify an identity generates anxiety and negative emotion which motivates people to eliminate the discrepancy between how others view them and the meanings they hold for their identity. If someone persistently fails to obtain identity verification through this control process, their identity meanings may become destabilized and their psychological

health could suffer as a result. These theoretical propositions have been supported

empirically, with identity verification being linked to lower levels of negative

emotions (Burke 2008; Burke and Harrod 2005; Stets and Tsushima 2001; Stets and

Carter 2011; 2012) and higher self esteem (Burke and Stets 1999; Cast and Burke

2002; Stets and Harrod 2004).

With respect to the influence of ethnic identity private regard on

psychological health, given the ascribed nature of ethnicity, one of the consequences

of living in an ethnically heterogeneous society is that one's ethnic identity may be

highly prominent, or an important of their self-concept. Past work suggests this

might be especially true for people who are disproportionately subject to acts of

discrimination. Research examining people belonging to ethnic minority groups has

found that these respondents rank their ethnic identity, in terms of importance, only

behind their gender identity and religious identity (Verkuyten 1988) and are more

likely than respondents belonging to the majority group to report their ethnic

identity as central to their self-concept (Phinney and Alipuira 1990).

Thus, given the importance of one's ethnic identity for many people, they

may often have to evaluate who they are on the basis of the feelings they hold for

their ethnic group. If these evaluations are positive for such a central component of

their self, then this positive evaluation should contribute to an overall positive

evaluation of their global self-concept, and thus to heightened psychological health.

Therefore, it is hypothesized that:

H3: Ethnic identity verification is positively associated with psychological health.

H4: Ethnic identity private regard is positively associated with psychological health.

The theoretical model linking ethnic identity achievement to psychological via the identity change processes is presented visually in Figure 3.1.

Figure 2.1: Theoretical Model for Ethnic Identity Achievement as Identity Change
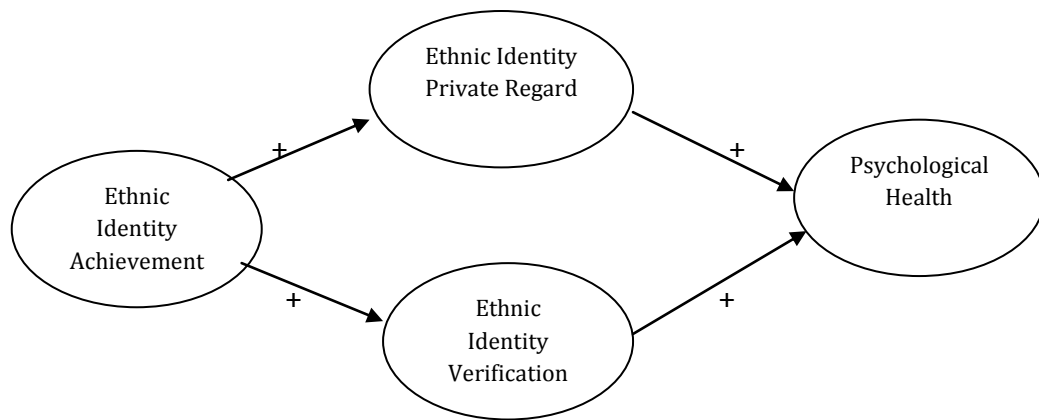
Ethnic Identity Achievement as Navigating Intergroup Relations

The second theoretical process linking ethnic identity achievement to psychological health is the ability to foster positive intergroup relations. Specifically, the process of ethnic identity achievement may generate a better understanding of the larger social context within which ethnic relations occur; in turn, people with an achieved identity may be more likely to appreciate the culture of other ethnic groups and less likely to perceive interactions with other ethnic groups as threatening. In turn, diminished perceptions of threat and positive

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feelings for other ethnic groups should diminish the stress associated with interactions with people of other ethnic groups, and thus improve psychological health. However, to adequately understand this process, it is first necessary to theoretically disentangle prior work that suggests a strong ethnic identity may promote either positive or negative intergroup relations.

On the one hand, as proposed in this research, scholars approaching ethnic identity from a developmental perspective have theorized that people develop an increased understanding of and commitment to their ethnic group – and thus an achieved ethic identity (Phinney 1992) -- by exploring the meaning and social significance of their ethnic group membership. Through this process, one develops a greater awareness of the social context within which ethnic relations occur, and thus more tolerant and positive attitudes towards both their own ethnic group and other ethnic groups (Berry et al. 2006; Phinney, Ferguson and Tate 1997; Phinney, Jacoby, and Silva 2007). On the other hand, scholars studying ethnic identity within a social identity theory framework (SIT; Tajfel and Turner 1986) have theorized that a strong ethnic identity should yield greater intergroup differentiation -- viewing one's own ethnic group as different and more favorable compared to other ethnic groups – thus generating ingroup bias (more favorable evaluations of one's own group compared to other groups), and possibly negative feelings for other ethnic groups.

In order to provide theoretical clarity to these mixed findings, scholars have called for examining how perceptions of threat (e.g., discrimination) may alter how

those with a strong ethnic identity view people belonging to other ethnic groups

(Branscombe, Schmitt and Harvey 1999; Brewer 1999). Related to this suggestion

has been the need to examine the role played by the psychological centrality of one's

ethnic identity (and social identities generally), apart from other dimensions of

ethnic identity, in influencing how ingroup/outgroup attitudes are formed (Leach et

al. 2008). Finally, scholars have questioned the presumption that ingroup bias is

necessarily harmful to intergroup relations by distinguishing between bias that

reflects positive evaluations of both groups -- but a stronger evaluation for one's

own ethnic group -- and bias that reflects a positive evaluation of one's own ethnic

group and a negative evaluation of other ethnic groups (i.e. outgroup derogation)

(Brewer 1999).

In the upcoming sections, I first review the developmental research

examining how ethnic identity influences intergroup relations. Next, I contrast this

with the classical predictions in the social identity theory literature, and how these

two approaches can be theoretically reconciled. Finally, I discuss how positive

intergroup relations (e.g., decreased perceptions of threat from other ethnic groups

and positive feelings for other ethnic groups) can foster improved psychological

health.

Developmental Approaches to Ethnic Identity and Intergroup Relations:

As noted previously, developmental psychologists studying ethnic identity

have conceptualized the development of an ethnic identity as a process through

which individuals gain a greater understanding of what it means to be a member of

their ethnic group (Arce 1981; Cross 1991; Phinney 1989; 1992). This developmental process has been most notably conceptualized as ethnic identity achievement, which derives through the interaction of two processes, exploration and commitment (Phinney 1989; Phinney and Ong 2007). The progression towards ethnic identity achievement is most commonly initiated by a crisis -- which may include people being alerted to the socially ascribed negative evaluations (e.g., negative stereotypes) directed towards their ethnic group – that makes people aware of the personal and social relevance of their ethnic group membership (Arce 1981; Mendelberg 1986; Phinney 1989). As a result, people may begin to explore the broader social meanings, significance and implications for being a member of their ethnic group, and thus develop a more sophisticated understanding of their ethnic identity. From this period of exploration people may then develop a stronger commitment to their ethnic group, thus aiding in a stable, secure and positively defined sense of self (Martinez and Dukes 1997; Phinney and Chavira 1992), marking ethnic identity achievement (Phinney 1992).

Developmental models of ethnic identity also suggest that the stable and secure sense of self marking an achieved ethnic identity can facilitate more tolerant intergroup attitudes (Phinney, Jacoby and Silva 2007). With a developed ethnic identity, people feel more confident entering into relationships with individuals from other ethnic groups, and thus possibly adopting an appreciation for other cultures. While often left implied in some developmental frameworks (Cross 1991;

Phinney, Jacoby, and Silva 2007), other research has explicitly framed ethnic identity development from this intergroup perspective.

For some scholars, ethnic identity development has been conceptualized in terms of the ability to engage in ethnic-perspective taking (Quintana 1994; Quintana, Castaneda-English and Ybarra 1999). Similar to the ethnic identity achievement model, these scholars conceptualize ethnic identity development as a process through which people develop a stronger social understanding of their ethnic group membership. However, this understanding derives from the increased ability to take the perspective of people belonging to their ethnic group; that is, to understand how their behaviors and expectations are shaped by their culture and shared social experiences. As people develop this understanding they begin to see similarities between themselves and other members of their ethnic group, which may then foster increased feelings of shared fate and attachment to other fellow ethnic group members, thus increasing the strength of their ethnic identity. Additionally, as this ability to engage in ethnic-perspective taking further develops, individuals begin to see the common experiences shared not just by members of their own ethnic group, but also how ethnicity frames the actions of and interactions with people of all ethnic groups.

The process of ethnic-perspective taking is analogous to Mead's concept of taking the role of the other (Mead 1934). Much like the above scholars regard ethnic-perspective taking as integral to the development of an ethnic identity, Mead saw taking the role of the other as essential towards the development of the self. For

Mead, people progress from taking the roles of others in a *play stage* where they pretend they are other people. From this stage, people progress to a *game stage* where they take the roles of multiple others engaged in particular activity. Finally, people internalize the norms, attitudes, and expectations of different social groups (and society at large), or the generalized other. By understanding the point of view of others, through this increasing development, it allows people to frame their own expectations and behaviors in ways that foster social cooperation.

Ethnic-perspective taking can be viewed as gradual progression wherein people go from taking the role of a particular generalized other (their own ethnic group) to taking the role of a broader generalized other (all ethnic groups). As this occurs, they people an increased understanding of how social context informs the process by which the ethnic identity for members of *all ethnic groups* informs their behaviors and expectations. Subsequently, people are more likely to develop a greater understanding of intergroup relations that yields the perception of less threatening interactions and a greater appreciation of other ethnic groups' culture and heritage.

In short, as one's ethnic identity develops, people's understanding of ethnicity and intergroup conflict shifts from being literal, concrete, and unchanging, to being informed by the social context shared by members of *their ethnic group*, to finally one informed by the perspectives of *multiple ethnic groups* within the larger social fabric (Quintana 1994). This suggests that people who have an achieved ethnic identity are more likely to engage in ethnic-perspective taking. As a result,

they are more likely to develop a sophisticated understanding and appreciation of both their own ethnic group and other ethnic groups, and a greater flexibility in the how they define their ethnic identity, including the possible adoption of bicultural and multicultural ethnic identities. Empirically, ethnic identity achievement has been associated with both a better ability to engage in ethnic perspective taking and favorable intergroup attitudes (Juang, Nguyen, and Lin 2006; Phinney, Jacoby and Silva 2007; Quintana, Castaneda-English and Ybarra 1999).

Work in the acculturation psychology literature has also explored this relationship adopting a multicultural perspective (Berry et al. 2006). Focusing specifically on immigrant populations, Berry (1997) has argued that the acculturation strategy – integration -- in which individuals maintain their own cultural heritage and are actively involved in the dominant culture is more likely to produce healthier psychological outcomes. Empirical work has shown that this acculturation strategy is also more likely to produce positive and tolerant intergroup attitudes (Berry, Kalin and Taylor 1977; Zagefka and Brown 2002).

Social Identity Theory and Intergroup Relations: Standing in apparent contrast to the developmental perspective is the research put forth by social identity theory (SIT). The theoretical framework of SIT has been used to understand the motivations for why people identify with social groups (e.g., ethnic, religious, national), and the consequences of this identification for intergroup relations. Identifying with social groups provides an avenue for people to enhance their sense of worth, an avenue which may often result in the expression of differentially

stronger positive evaluations of ingroup members (ingroup bias) and sometimes

provide a platform for derogating people who fall outside of one's group (outgroup

derogation) (Tajfel and Turner 1986). When individuals identify with a particular

social group, through the *metacontrast principle*, they will accentuate the similarities

of members *within* the ingroup and outgroup, while accentuating the differences

between members of the ingroup and outgroup. Implied in this process is that

people experience depersonalization, seeing members of their group (ingroup) and

other groups (outgroup) less in terms of their personal idiosyncratic features

(personal identity) and more in terms of the features typical of their group (group

prototype) (Turner et al. 1987).

Once categorized by these group distinctions, in order to enhance their self-

esteem and protect their ingroup identity, people may begin to display preference

for ingroup members over outgroup members, expressing ingroup bias and possibly

the derogation of outgroup members through acts of discrimination and outgroup

hostility. The implications for ethnic identity are clear. For those with a strong

ethnic identity, SIT would predict greater levels of ingroup bias directed against

members of other ethnic groups; a prediction which stands in apparent contrast to

the theory and research in the developmental literature discussed previously.

In order to provide theoretical clarity to these contrary predictions, scholars

have called attention to three particular issues: the conflation of ingroup bias with

outgroup derogation, the importance of perceived threat in fostering ingroup bias

and outgroup derogation, and assessing how the social identity dimension of

psychological centrality may influence ingroup/outgroup attitudes differently than other social identity dimensions.

Researchers have drawn a distinction between ingroup bias and outgroup derogation (Brewer 1979; 1999; Cameron et al. 2001; Hinkle and Brown 1990; Phinney, Ferguson and Tate 1997). Ingroup bias is *any* differential evaluation that favors one's ingroup over an outgroup. For instance, this may occur if someone thinks favorably of all ethnic groups, but holds a slightly more favorable attitude towards their own ethnic group. Outgroup derogation, however, is a form of ingroup bias that explicitly involves the expression of hostility and negativity towards the outgroup. Whereas high ingroup identification might be sufficient for people to make evaluations that favor ingroup members, it is not sufficient for people to exhibit hostility towards outgroup members (outgroup derogation) (Brewer 1979).

While people may exhibit an ingroup bias, it may be tempered (or eliminated) if it has negative consequences for the outgroup. For instance, one study found that when asked to allocate a negative resource (listening to an unpleasant sound), ingroup members showed no bias, sharing the unpleasant sound equally with the outgroup (Mummenday et. al. 1992). While ingroup bias appears to be a largely automatic consequence of ingroup identification, when ingroup members are forced to express this bias in terms of hurting members of the outgroup, they usually appear to not do so (Brewer 1979).

Brewer (1999) has theorized that while ingroup bias will not usually generate outgroup derogation, certain conditions may foster hatred of the outgroup

-- notable among these conditions is perceived threat. Threatening actions by an outgroup may justify feelings of hatred by ingroup members, thus leading to outgroup derogation (Branscombe et. al. 1999; Branscombe, Schmitt and Harvey 1999). Past work supporting this theoretical position has found that ingroup identification is associated with outgroup derogation, but only when the outgroup is viewed as threatening (Gallagher and Cairns 2011; Jackson 2002; Verkuyten 2007).

Perhaps more intriguing, another line of research has found that high ingroup identification is itself associated with greater perceptions of threat (Branscombe, Schmitt and Harvey 1999; Cameron 2001; Falomir-Pichastor and Frederic 2013) and outgroup derogation (Lyons, Kenworthy and Popan 2010), suggesting that merely identifying with a group alerts individuals to group-relevant threatening stimuli, which they would not have otherwise been conscious of. However, given that increases in perceived threat and outgroup derogation are the exception and not the rule for high ingroup idenitifiers (Brewer 1979), this relationship also appears to be conditional. This has led some scholars to examine how the core predictions of social identity theory might vary when the effects of psychological centrality are appraised separately from other dimensions of social identities.

Similar to the review of ethnic identity dimensions covered in chapter one, there has been discussion over the different components of social identities and some differences in terminology (see Ashmore, Deaux, and McLaughlin-Volpe 2004). However, most of the multidimensional conceptualizations in the social identity

theory literature, consistent with the original formulations of SIT (Tajfel 1981),

converge on three distinct dimensions: a cognitive dimension, an affective

dimension, and an evaluative dimension, (Cameron 2004; Ellemers, Kortekaas, and

Ouwerkirk 1999; Jackson 2002; Leach et al. 2008). Cameron (2004) refers to the

affective dimension as centrality (or the importance of the identity in one's self-

concept), the evaluative dimension as ingroup affect (or the positive feelings

derived from one's group membership) and the affective dimension as ingroup ties

(or the perceived bonds one shares with other members of the social group).

While work examining how these dimensions differentially influence ingroup

bias and outgroup derogation is relatively new, some research has shown that the

centrality of a social identity (net of the other dimensions) is associated with greater

levels of perceived threat (Cameron 2001) and outgroup derogation (Obst et. al.

2011). This has led scholars to theorize that high levels of centrality, apart from the

influence of ingroup ties and ingroup affect, may make people more sensitive to

intergroup experiences and thus more attentive to potentially threatening cues that

are relevant to their social group (Leach et al. 2008).

A Theoretical Framework for Assessing the Relationship between Ethnic

Identity and Intergroup Relations: This research examines the relationship between

ethnic identity and ingroup/outgroup attitudes by integrating the three theoretical

insights discussed above. Perceived threat is included as a mediator between ethnic

identity and outgroup attitudes to assess the extent to which a strong ethnic identity

increases the cognitive awareness of threatening stimuli to one's ethnic group, and

thus indirectly influences outgroup attitudes. In addition, ethnic identity is measured along two dimensions -- centrality and achievement – to distinguish between its potentially positive or negative impact on intergroup relations which is discussed below.

Ethnic identity achievement is a developmental process whereby people gain a greater understanding of and commitment to their ethnic group by exploring the meaning and social significance of their ethnic group membership. Past research shows that this developmental process helps generate a secure, stable, and positively-defined self-concept (Martinez and Dukes 1997; Phinney and Chavira 1992) that aids in the positive evaluation one's ethnic group (Phinney, Ferguson, Tate 1997). In addition, an achieved ethnic identity provides the confidence and flexibility in one's self-concept to interact with members of other ethnic groups, a more sophisticated understanding of intergroup relations that minimizes the likelihood of perceiving interethnic relations as threatening, and thus a greater likelihood of developing an appreciation and understanding for the cultural heritage and values of other ethnic groups. This finding has been supported empirically in both the developmental and acculturation psychology literature, with past work finding an achieved and secure ethnic identity to be positively associated with ethnic perspective taking (Quintana, Castaneda-English and Ybarra 1999), openness to other cultures (Berry, Kaylin and Taylor 1977; Zagefka and Brown 2002), and positive outgroup attitudes (Phinney, Jacoby, and Silva 2007). Therefore it is hypothesized:

H5: Ethnic identity achievement is positively associated with positive outgroup attitudes.

H6: Ethnic identity achievement is inversely associated with perceptions of threat from other ethnic groups.

Ethnic identity centrality is the importance of one's ethnic identity in a person's self-concept. Whereas ethnic identity achievement is a developmental process that fosters a secure and stable self-concept, ethnic identity centrality represents a cognitive awareness of one's ethnicity when interacting with others. Those with a highly central ethnic identity may be more likely to perceive and interpret interactions with others directly in terms of their ethnicity, thus being more sensitive to intergroup encounters (Leach et al. 2008). When these interactions are negative, people with a highly central ethnic identity may be more likely to interpret the interaction as an attack on their ethnic group, and thus develop negative attitudes towards other ethnic groups. In addition, consistent with the SIT framework, those with a central ethnic identity should be more likely to positively evaluate their own ethnic group to maximize their own self-esteem. Therefore it is hypothesized:

H7: Ethnic identity centrality is positively associated with ethnic identity private regard.

H8: Ethnic identity centrality is positively associated with perceived threat.

H9: Perceived threat is inversely associated with positive outgroup attitudes.

The Effects of Perceived Threat and Positive Outgroup Attitudes on Psychological Health

With the decreased perceptions of threat and positive feelings for other ethnic groups that accompany the development of an achieved ethnic identity, ethnic identity achievement may then foster improved psychological health in two additional ways. First, an achieved ethnic identity may foster improved psychological health by reducing the central risk factor (perceived threat) associated with one's ethnic identity, a risk factor that threatens the positive evaluation of one's self-concept and has been consistently shown to negatively impact psychological health (Branscombe, Schmitt and Harvey 1999; Kulis, Marsiglia, and Nieri 2009; Romero and Roberts 2003; Smith and Silva 2011).

Second, ethnic identity achievement may help facilitate improved psychological health by fostering more positive attitudes for other ethnic groups, When people face discrimination from other ethnic groups, those who hold positive attitudes towards other ethnic groups may experience a unique form of resiliency. When viewing other ethnic groups more favorably, people may be more likely to discount the threatening interaction by attributing the threat to the individual source of the discrimination instead of that source's whole ethnic group. By discounting the source of the threatening interaction, in this way, a person is less likely to internalize the negative evaluation. For instance, if a Latino who holds generally favorable attitudes towards Asians encountered an Asian person who said something insulting of his Latino heritage, he may be more likely attribute the insult

to the Asian person being racist and not to Asians in general being racist. This would

delegitimize the insult, and thus he would be less likely to internalize the threat and

have it adversely affect his psychological health.

In short, ethnic identity achievement can be understood as a process which

helps people develop healthy relations with other ethnic groups by framing these

interactions within a broader social context that facilitates decreased perceptions of

threat as well as positive feelings for other ethnic groups. As a result, the decreased

perceptions of threat and more positive feelings for other ethnic groups should

operate to improve one's psychological health. Therefore:

H10: Perceptions of threat are inversely associated with psychological health.

H11: Positive outgroup attitudes are positively associated with psychological

health.

The full model linking ethnic identity achievement to improved psychological

health by fostering positive relations with other ethnic groups is displayed in Figure

3.2.

Drawing off the conceptual framing for ethnic identity suggested in the

previous chapter (ethnic identity as the process of ethnic identity achievement), this

chapter proposed two theoretical processes that link the developmental process of

ethnic identity achievement to psychological health. Ethnic identity achievement

was first conceptualized as a process of identity change in which people evaluate

their ethnic identity more positively and are better able to obtain identity

verification – thus contributing to a positively defined and stable self-concept.

Figure 2.2: Ethnic Identity Achievement as Promoting Positive Intergroup Relations
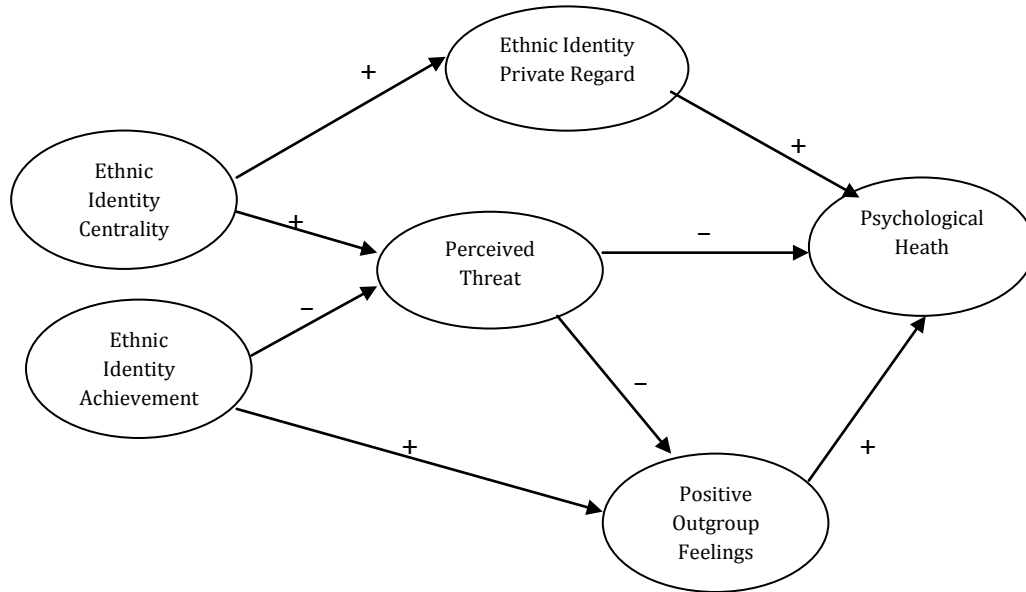
Ethnic identity achievement was also conceptualized as a process that fosters positive relations with other ethnic groups. By reducing perceptions of threat and developing more positive attitudes towards other ethnic groups, ethnic identity was theorized to promote psychological health. The full conceptual model is illustrated in Figure 3.3.

Risk and Resiliency Model: Compensatory vs. Protective Benefit

Analytically, the full conceptual model displayed in Figure 3.3 outlines four causal mechanisms argued to mediate the relationship between ethnic identity achievement and psychological health: decreased perceptions of threat, increased private regard, increased positive outgroup feelings, and increased identity verification. This logic is consistent with the compensatory model that assumes the resiliency displayed by the latter three mechanisms is compensatory. That is, they

increase psychological health and essentially "balance out" or compensate for the detrimental impact of perceived threat. Analytically, this model tests for the direct effects of these three beneficial mechanisms independent of the detrimental effect played by perceived threat.

It is also possible that these mechanisms could have a protective function. That is, private regard, positive feelings for other groups, and identity verification could reduce or nullify the impact of perceived threat on psychological health. Analytically, this model assumes that the three beneficial mechanisms moderate and reduce the harmful effect of perceived threat on psychological health. This study tests for both possibilities.

Figure 2.3: Full Conceptual Model
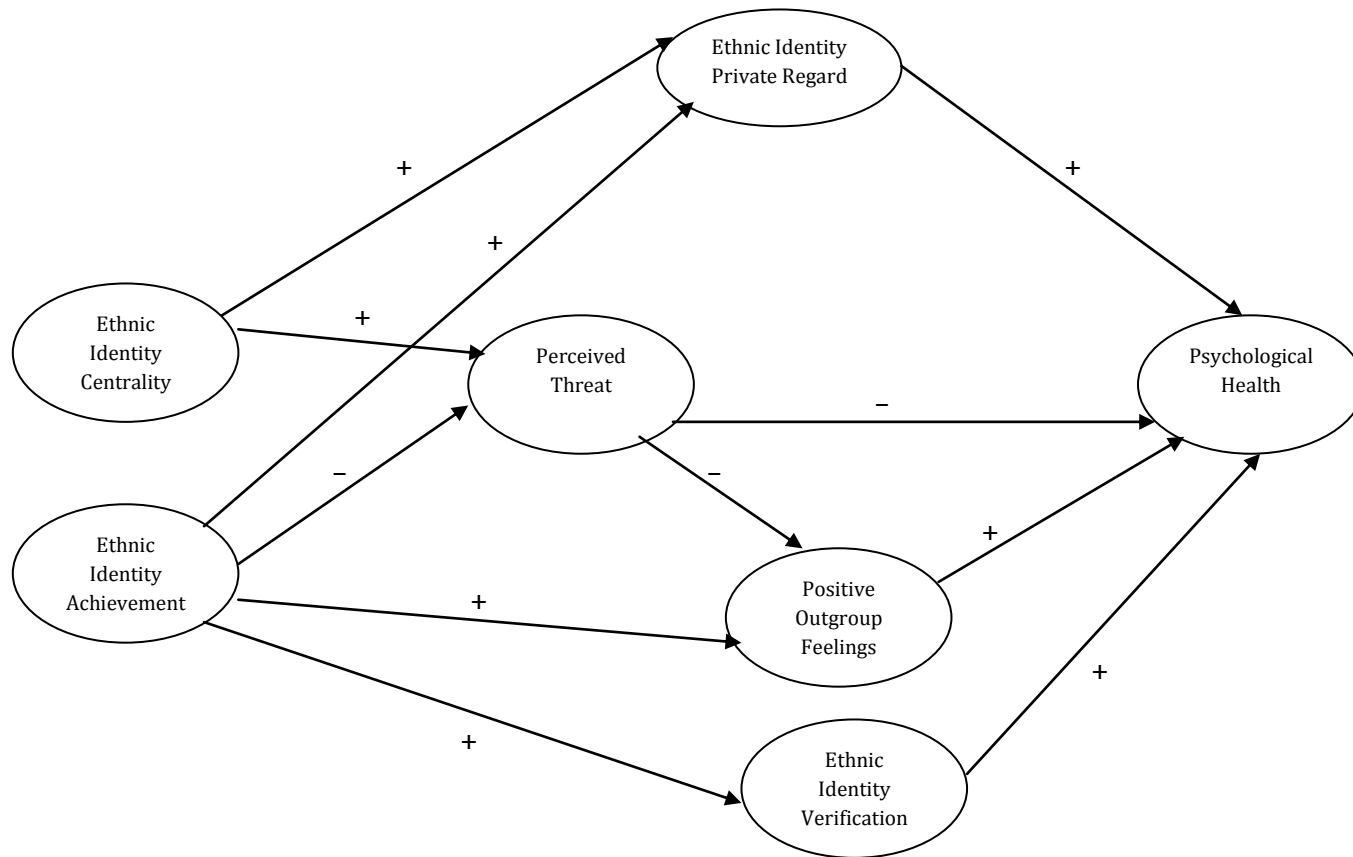
Chapter Four: Research Design, Sample, Measures, and Bivariate Correlations

Research Design

This research used survey data drawn from a cross-sectional study measuring ethnic identity dynamics within an ethnically diverse population of college students. Past work examining ethnic identity achievement, and the consequences of ethnic identity achievement, has overwhelmingly focused on adolescent populations. Implied in this work is that the achievement process is completed by the time one enters adulthood. However, recent work in the *emerging adulthood* literature (Arnett 2006) has begun to question this assumption, and examine different ways that one's ethnic identity may continue to develop into adulthood (Phinney 2006; Syed and Amitzia 2008). This study helps further this understanding by examining how ethnic identity development influences the psychological health of this population.

The survey respondents were undergraduate students at a large southwestern public university. The university enrolls about 20,000 students with an approximate ethnic breakdown of 40% Asian/Asian American, 29% Latino, 17% non-Latino White, 8% African American, and 6% other ethnicity or race. The survey data were collected in the Fall of 2012.

Participants were recruited from three sociology courses and one interdisciplinary honors course, requesting their participation in the study. Two of the courses were lower division (enrolling mostly freshman and sophomores), while the other two courses were upper division (enrolling mostly juniors and seniors). In

three of the classes, respondents received course extra credit for their participation. In the fourth class, respondents had the opportunity to enter a raffle to win one of two fifty dollar gift cards. The students were also offered an alternative assignment for those who did not want to participate but wished to receive the course extra credit or be entered into the raffle. Of the 652 total students enrolled in the four classes, 67% participated in the survey. The survey was administered online and took approximately twenty minutes to complete.

Sample

Four-hundred and thirty-eight students completed the survey. Of these, eleven were excluded from the analysis because they did not provide complete data; thus the final sample consisted of 427 respondents. The demographic characteristics of the sample are listed in table 3.1. Drawn from forced-choice self-reports of the racial/ethnic self label, the ethnic breakdown of the sample was 6% African American, 25% Asian/Pacific Islander, 44% Latino, 16% Non-Latino White, and 6% belonging to another race/ethnicity. Seventy-four percent of the respondents were female and 26% were male, with a mean age of 20.70 (SD=2.18). Eighty-eight percent of the respondents were born in the United States and 12% were born outside the United States. Finally, based on ordinal measures of parental income and parental education, the median parental income of the respondents was $45,000, while the median level of parental education was some college.

Table 3.1: Demographic Characteristics of Sample (N = 427)		
	N	%
Ethnicity		
African American	25	6%
Asian/Pacific Islander	108	25%
Latino	187	44%
Non-Latino White	69	16%
Other	38	9%
Gender		
Male	112	26%
Female	315	74%
Nativity Status		
Born in the United States	377	88%
Born outside the United States	50	12%
Parents' Education		
Less than High School	104	25%
High School	73	17%
Some College	125	30%
Bachelor's Degree	73	17%
Some Graduate School/Graduate Degree	48	11%
Parents' Income		
Less than $30, 000	118	26%
$30, 001 - $60, 000	133	32%
$60, 001 – $90, 000	86	20%
$90, 001 - $120, 000	46	11%
Greater than $120, 000	43	10%
Age		
18	20	5%
19	128	30%
20	80	19%
21	99	23%
22	47	11%
23+	53	12%

Measurement of Study Variables

This section describes how the study variables were measured and any

factor analyses used to justify the measurement strategy. Following each discussion,

a bivariate analysis was conducted to examine the associations with each of the

demographic variables in Table 3.1. F-tests were reported to examine ethnic

variation in each of the study variables, while t-tests were used to assess gender

differences and nativity status differences in each of the study variables. Finally, a

Pearson's R correlation was used to assess the association between age, parents'

education, and parents' income with each of the study variables.

Turning first to the ethnic identity constructs, the study utilized four

measures of ethnic identity: ethnic identity achievement, ethnic identity centrality,

ethnic identity private regard, and ethnic identity verification. Because the test of

the hypotheses utilized structural equation modeling, achievement was measured as

a latent construct. Private regard and verification were measured as observed

variables since they were used to construct interaction terms with perceived threat.

Finally, centrality was also measured as an observed variable. Preliminary analyses

revealed that measuring centrality as a latent construct prevented the model from

converging in the structural equation modeling analysis, thus warranting its

measurement as an observed variable.

Ethnic identity Achievement: Two three-item scales corresponding to the

dimensions of commitment and exploration were used as indicators for the latent

construct of ethnic identity achievement (Appendix A). The items are drawn from

the Multigroup Ethnic Identity Measure – Revised which has been used and

validated in past work to assess ethnic identity achievement (MEIM-R; Phinney and

Ong 2007). The three items measuring commitment reflect the degree of attachment

and belonging one feels towards her ethnic group (e.g., "I feel a strong sense of

belonging to my ethnic group"). The three items measuring exploration reflect the

degree to which one works to learn more about her ethnic group (e.g., "I have often

done things that will help me better understand my ethnic background"). The items

have five ordinally ranked response options ranging from zero to four: strongly

disagree (0), disagree (1), neither agree nor disagree (2), agree (3), strongly agree

(4).

Table 3.2: Bivariate Analyses of Achievement with Demographic Variables (N = 427)

	Mean	SD	Pearson's *r*
Ethnicity			
African American	2.85	.68	
Asian/Asian American	2.51	.71	
Latino	2.62	.81	
Non-Latino White	2.10	.94	
Other	2.74	.72	
Gender			
Male	2.39	.83	
Female	2.58	.82	
Nativity Status			
Born in the United States	2.50	.84	
Born outside the United States	2.67	.74	
Age			-.04
Parents' Education			-.05
Parents' Income			-.03

Responses were averaged to create an index ranging from zero to four with higher

scores indicating greater commitment to one's ethnic group (Mean = 2.62, SD = .96)

(α=.89) and greater exploration of one's ethnic background (Mean = 2.42, SD = .93)

(α=.88).

The two dimensions were combined into one additive measure in order to

conduct bivariate analyses with the demographic variables (Mean = 2.52, SD = .83)

(α = .89). The results are listed in table 3.2. Levels of ethnic identity achievement were found to significantly differ by ethnic group (F = 9.58, p < .001), with most of the difference reflected in non-Latino Whites having lower levels of achievement than the other ethnic groups. There were also differences between men and women's levels of achievement, with women being significantly higher (t = 1.98. p < .05). Finally, there were no differences in levels of achievement by nativity status, nor were there significant correlations of achievement with age, parental education, or parental income.

Ethnic Identity Private Regard: Private regard was measured with a two-item index created for this study (Appendix A). Each item asked the respondents how strongly they agree in having pride in two aspects of her ethnic identity: heritage and values. The first item stated the respondent is proud of his/her ethnic heritage. The second item stated the respondent has pride in the values of his/her ethnic group. Each item had five ordinally ranked response options which were coded from zero to four -- strongly disagree (0), disagree (1), neither agree nor disagree (2), agree (3), strongly agree (4) – with a higher score indicating stronger levels of private regard (α = .90). Respondents reported high mean levels of private regard (Mean = 3.12, SD = .82).

Turning to the bivariate analysis of private regard with the demographic variables (Table 3.3), levels of ethnic identity private regard significantly differed by ethnic group (F = 9.76, p < .001), with most of the difference reflecting lower scores for non-Latino Whites compared to other ethnic groups. There were also

differences between men and women's levels of private regard, with women being

significantly higher (t = 3.43, $p < .01$). There were no differences in levels of private

regard by nativity status, nor were there significant correlations of private regard

with age or parental income. However, there was a significant association between

private regard and parental education ($r = -.11$, $p < .05$), with higher levels of

parental education leading to lower private regard.

Table 3.3: Bivariate Analyses of Private Regard with Demographic Variables (N = 427)

	Mean	SD	Pearson's *r*
Ethnicity			
African American	3.34	.69	
Asian/Asian American	3.12	.73	
Latino	3.27	.79	
Non-Latino White	2.60	.79	
Other	3.25	1.00	
Gender			
Male	2.90	.87	
Female	3.20	.79	
Nativity Status			
Born in the United States	3.10	.83	
Born outside the United States	3.28	.74	
Age			.01
Parents' Education			-.11*
Parents' Income			-.04

    * $p < .05$

Ethnic Identity Verification: Identity theory has traditionally measured

verification as the inverse of identity discrepancy. In turn, identity discrepancy has

been measured as the squared difference between the identity-relevant meanings

present in the reflected appraisals of others and those present in one's identity

standard. Recent mixed-methods research examining the ethnic identity (Burke,

Cerven, and Harrod 2009) used focus groups to discern common meanings present

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in one's ethnic identity. The researchers found that, unlike other identities traditionally studied by identity theory, the respondents did not define their ethnic identities with directly cognitive meanings (e.g., assertive, intelligent, ambitious). Rather, they defined their ethnic identities in terms of those behavioral practices that reaffirmed what it meant to be a member of their ethnic group.

They conducted exploratory factor analysis on fourteen behavioral practices mentioned by the focus group participants and discovered two dimensions of ethnic practices: heritage and personal. The heritage dimension corresponds to those practices that reaffirm the traditions and collective culture of the ethnic group (e.g., "holding on to my ethnic beliefs and attitudes"). The personal dimension corresponds to those practices that reaffirm an individual's personal ties with others to their ethnic group (e.g., "having friends with the same ethnic background"). Because these meanings are more behavioral than cognitive, a traditional measure of discrepancy was not possible. As such, their study used an alternative measure of identity verification which directly asked the respondents the degree of difficulty they had engaging in a given practice.

Drawing on this past research, a fourteen item scale measuring the degree of difficulty the respondent has in verifying her ethnic identity was used to measure identity verification (Burke, Cerven, and Harrod 2009) (Appendix A). The items list ethnic practices and ask the respondent the degree of difficulty they have engaging in each practice when they want to. The lack of difficulty felt by individuals reflects the ability to receive social support for engaging in these ethnic practices, or

alternatively, the ability to receive reflected appraisals that verify their ethnic identity. Seven items measured the personal dimension and seven items measured the heritage dimension. Each item had five ordinally ranked response options which were coded from zero to four: a great deal of difficulty (0), quite a bit of difficulty (1), some difficulty (2), not much difficulty (3), and no difficulty at all (4). Responses for the items were averaged together with higher scores reflecting less difficulty in verifying the heritage and personal dimensions of one's ethnic identity (α = .92). The mean for identity verification (Mean = 2.99, SD = .75) was moderate to high, indicating that the respondents generally had little difficulty verifying their ethnic identity.

Although the measure of ethnic identity verification was a single observed variable in the multivariate analysis, an exploratory factor analysis was carried out with promax rotation on the fourteen items in the scale to assess the discriminant and convergent validity of its two dimensions: heritage and personal. Promax rotation is a specific type of oblique rotation that linearly transforms the initial factor solution with the assumption that the factors are correlated with each other (Hatcher 1994). This provides a "simple structure" where the items load highest on one factor and lower on the others. The results are listed in table 3.4. The initial factor solution produced two eigenvalues over one, indicating the presence of two factors. The rotated factor solution revealed that the personal items loaded highly on the first factor and the heritage items loaded highly on the second factor. Furthermore, there were no significant cross-loadings for any of the items across

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the two factors. Taken in concert, these findings support that the heritage and

personal dimensions make up the underlying construct of ethnic identity

verification.

Table 3.4: Exploratory Factor Analysis of Ethnic Identity Verification Items

	Personal	Heritage
Items	Factor Loading	
Having friends with the same ethnic background	**.57**	.14
Looking like my ethnicity	**.63**	-.03
Listening to music associated with my ethnicity	**.69**	.05
Being in my ethnic community	**.76**	.07
Dating within my ethnic community	**.65**	.00
Wearing clothing styles associated with my ethnicity	**.82**	-.10
Maintaining an ethnic home	**.54**	.32
Eating foods associated with my ethnicity	-.08	**.66**
Engaging in ethnic traditions	-.02	**.80**
Speaking the language associated with my ethnicity	.07	**.54**
Sharing my ethnic heritage with my family	-.05	**.76**
Holding on to my ethnic beliefs and attitudes	.17	**.57**
Observing the religious traditions associated with my ethnicity	.14	**.47**
Participating in ethnic holidays/festivals	.19	**.61**
Eigenvalue	5.73	1.08
Alpha	.87	.84

Turning to the bivariate analyses of identity verification with the

demographic variables (Table 3.5), levels of ethnic identity verification were found

to significantly differ by ethnic group (F = 6.93, $p < .001$), with most of the difference

attributable to the mean scores of Asian/Pacific Islanders and the those belonging to

the other category being lower than African Americans, Latinos, and non-Latino

Whites. There were no significant differences between men and women's levels of

verification. Finally, there were no differences in levels of verification by nativity

status, nor were there significant correlations of verification with age, parental

education, or parental income.

Table 3.5: Bivariate Analyses of Verification with Demographic Variables (N = 427)

	Mean	SD	Pearson's *r*
Ethnicity			
African American	3.26	.97	
Asian/Asian American	2.76	.64	
Latino	3.10	.65	
Non-Latino White	3.13	.85	
Other	2.69	.88	
Gender			
Male	2.94	.81	
Female	3.01	.72	
Nativity Status			
Born in the United States	2.98	.83	
Born outside the United States	3.12	.59	
Age			.01
Parents' Education			.08
Parents' Income			-.01

Ethnic Identity Centrality: The measure for ethnic identity centrality is drawn

from past work in identity theory examining the ethnic identity (Burke, Cerven, and

Harrod, 2009). The respondents were asked to rate how important it is to them to

engage in each of the fourteen ethnic practices, listed in the previous verification

measure, corresponding to the heritage and personal dimensions (Appendix A). The

response options ranged from not important (0), a little important (1), somewhat

important (2), very important (3), extremely important (4). The responses to the

fourteen items were averaged creating a scale from 0 to 4, with a higher score

reflecting greater ethnic identity centrality (α = .92). The respondents reported

moderate levels of centrality (Mean = 1.85, SD = .88).

Although the measure of ethnic identity centrality was a single observed variable in the multivariate analysis, an exploratory factor analysis was carried out with promax rotation on the fourteen items in the scale to assess the discriminant and convergent validity of its two dimensions: heritage and personal. The results are listed in table 3.6. The initial factor solution produced two eigenvalues over one, indicating the presence of two factors. The rotated factor solution revealed that the heritage items loaded highly on the first factor and the personal items loaded highly on the second factor. Furthermore, there were no significant cross-loadings for any of the items across the two factors. Taken in concert, these findings support that the heritage and personal dimensions make up the underlying construct of ethnic identity centrality.

Table 3.6: Exploratory Factor Analysis of Ethnic Identity Centrality Items

	Heritage	Personal
Items	Factor Loading	
Eating foods associated with my ethnicity	**.71**	-.02
Engaging in ethnic traditions	**.84**	.03
Speaking the language associated with my ethnicity	**.62**	.04
Sharing my ethnic heritage with my family	**.92**	-.08
Holding on to my ethnic beliefs and attitudes	**.84**	-.02
Observing the religious traditions associated with my ethnicity	**.56**	.13
Participating in ethnic holidays/festivals	**.76**	.04
Having friends with the same ethnic background	.22	**.61**
Looking like my ethnicity	-.01	**.83**
Listening to music associated with my ethnicity	.13	**.70**
Being in my ethnic community	.17	**.71**
Dating within my ethnic community	-.07	**.80**
Wearing clothing styles associated with my ethnicity	-.22	**.92**
Maintaining an ethnic home	.28	**.54**
Eigenvalue	6.76	1.65
Alpha	.90	.91

Turning to the bivariate analysis of centrality with the demographic variables (Table 3.7), levels of ethnic identity centrality significantly differed by ethnic group (F = 15.49, p < .001), with most of the difference reflecting lower scores for non-Latino Whites compared to other ethnic groups. There were also differences between men and women's levels of centrality, with women being significantly higher (t = 2.20, p < .05). Additionally, there were differences in levels of centrality by nativity status (t = 3.30, p < .01), with those born in the United States having a less prominent ethnic identity.

Table 3.7: Bivariate Analyses of Centrality with Demographic Variables (N = 427)

	Mean	SD	Pearson's r
Ethnicity			
African American	2.11	.89	
Asian/Asian American	1.96	.77	
Latino	1.97	.85	
Non-Latino White	1.14	.81	
Other	2.08	.91	
Gender			
Male	1.69	.93	
Female	1.91	.86	
Nativity Status			
Born in the United States	1.88	.88	
Born outside the United States	2.20	.87	
Age			-.10*
Parents' Education			-.12*
Parents' Income			-.07

* p < .05

Finally, higher levels of age (r = -.10, p < .05) and parental education (r = -.12, p < .05) were associated with lower levels of centrality. However, there was no relationship between centrality and parental income.

Prior to treating the ethnic identity constructs as separate from one another in the multivariate analysis, it was first necessary to establish that they are indeed conceptually distinct. An exploratory factor analysis was carried out to assess both their convergent and discriminant validity. Each ethnic identity construct was subdivided into its theoretical dimensions. These included the two scales for achievement (commitment and exploration), the two scales for centrality (heritage and personal), the two scales for verification (heritage and personal), and the two items for private regard (heritage and values). These eight measures were factor analyzed with promax rotation. The initial factor solution only identified two factors with Eigenvalues (amount of variance explained) over the Kaiser (1960) criterion of one. However, after the items were rotated, four factors were identified with variances greater than one. The results are listed in table 3.8.

The loadings for the private regard items on the corresponding factor were .87 and .91. The loadings for the centrality items on the corresponding factor were .57 and .72. The loadings for the achievement items on the corresponding factor were .40 and .51. The loadings for the verification items on the corresponding factor were .72 and .75. Finally, there were no significant crossloadings of any of the items across non-corresponding factors. These results collectively support the assertion that these eight observed variables uniquely correspond to four distinct ethnic identity constructs.

Table 3.8: Exploratory Factor Analysis of Ethnic Identity Constructs

	Private Regard	Centrality	Achievement	Verification
Observed Variable	Factor Loading			
Achievement (Commitment)	.24	.17	**.40**	-.14
Achievement (Exploration)	-.02	.12	**.51**	.10
Centrality (Heritage)	.26	**.57**	.11	.01
Centrality (Personal)	.07	**.72**	-.05	.00
Private Regard (Heritage)	**.87**	-.06	.10	.02
Private Regard (Values)	**.91**	.08	-.13	.01
Verification (Heritage)	-.11	.02	.02	**.72**
Verification (Personal)	.11	-.01	.01	**.75**
Variance (Proportion)	3.06 (.71)	2.66 (.61)	2.57 (.59)	1.34 (.31)
Alpha	.90	.74	.64	.76

Positive Outgroup Attitudes Positive outgroup attitudes were measured as an observed variable since it was used in an interaction term with perceived threat in the structural equation modeling analysis. A two-item scale created for this study was used to measure positive feelings for other ethnic groups (Appendix A). Each item asked the respondent how positive she feels about two aspects of other ethnic groups: heritage and values. The first item stated the respondent has positive feelings about the ethnic heritage of other ethnic groups. The second item stated the respondent has positive feelings about the values of other ethnic groups. Each item had five ordinally ranked response options which were coded from zero to four -- strongly disagree (0), disagree (1), neither agree nor disagree (2), agree (3), strongly agree (4) – with a higher score indicating stronger levels of positive outgroup attitudes (α = .92). Respondents reported high mean levels of positive outgroup attitudes (Mean = 3.04, SD = .72).

Turning to the bivariate analysis of positive outgroup attitudes with the demographic variables (table 3.9), levels of positive outgroup attitudes did not differ by ethnic group. There were differences between men and women's levels of positive outgroup feelings, with women being significantly higher (t = 2.20, *p* < .05). There were no differences in levels of positive outgroup attitudes by nativity status, nor were there significant correlations of positive outgroup attitudes with age, parental education or parental income.

Table 3.9: Bivariate Analyses of Positive Outgroup Attitudes with Demographic Variables (N = 427)

	Mean	SD	Pearson's *r*
Ethnicity			
African American	3.04	.69	
Asian/Asian American	3.00	.74	
Latino	3.13	.70	
Non-Latino White	2.84	.67	
Other	3.11	.83	
Gender			
Male	2.92	.82	
Female	3.09	.68	
Nativity Status			
Born in the United States	3.04	.71	
Born outside the United States	3.05	.82	
Age			-.01
Parents' Education			-.01
Parents' Income			.00

Perceived Threat: Perceived threat was measured as the willingness to make an attribution of prejudice in a given situation and is drawn from past research (Branscombe, Schmitt, and Harvey 1999). The respondents were provided with ten vignettes involving interactions with other people that resulted in the subject of the vignette receiving a negative outcome. The respondents were then asked to imagine

themselves in that situation, and to then list the likelihood that the negative outcome to which they were subjected was attributable to ethnic/racial discrimination. They were given four options -- not due to discrimination (0), possibly due to discrimination (1), probably due to discrimination (2), definitely due to discrimination (3) – with a higher score indicating a greater likelihood of making an attribution of prejudice.

In order to maximize variation, the vignettes were phrased to be attributionally ambiguous, but to still be easily interpretable in terms of ethnic/racial prejudice. For example, one of the vignettes described the following scenario: "*Suppose you park your car at a parking meter and it has just expired. You arrive back at the car just as an officer is writing up a ticket. You try to persuade the officer not to give you the ticket. The officer gives you the ticket anyways.*" While the possibility of prejudice is quite real, one can think of other reasons why the officer might elect to make such a judgment (e.g., the officer is in a bad mood, the officer does not believe in grace periods, the officer has a quota to fill).

An exploratory factor analysis was run on the responses to the ten vignettes. The results are listed in Table 3.8. The results yielded one Eigenvalue over one, indicating the presence of one factor. An examination of the initial loadings – first column -- revealed only one item below .40, a commonly cited minimal threshold for factor loadings in exploratory factor analysis (Stevens 1992).

Table 3.10: Exploratory Factor Analysis of Perceived Threat Items

	Threat	Threat
Item	Factor Loading	
Fancy Restaurant	.59	.54
Apply for a Job	.59	.58
Buy a House	.35	-
Parking Ticket	.50	.51
Rent an Apartment	.67	.56
Apply for a Loan	.52	.62
Ask out on a Date	.46	.47
Speeding Ticket	.62	.63
Join a Social Organization	.60	.64
Bad Evaluation from Boss	.66	.55
Eigenvalue	3.13	3.00
Alpha Reliability	.81	.82

This vignette addressed the respondent looking to buy a house, and the real estate agent only showing her houses in neighborhoods populated by her ethnic group. It is possible this item did not load well because most of the study population is too young to have experienced this personally, and thus they might have had different impressions of the likelihood of discrimination in that scenario. Given this and the low loading, the item was dropped and the remaining nine items were analyzed again. This factor solution produced nine items with factor loadings ranging from .47 - .64. These nine items were averaged into a scale with a range of zero to three, with a higher score indicating a greater level of perceived threat (α = .82). The respondents reported low levels of perceived threat (Mean = .70, SD = .49).

Turning to the bivariate analysis of perceived threat with the demographic variables (Table 3.11), levels of perceived threat did differ significantly by ethnic group (F = 8.55, p < .001), with African Americans exhibiting greater levels of

Table 3.11: Bivariate Analyses of Perceived Threat with Demographic Variables (N = 427)

	Mean	SD	Pearson's *r*
Ethnicity			
African American	.96	.61	
Asian/Asian American	.73	.44	
Latino	.75	.52	
Non-Latino White	.42	.34	
Other	.69	.42	
Gender			
Male	.73	.46	
Female	.69	.50	
Nativity Status			
Born in the United States	.69	.50	
Born outside the United States	.74	.36	
Age			-.01
Parents' Education			-.01
Parents' Income			.00

perceived threat than the other ethnic groups, and non-Latino Whites exhibiting lower levels of perceived threat than the other ethnic groups. There were no differences in perceived threat by gender or nativity status, nor were there significant correlations of perceived threat with age, parental education or parental income.

The latent construct of psychological health was measured with three observed variables: depression, negative emotions and self-worth.

Depression: Depression was measured with the depression module drawn from the Patient Health Questionnaire (PHQ-9; Spitzer, Kroenke and Williams 2001) (Appendix A). The nine items in the PHQ-9 measure how frequently the respondent has experienced each of the nine diagnostic criteria for depression listed in the DSM-IV over the prior two weeks (e.g., "feeling tired or having little energy"). Each

item has four ordinally ranked response categories which were coded from zero to three: not at all (0), several days (1), more than half the days (2), and nearly every day (3). Responses were averaged together to create an index ranging from zero to three, with a higher score indicating higher levels of depression (α=.87). Overall, the respondents reported low levels of depression (Mean = .76, SD = .61).

Table 3.12: Bivariate Analyses of Depression with Demographic Variables (N = 427)

	Mean	SD	Pearson's *r*
Ethnicity			
African American	.61	.69	
Asian/Asian American	.88	.65	
Latino	.72	.54	
Non-Latino White	.72	.64	
Other	.80	.69	
Gender			
Male	.75	.60	
Female	.77	.61	
Nativity Status			
Born in the United States	.78	.63	
Born outside the United States	.62	.42	
Age			-.08
Parents' Education			-.01
Parents' Income			.01

The bivariate analyses between depression and the demographic variables (Table 3.12) revealed no significant differences by ethnicity, gender, or nativity status, nor were there any significant correlations between depression and age, parents' education or parents' income.

Negative Emotions: Negative emotions were measured with two items asking the respondent how frequently she had experienced sadness and anger over the last two weeks (Appendix A). Each item had five ordinally ranked response categories

which were coded from zero to four: not at all (0), rarely (1), some of the time (2), a lot (3), all of the time (4). Responses to the two items were averaged together to create an index ranging from zero to four, with a higher score indicating higher levels of negative emotions (α=.64). The respondents reported moderate levels of negative emotions (Mean = 1.50, SD = .78).

Table 3.13: Bivariate Analyses of Negative Emotions with Demographic Variables (N = 427)

	Mean	SD	Pearson's r
Ethnicity			
African American	1.36	.77	
Asian/Asian American	1.70	.81	
Latino	1.39	.77	
Non-Latino White	1.51	.75	
Other	1.62	.73	
Gender			
Male	1.55	.73	
Female	1.39	.80	
Nativity Status			
Born in the United States	1.53	.80	
Born outside the United States	1.36	.65	
Age			.07
Parents' Education			-.03
Parents' Income			-.07

The bivariate analyses between negative emotions and the demographic variables (table 3.13) revealed significant differences by ethnicity (F = 3.27, $p < .05$). There were no significant differences by gender or nativity status, nor were there any significant correlations between negative emotions and age, parents' education or parents' income.

Self-Esteem: Self-esteem was measured with a six item index adapted from the Rosenberg Self-Esteem Scale (RSES) and drawn from past research in identity

theory (Cast and Burke 2002) (Appendix A). The items selected for this index reflect those items in the RSES that tap into the self-worth (as opposed to self-efficacy) that individuals hold of themselves. Recent work in identity theory has suggested that feelings of self-worth are more likely to correspond to social identities, such as ethnicity (Burke and Stets 2009). The items asked the respondents the extent to which they agree with certain evaluations of their global self-concept (e.g., I am a person of worth, at least on an equal basis with others). Each item had five ordinally ranked response options which were coded from zero to four: strongly disagree (0), disagree (1), neither agree nor disagree (2), agree (3), strongly agree (4). Responses were averaged together to create an index ranging from zero to four with a higher score reflecting greater levels of self-esteem (α = .90). The respondents reported high levels of self-esteem (Mean = 2.32, SD = .57).

The bivariate analyses between self-esteem and the demographic variables (Table 3.14) revealed significant differences by ethnicity (F = 5.77, p < .01), with much of the difference being due to lower levels for Asian/Asian Americans compared to other ethnic groups. There were also significant differences by gender (t = 2.54, p < .05), with women having higher levels of self-esteem than men. There were not any significant differences in self-esteem by nativity status. There was a significant association between age and self-esteem (p < .001), with older people having higher levels of self-esteem. Finally, there was no significant correlation between self-esteem and parents' education or parents' income.

Table 3.14: Bivariate Analyses of Self-Esteem with Demographic Variables (N = 427)

	Mean	SD	Pearson's r
Ethnicity[a]			
African American	2.45	.56	
Asian/Asian American	2.12	.58	
Latino	2.43	.49	
Non-Latino White	2.29	.65	
Other	2.38	.58	
Gender[b]			
Male	2.21	.56	
Female	2.36	.56	
Nativity Status[c]			
Born in the United States	2.32	.58	
Born outside the United States	2.35	.50	
Age			.17***
Parents' Education			-.06
Parents' Income			.02

*** $p < .001$

Bivariate Correlations of Study Variables

There were ten measured observed variables: the three observed indicators of psychological health (depression, self-esteem, and negative emotions), the two observed indicators of ethnic identity achievement (commitment and exploration), and single observed measures for ethnic identity private regard, ethnic identity centrality, ethnic identity verification, perceived threat, and positive outgroup feelings. The bivariate correlations are displayed in Table 3.15.

Self-esteem, negative emotions, and depression were all highly intercorrelated with each other, thus providing initial evidence that they all tap into the latent construct of psychological health. Similarly, commitment and exploration were highly associated with each other, providing initial evidence that they both tap into the latent construct of ethnic identity achievement. The ethnic identity

measures were mostly associated with better psychological health via lower

negative emotions and depression and higher self-esteem, results which are

generally supportive of the findings in the developmental literature (Phinney 1990).

Table 3.15: Correlations of Observed Variables

Observed Variable	1	2	3	4	5	6	7	8	9	10
1 Depression	1.00									
2 Negative Emotions	.62***	1.00								
3 Self-Esteem	-.43***	-.39***	1.00							
4 Ethnic Identity Verification	-.20***	-.18***	.10*	1.00						
5 Ethnic Identity Private Regard	-.20***	-.19***	.25***	.16**	1.00					
6 Positive Outgroup feelings	-.03	-.08	.18**	.09	.42***	1.00				
7 Perceived Threat	.12*	.08	-.07	-.04	.02	-.11*	1.00			
9 Commitment	-.14**	-.14*	.15**	.28***	.66***	.36***	.00	.61***	1.00	
10 Exploration	-.06	-.08	.09	.03	.45***	.29***	.04	.47***	.54***	1.00

* $p < .05$, ** $p < .01$, *** $p < .001$

Chapter Four: Test of the Theoretical Model

This chapter presents the test of the theoretical model proposed in this research. Structural equation modeling was used to test the proposed theoretical model as operationalized in Figure 4.1.

Analytical Strategy

Psychological health and ethnic identity achievement were measured as latent constructs. Ethnic identity private regard, ethnic identity verification, perceived threat, and positive outgroup attitudes were measured as manifest variables since they were used to construct interaction terms. Ethnic identity centrality was also measured as a manifest variable. When centrality was measured as a latent construct (with the heritage and personal dimensions serving as observed indicators), the model failed to converge because the heritage item correlated perfectly with the latent construct. Thus, the decision was made to measure centrality as an additive index of the two dimensions (heritage and personal). Finally, depression and negative emotions were reverse-coded for the structural equation model analysis, such that a higher score reflected less depression and negative emotions, and thus increased psychological health.

Structural equation modeling assumes the use of continuous variables. While all the observed variables used in this study (manifest variables and observed indicators of the two latent constructs) were ordinal, past research suggests that employing ordinal variables with at least five categories is not likely to have a

Figure 4.1: Theoretical Model
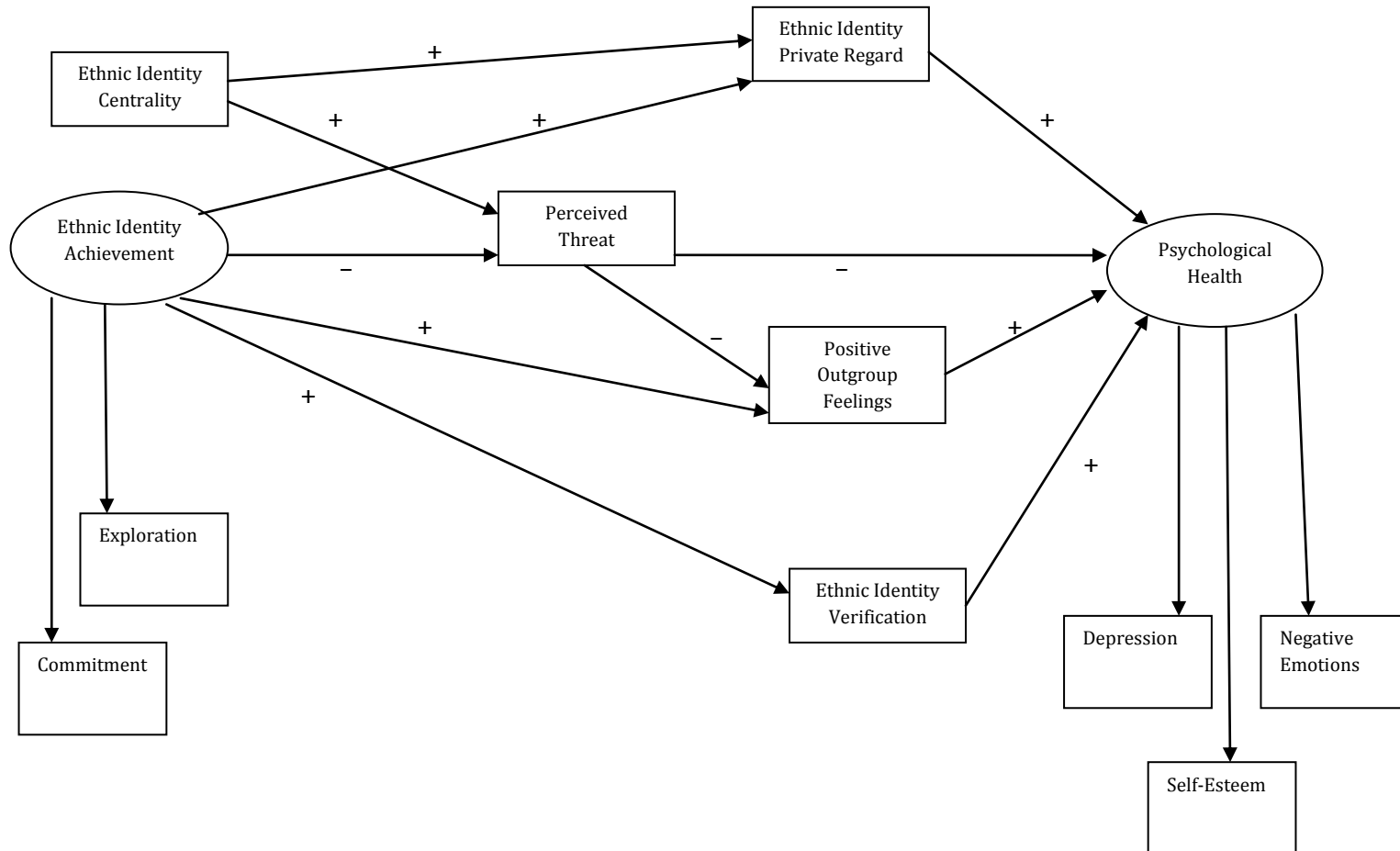
significant impact on the results (Dolan 1994; Johnson and Creech 1983). The ordinal variables used in this research were composite measures, all of which contained at least ten categories, thus minimizing the impact of the violation of this assumption.

In all, the model contained ten observed variables, thus generating 29 parameters that required estimation. Past work has suggested that a sample size-to-free parameters ratio of at least five is the minimum threshold to generate sufficient statistical power in a structural equation model, with a ratio of ten being ideal (Bentler and Chou 1987). With a sample size of 427, the ratio for this analysis was 14.72. Finally, to help ensure the goodness of fit of the theoretical model and the reliability of the parameter estimates, two sets of error terms were correlated. The error terms for private regard and positive outgroup feelings were correlated. Both of these variables may reflect an antecedent disposition to positively evaluate social phenomena generally, thus are likely to be related. In addition, because ethnic identity verification and exploration each reflect an aspect of behavioral involvement in one's ethnic group (exploration: frequency of engaging in ethnic practices versus verification: difficulty engaging in ethnic practices), they are likely to be related, and thus, their error terms were also correlated.

The analysis is reported in three steps. First, the fit statistics of the theoretical model were calculated. Maximum likelihood was used to estimate the variance-covariance matrix of the theoretical model. Based on this, five model fit statistics were calculated: chi-square, the root mean square of approximation

(RMSEA), the standardized root mean squared residual (SRMR), the comparative fit index (CFI), and the Tucker-Lewis Index (TLI). The chi-square assesses the contrast between the theoretical variance-covariance matrix and the observed variance-covariance matrix. A smaller difference, and thus a nonsignificant chi-square, is indicative of a good model fit.

The RMSEA measures the square root of the average of the residuals in the covariance matrix relative to the degrees of freedom, thus penalizing a model for unnecessary complexity. A value less than .05 has been cited in past literature as indicative of good model fit (MacCallum, Brown, and Sugawara 1996; Stieger 1990). Similarly, the SRMR estimates on average how close the theoretical model came to replicating each correlation among the ten variables (Acock 2013). An estimate of less than or equal to .08 has been cited in past literature as indicative of a good model fit (Hu and Bentler 1999). The CFI and TLI are both measures of relative fit that compare the variance-covariance matrix of the theoretical model to the null model where all the observed variables are assumed to be independent. Both measures help ensure parsimony by penalizing excessive complexity, with the TLI being a more stringent measure than the CFI. Both statistics range from zero to one, with .95 frequently cited as minimum cutoff indicating a good model fit (Acock 2013; Hu and Bentler 1999).

Next, the path coefficients are reported for the three items corresponding to the latent construct of psychological health (depression, negative emotions, and self-esteem) and the three items corresponding to the latent construct of ethnic identity

achievement (commitment and exploration). The hypothesized path coefficients and indirect effects for the structural model are then reported. Sobel tests (1982) were used to test the significance of the indirect effects.

Finally, a second structural equation model was generated in which interaction terms were constructed for private regard, positive outgroup attitudes, and identity verification with perceived threat. After reporting the model fit statistics, these interaction effects were then tested to examine if the benefit of the causal mechanisms linking ethnic identity achievement to psychological health (private regard, verification, and positive outgroup attitudes) are compensatory (i.e. balancing out the harmful effects of perceived threat) as implied by the initial theoretical model or protective (i.e. neutralizing the harmful effects of perceived threat).

Multivariate Findings

Before the analysis of the theoretical model, in order to establish a baseline effect between ethnic identity achievement and psychological health, a structural equation model was run assessing the relationship between these two latent constructs. The model fit the data well (X^2 = 2.35, df = 4, *ns*, RMSEA <.01, SRMR = .02, CFI = 1.00, TLI = 1.00). In addition, there was a positive direct effect between ethnic identity achievement and psychological health (β = .19, *p* < .01).

Turning next to the test of the theoretical model, the model fit statistics were calculated first to assess if it was a good fit to the observed data, thus ensuring reliable parameter estimates. The X^2 (df = 26) of 37.48 was not statistically

significant indicating that the theoretical model was not significantly different than the observed data in the variance-covariance matrix, indicating a good model fit. The RMSEA and SRMR were both .03, indicating that the mean residual levels of the covariance matrix were small. Finally, the TLI and CFI were .98 and .99, respectively, indicating large differences between the chi-squared measures of the theoretical model and null model. Taken in concert, these statistics indicate that the proposed theoretical model is a good fit to the data, thus lending confidence to the parameter coefficients.

The standardized path coefficients for the two latent constructs of psychological health and ethnic identity achievement are listed in Table 4.1.

Table 4.1: Standardized Path Coefficients of Latent Constructs (N = 427)

Latent Construct	Observed Variable	Path Coefficient	R^2
Psychological Health			
	Self-Esteem	.53***	.28
	Negative Emotions†	.75***	.56
	Depression†	.82***	.67
Ethnic Identity Achievement			
	Commitment	.88***	.77
	Exploration	.62***	.38

*** $p < .001$, †: reverse-coded

The path coefficients for self-esteem ($\Lambda = .53$, $p < .001$), negative emotions ($\Lambda = .75$, $p < .001$), and depression ($\Lambda = .82$, $p < .001$) were all strong and statistically significant, indicating that these measures reflect the underlying construct of psychological health. Additionally, the path coefficients for the observed measures of commitment ($\Lambda = .88$, $p < .001$) and exploration ($\Lambda = .61$, $p < .001$) were strong and

statistically significant, indicating that these measures reflect the underlying construct of ethnic identity achievement.

Turning next to the path coefficients of the structural model, the direct effects are reported first (Table 4.2). Looking first at the identity change hypotheses, ethnic identity achievement was associated with higher levels of identity verification (β = .28, p < .001) and higher levels of private regard (β = .63, p < .001). These findings support hypotheses one and two. Those with higher levels of achievement held a definition of their identity that they defined more positively and were more easily able to verify. In turn, higher levels of ethnic identity verification were associated with greater psychological health (β = .20, p < .001), as were higher levels of private regard (β = .26, p < .001). These findings support hypotheses three and four. Where people experienced greater ease in verifying their ethnic identity and had positive feelings for their ethnic group, they were more likely to have better psychological health.

With respect to the intergroup relations hypotheses, ethnic identity achievement was associated with lower levels of perceived threat (β = -.27, p < .001) and higher levels of positive outgroup attitudes (β = .41, p < .001). These findings support hypotheses five and six. Consistent with the developmental literature, those with higher levels of ethnic identity achievement were more likely to have positive attitudes towards other ethnic groups and were less likely to view interactions with members of other ethnic groups as threatening.

Ethnic identity centrality, on the other hand, was associated with more

positive feelings for one's own ethnic group (β = .15, *p* < .05) and stronger

perceptions of perceived threat (β = .38, *p* < .001). These findings support

**Table 4.2: Standardized Path Coefficients and Covariances of Structural
Model (N = 427)**

Dependent Variable	Independent Variable	Path Coefficient	R^2
Psychological Health			.13
	Verification	.20***	
	Private Regard	.26***	
	Positive Outgroup Attitudes	-.06	
	Perceived Threat	-.13**	
Ethnic Identity Verification			.08
	Achievement	.28***	
Ethnic Identity Private Regard			.55
	Achievement	.63***	
	Centrality	.16*	
Positive Outgroup Attitudes			.18
	Achievement	.41***	
	Perceived Threat	-.10*	
Perceived Threat			.08
	Centrality	.38***	
	Achievement	-.26***	
Covariance		**Correlation**	
Centrality*Achievement		.69***	
Error: Private Regard*Error: Positive Outgroup Attitudes		.20***	
Error: Exploration*Error: Verification		.18***	

* *p* < .05, **p* < .01, *** *p* < .001

hypotheses seven and eight. Consistent with past theorizing in social identity theory

(Leach 2008), these findings suggest that people with more central ethnic identities

are more likely to approach interactions attending to cues relating to their ethnicity,

and are thus more likely to positively evaluate their ethnic identity, but also more

likely to perceive interactions with other ethnic groups as threatening. In the latter

case, the higher levels of perceived threat led to less positive attitudes for members of other ethnic groups (β = -.10, p < .05) in support of hypothesis nine.

Finally, lower levels of perceived threat produced greater psychological health (β = -.13, p < .05) in support of hypothesis ten. However, there was no significant effect between positive outgroup attitudes and psychological health, thus failing to support hypothesis eleven. When people viewed interactions with other ethnic groups as less threatening, they were more likely to have better psychological health. However, no such benefit was found for those who had more positive feelings for members of other ethnic groups.

Implicit in these findings are a few indirect effects which are addressed next (Table 4.3). The indirect effects were calculated by multiplying the pathway coefficients that compose the indirect effect. Sobel tests were used to assess the significance of the indirect effects (Sobel 1982). The theoretical model implies an indirect effect between ethnic identity achievement and psychological health, mediated by identity verification, private regard, positive outgroup feelings, and perceived threat. Overall, the indirect effect of ethnic identity achievement on psychological health was significant (β = .23, p < .001). Decomposing the specific indirect paths, the direct effect of achievement on psychological health was found to be significantly mediated by greater levels of identity verification (β = .06, p < .01), greater levels of private regard (β = .16, p < .001), and lower levels of perceived threat (β = .03, p < .05). However, positive outgroup attitudes was not found to provide significant mediation.

In order to test the degree of the mediation between ethnic identity

achievement and psychological health, a subsequent analysis specified a direct

Table 4.3: Test of Indirect Effects (N=427)

Pathway	Coefficient
Achievement → Psychological Health	.23***
Achievement → Verification → Psychological Health	.06**
Achievement → Private Regard → Psychological Health	.16***
Achievement → Perceived Threat → Psychological Health	.03*
Achievement → Positive Outgroup Attitudes → Psychological Health	-.02
Achievement → Perceived Threat → Positive Outgroup Attitudes	.03*
Centrality → Perceived Threat → Positive Outgroup Attitudes	-.04*

*$p<.05$, **$p<.01$, ***$p<.001$

path between ethnic identity achievement and psychological health. This path did

not improve the model fit, nor was it statistically significant. Taken in concert, these

findings point to the effect of ethnic identity achievement on psychological health

being completely indirect, fostered by the theorized identity change and intergroup

relations processes that increase private regard and the ability verify one's ethnic

identity, while reducing perceptions of threat.

Additional analyses were run to test the indirect effects between both ethnic

identity dimensions and positive outgroup attitudes via perceived threat. Both

effects were found to be significant with ethnic identity achievement leading to

more positive outgroup attitudes via a decreased perception of threat ($\beta = .03$, $p <$

.05), and ethnic identity centrality was found to lead to less positive outgroup

attitudes via an increased perception of threat ($\beta = -.04$, $p < .05$).

Finally, a separate structural equation model was run to assess if the

beneficial effects of verification, private regard, and positive outgroup feelings on

psychological health are direct or derive through their ability to buffer the harmful

effects of perceived threat. This added step provided a test between the

compensatory and protective models within the risk and resiliency framework. The

theoretical model assumed that the effects of private regard, verification, and

positive outgroup attitudes were direct, independent of the effect of perceived

threat. The added step, here, tests this assumption by examining the moderating

effects of private regard, identity verification, and positive outgroup feelings on the

relationship between perceived threat and psychological health to assess if the

effects are instead protective.

The model fit statistics showed that this model fit was adequate (X^2 = 79.98,

p < .001, RMSEA = .04, SRMR = .04, CFI = .97, TLI = .96). The coefficients linking

private regard, identity verification, positive outgroup attitudes, perceived threat,

and the interaction terms to psychological health are listed in Table 4.4. Model one

displays the baseline coefficients for the predictors of psychological health from the

first structural equation model.

**Table 4.4: Standardized Interaction Effects of Private Regard, Positive
Outgroup Feelings, and Verification with Perceived Threat on Psychological
Health (N=427)**

Independent Variables	Model One	Model Two
Ethnic Identity Verification	.20***	.19***
Ethnic Identity Private Regard	.26***	.27***
Positive Outgroup Attitudes	-.06	-.08
Perceived Threat	-.13*	-.14**
Private Regard*Threat	-	.12*
Outgroup Feelings*Threat	-	.03
Verification*Threat	-	.01

*p<.05, **p<.01, ***p<.001

Model two introduces the moderating effects. Only private regard was found to moderate the effect of perceived threat on psychological health. This effect was found to be significant ($\beta = .12$, $p < .05$). For every one standard deviation increase in private regard, the harmful impact of perceived threat on psychological health was reduced by .12.

Chapter Five: Discussion and Conclusions

This research sought to provide theoretical clarity to the relationship between ethnic identity and psychological health by addressing two central issues. It was first necessary to address the multidimensional nature of the ethnic identity construct in order to distill the underlying process of ethnic identity development traditionally theorized to foster improved psychological health. In other words, what is it about a strong ethnic identity that should lead to improved psychological health? Towards this end, the first chapter reviewed the numerous conceptualizations of ethnic identity, ultimately focusing on the process of ethnic identity achievement – the increased commitment to one's ethnic group derived through the exploration of the meanings of one's ethnic identity – as the central developmental process that ties together the other dimensions of ethnic identity as well as fosters improved psychological health. The process of ethnic identity achievement, which has been to found to generate a secure, stable, and positively defined self-concept (Martinez and Dukes; Phinney and Chavira 1992), was adopted by this study as the central conceptualization of ethnic identity given its direct theoretical relevance for promoting psychological health.

Given the theoretical and empirical advantages for conceptualizing ethnic identity as the developmental process of achievement, the second theoretical issue explored was the examination of how the process of ethnic identity achievement yields improved psychological health. While prior theorizing and empirical results have generally addressed and supported the idea that an achieved identity produces

a more secure, stable, and positively defined self-concept, this research extended

this theoretical understanding by formalizing two theoretical links that connect the

process of ethnic identity achievement to improved psychological health -- as

detailed in Chapter Two. First, ethnic identity achievement was theorized to

facilitate a process of identity change through which the definition of one's ethnic

identity became more positively evaluated and stable (via increased identity

verification). Second, the process of ethnic identity achievement was theorized to

facilitate more healthy relations with other ethnic groups, thus resulting in

diminished perceptions of threat and more positive feelings for members of other

ethnic groups.

The remainder of this chapter is divided into four sections. In the first two

sections, I review the findings as well as their theoretical implications and

contributions for each of the two processes hypothesized to link an achieved ethnic

identity to improved psychological health. I then discuss the limitations of this

study. Finally, I conclude with three suggestions for future research.

Ethnic Identity Achievement as Identity Change

The developmental process leading to ethnic identity achievement was first

conceptualized as a process of identity change in which, through an embedding in

the practices and culture of one's ethnic group, people were better able to positively

evaluate and obtain verification for their ethnic identity, thus contributing to a

positively defined and stable self-concept. Specifically, it was theorized that the

process of ethnic identity achievement provided people with the cultural and social

capital necessary to view their ethnic identity in a way that allowed for both enhancement of and greater ease in obtaining identity verification. In turn, these proximate mechanisms were argued to contribute to better psychological health.

Ethnic identity achievement was associated with having more positive feelings for one's ethnic group through higher levels of ethnic identity private regard, reflecting a validation of the enhancement hypothesis. Ethnic identity achievement also increased the ability of respondents to verify their ethnic identity, thus fostering a stable set of identity meanings, and contributing to a stable self-concept, reflecting a validation of the verification hypothesis. The proximate mechanisms of private regard and identity verification were also shown, as predicted, to positively influence psychological health. The less difficulty respondents had in verifying their ethnic identity, and the more they evaluated their ethnic identity positively, the more likely they were to experience heightened psychological health.

Furthermore, the positive effects of private regard and identity verification manifested themselves in different ways. Enhanced private regard increased psychological health by neutralizing the harmful effect of perceived threat. Where people had a more positively defined ethnic identity and they perceived interactions with other ethnic groups as threatening, they were less likely to internalize and be adversely affected by these negative evaluations. From a risk and resilience and framework, this lends support to the effect of private regard on psychological health as protective instead of compensatory.

However, the stable set of identity meanings provided by greater ease in verifying one's ethnic identity did not have a similar neutralizing effect on perceived threat. Instead, identity verification was shown to promote increased psychological health independent of the detrimental effect of perceived threat. These results suggest that the resilience provided by a stable set of identity meanings is compensatory, balancing out the harmful effect of perceived discrimination. This finding is consistent with past theoretical work in identity theory suggesting that identity verification generates a "reservoir" of positive emotions that may provide resilience against risk factors like non-verification (Cast and Burke 2002). The findings of this study support the idea that this reservoir effect may also provide resilience against the risk factor of perceived discrimination.

These findings extend past work by showing how the development of an ethnic identity, often in the face of discrimination and negative stereotypes, operates to improve psychological health. By exploring the meanings and social significance of one's ethnic identity, people appear to evaluate their ethnic identity more positively and are more successful in obtaining verifying feedback, contributing to a positively defined and stable self-concept and thus heightened psychological health.

It was theorized in this study that the drive to obtain obtaining verifying feedback for one's ethnic identity was magnified by the development of a communal orientation to one's ethnic group and the placement of individuals within social networks containing others willing to provide verifying reflected appraisals.

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However, these links were not measured in this study. While past work has found some support for these arguments (Burke and Stets 1999), the research thus far is sparse. Future work should examine the causal validity of these theorized mechanisms.

This research also points to the importance of studying verification and enhancement as not only competing motivations of self-relevant action, but also understanding the contexts where these motivations could operate parallel to one another. When people are motivated to explore and the meaning and social significance of their ethnic identity, the findings of this research suggest that they will enhance how they evaluate their ethnic identity and will be more likely to receive verifying reflected appraisals. Similarly, like ethnicity, people may hold a variety of identities that they may feel uncommitted to. If people are adequately motivated to explore the meanings of these identities, especially in the face of negative socially ascribed stereotypes, the process of identity achievement may allow people the opportunity to both enhance its evaluative dimension as well as be better able to obtain identity verification. The findings of this research appear to support this contention.

These findings also have implications for extending identity theory. While past identity theory scholars have suggested the importance of examining how the verification dynamics of positively defined identities differ from those of negatively defined identities (Burke and Stets 1999; Stets and Serpe 2013), identity theory has still focused largely on identity verification being the primary determinant of

psychological health. Past work in identity theory -- and the findings in this study -- point to the importance of identity verification in fostering psychological health (Burke 2008; Burke and Harrod 2005; Cast and Burke 2002; Stets and Tsushima 2001; Stets and Harrod 2004; Stets and Carter 2011; 2012), however, a consideration of the evaluative feelings a person holds for their identity, as an additional mechanism, appears warranted.

The findings of this research suggest that the positive evaluation an individual holds for an identity exerts an effect on psychological health completely independent of verification. Indeed, apart from ethnicity, one might think of a variety of negatively defined identities individuals might hold (e.g., stigmatized identities) that could adversely affect their psychological health. Even if verified, how might the affective consequences of people with negatively defined identities be different from those with positively defined identities? Future work in identity theory should explore not only the verification dynamics underlying psychological health, but also the influence of whether the identities under study are positively or negatively defined by the individuals holding them.

Ethnic Identity Achievement as Process to Promote Positive Intergroup Relations

The process of ethnic identity achievement was also theorized to foster positive relations with other ethnic groups. Consistent with the developmental literature (Cross 1981; Phinney, Jacoby and Silva 2007), an achieved ethnic identity was theorized to generate a greater awareness and understanding of the social context within which relations with other ethnic groups occur, and thus possibly a

greater appreciation for other ethnic groups and decreased likelihood of perceiving interactions with other ethnic groups as threatening. However, to unpack this relationship it was first necessary to disentangle a literature which suggests that a strong ethnic identity could be associated with either positive or negative intergroup relations.

Towards this end, it was first recognized that ingroup bias does not necessarily equate to outgroup derogation (Brewer 1979; 1999). A strong ethnic identity might drive people to express bias for their own ethnic group, while at the same time generating positive feelings for other ethnic groups – with the bias reflected in stronger positive feelings for their own ethnic group. Outgroup derogation, on the other hand, is a form of ingroup bias that explicitly entails increased *negative* evaluations of other ethnic groups. The extent to which a strong ethnic identity generates outgroup derogation has thus been theorized to be conditional (Brewer 1999). Two such conditional factors were explored in this research.

Drawing on recent theoretical insights from the developmental literature and social identity theory, ethnic identity was modeled along two dimensions, as ethnic identity achievement and ethnic identity centrality. Past work in social identity theory suggests that high levels of centrality, apart from other dimensions of social identities, might lead people to be more attentive to intergroup relations and potentially threatening cues (Leach et al. 2008). Thus, in addition to modeling

centrality and achievement together, the role of perceived threat was assessed as a causal mechanism linking ethnic identity to negative outgroup attitudes.

Those who had a strong commitment to their ethnic group derived through an exploration of meanings, and thus an achieved ethnic identity, were more likely to positively evaluate other ethnic groups both directly and indirectly – in the latter case by diminishing the perceptions of threat when interacting with other ethnic groups. Consistent with the work of developmental and acculturation psychologists (Berry 1997; Cross 1991; Quintana 1994; Quintana, Castaneda-English and Ybarra 1999; Phinney, Ferguson and Tate 2007), these findings suggest that the achievement process brings with it a stable, secure and positively defined sense of self, thus promoting a greater openness to interact with other ethnic groups, a more sophisticated outlook on intergroup relations, and a greater appreciation for other ethnic groups; in turn, fostering more positive feelings for other ethnic groups and minimizing the extent to which people perceive interactions with other ethnic group members as threatening.

Turning to the ethnic identity centrality predictions, ethnic identity centrality was found to increase positive evaluations for one's own ethnic group and to indirectly reduce positive attitudes for other ethnic groups via an increased perception of threat. These findings suggest that when an identity is more central, people are more likely to be sensitive and attend to ethnically relevant cues and interpret interactions with other ethnic groups in terms of their own ethnic group membership (Leach 2008). Where these interactions are negative, the findings

suggest that people may be more likely to interpret them as threatening and thus develop more negative attitudes towards other ethnic groups.

Both ethnic identity achievement and ethnic identity centrality generated ingroup bias. However, the nature of the biases generated by the ethnic identity dimensions differed. On the one hand, higher levels of ethnic identity achievement were associated with greater positive attitudes for one's own ethnic group and other ethnic groups. The bias resulted from the increase in positive attitudes for one's own ethnic group being significantly greater than the positive attitudes for other ethnic groups. In effect, these respondents reported increased positive attitudes for all ethnic groups, but the increase in positive attitudes was greatest for their own. On the other hand, higher levels of ethnic identity centrality were associated with less positive feelings for other ethnic groups and greater positive feelings for one's own ethnic group. Where respondents reported a more central ethnic identity, they were more likely to exhibit an ingroup bias that favored their own ethnic group at the expense of other ethnic groups.

Given the high intercorrelation between centrality and achievement, it is important to note that that the dimensions of achievement and centrality co-occur and likely influence each other. As people develop a more achieved ethnic identity, they should be more likely to report an ethnic identity that is more central. Conversely, those with highly central identities may have an increased motivation to explore the meanings of that identity and thus develop a more achieved ethnic identity. This suggests that the two dimensions mutually influence each other, and

thus magnify the two processes which influence intergroup attitudes discussed in the research. Future research using longitudinal survey data could isolate the causal nature of these dimensions.

Finally, turning back to the role played by ethnic identity achievement in influencing psychological health, with respect to this theoretical process, achievement was found to increase psychological health by reducing the likelihood that interaction with other groups would be viewed as threatening. By viewing interactions with other ethnic groups as less threatening, people were less likely to be subjected to negative evaluations which could adversely their psychological health. However, there was no relationship between positive feelings for other groups and improved psychological health, either directly or by moderating the harmful impact of perceived threat. While these results provide partial support to the protective function of ethnic identity achievement, the central theoretical contribution to this part of the study comes with understanding how a strong ethnic identity influences intergroup relations.

To start, the implications for outgroup derogation (e.g., diminished positive attitudes for the outgroup) are telling. The findings suggest that two countervailing forces, each deriving from either ethnic identity dimension, are at work. On the one hand, a heightened centrality makes threats more noticeable and relevant to the individual, thus leading to greater outgroup derogation. However, where this heightened centrality is accompanied by an achieved ethnic identity, people are less likely to interpret this potentially negative input as threatening. Indeed, the two

indirect effects tracking these countervailing effects of ethnic identity on outgroup

derogation were similar, suggesting that they may negate each other. Additionally,

given the positive direct effect of ethnic identity achievement on positive outgroup

attitudes, the sum total of having a strong ethnic identity in this sample was to

overwhelmingly produce positive feelings for members of other ethnic groups.

That being said, it is necessary to discern from the data the type of case

where a strong ethnic identity might lead to outgroup derogation. The findings of

this study strongly suggest that it would be someone with low ethnic identity

achievement, but high ethnic identity centrality. Sociological treatments of

Phinney's developmental model (Shiao and Tuan 2008), as well as other research

examining ethnic identity development (Lewis 2001; Matute-Bianchi 1986; Van

Ausdale and Feagin 2001; Waters 1994) point to the importance of social contexts

(e.g., neighborhoods and schools).

Social contexts may encourage or discourage the exploration of one's ethnic

identity, and thus how people define their ethnic identity (Matute-Bianchi 1986),

and the extent to which people develop an achieved ethnic identity (Shiao and Tuan

2008). Additionally, in many contexts, attempts made by people of color to explore

their ethnic identity may be discouraged by a white majority, as playing the "race

card," reflecting the majority ideology of colorblindness (Carr 1997; Lewis 2001).

However, given the realities of ethnic-racial discrimination facing people of color

(Pager and Shephard 2008), many ethnic minorities are likely to perceive their

ethnic identity as important, even if it is not achieved, because it is often invoked in

hostile interactions with other ethnic groups. The findings of this study suggest that this group would be most likely to engage in outgroup derogation, thus pointing to the need – on a contextual level – for social institutions to encourage the exploration of people's ethnic heritage and foster ethnic identity achievement.

Finally, these findings have implications for social identity theory. Social identity theory was founded on the historical premise of studying the harmful consequences of group affiliation (Ellemers and Haslam 2012). While a stronger ethnic identity did generate ingroup bias in this sample, it did so overwhelmingly by increasing the positive feelings respondents had for both their own ethnic group and other ethnic groups – with the bias reflected in stronger positive feelings for their own ethnic group. By studying both the process by which one develops an achieved ethnic identity and the centrality of an ethnic identity as separate dimensions, the findings in this research suggest that, in total, the tendency towards ingroup bias does not reflect negative feelings for other ethnic groups. This would suggest that a strong social identity is not a necessary ingredient for outgroup derogation. In other words, where a central social identity is accompanied by the increased commitment to the group via an exploration of meanings, and a decreased prevalence of threat, a strong social identity can foster healthy intergroup relations.

Study Limitations

While the predictions in this study were generally supported and are consistent with past theorizing in the developmental and social psychological literature, there are a few methodological limitations which future research could

address. This study used a cross-sectional design to test the theoretical model. While there are sound theoretical reasons to suppose the time-order of the pathways posited in this model, it is plausible that some of these relationships exhibit feedback effects. This limitation is most pronounced with the identity change process. For instance, Burke and Stets (1999) found that identity verification not only resulted from a greater collective orientation, but also helped generate a greater collective orientation. This finding suggests that ease in verifying one's ethnic identity might not only be an outcome of the ethnic identity achievement process, but might also act to foster further exploration of one's ethnic identity meanings, and thus further identity achievement.

Additionally, as people develop a more positive evaluation of their ethnic group with an achieved ethnic identity, they may feel motivated to further explore the meanings of their ethnic identity and become more committed to their ethnic group. While this identity change process has important theoretical implications for studying ethnic identity achievement's connection to improved psychological health, future work should replicate these findings using a longitudinal design that can distinguish the direct effects theorized in this model from any feedback effects. Such work would lend greater confidence to the findings found in this study.

There were also four measurement issues which future research can address. First, this study assessed ethnic identity private regard in terms of pride, whereas outgroup attitudes were assessed in terms of positive feelings. While pride in one's ethnic group should be strongly associated with positive feelings for one's ethnic

group, the two terms do not have synonymous meanings. As such, this may have made comparisons of the effects of ethnic identity on evaluations of one's own ethnic group and other ethnic groups problematic. Future research adopting the same evaluative terminology for the ingroup and outgroup assessments would lend further confidence to the findings of this study.

Similarly, future research examining the identity change process could adopt measures of private regard that are similar to the identity verification measures, thus ensuring congruence between the measures assessing enhancement and verification. The logic behind the measure of behavioral meanings that informs the identity theory measurement of ethnic identity verification and ethnic identity centrality (Burke, Cerven and Harrod 2009) could also extend to a measure of private regard. Both of these measures capture fourteen ethnic practices, asking the extent to which respondents find them important (i.e. centrality) and the extent to which respondents experience ease engaging in them (i.e. verification). A measure of private regard could be crafted that adopts the same behavioral meanings. This measure could ask respondents the extent to which they positively evaluate the fourteen practices (e.g., it is good that I hold on to my ethnic beliefs and attitudes). By using the same measurement strategy to assess both the measures of enhancement and verification (e.g., behavioral meanings), it would lend further confidence to the findings of this study.

In addition, this study assessed identity verification by examining the degree of difficulty people have when engaging in ethnic practices that would verify their

identity. While people who are more easily able to engage in these practices should be better able to verify their ethnic identity, identity verification and difficulty verifying one's ethnic identity are still conceptually distinct. For instance, someone may have difficulty verifying their identity but still may be able to do so. Future research establishing a strong correlation between identity verification and ease of verification would lend further confidence to these findings.

Finally, this study used a measure of positive attitudes for other ethnic groups to indirectly assess outgroup derogation, thus treating low levels of positive outgroup attitudes as outgroup derogation. While past research has shown that positive and negative evaluations of the same group have a strong inverse correlation (Costarelli and Calla 2004), someone possessing low positive attitudes for other ethnic groups may not necessarily hold negative attitudes towards other ethnic groups. Thus, future research replicating these results with a direct measure of negative outgroup attitudes would also lend greater confidence to these findings.

Directions for Future Research

Future research could extend on this theoretical model in three ways: 1) developing a stronger understanding of the contextual influences on ethnic identity achievement, 2) examining the extent to which the theoretical processes examined by this research vary across ethnic groups, and 3) examining the theoretical dynamics of this study with other social identities.

The ethnic identity and social psychological literature has given a limited treatment to the factors that promote ethnic identity achievement. The extent to

which people are motivated to engage in the exploration process is often viewed as either being prompted by acts of prejudice (Cross 1981) or through families socializing children about their ethnic heritage and how their ethnicity might affect them when interacting with other people (i.e., ethnic-racial socialization, see Hughes et al. 2006). Future research can expand on this work by examining how contextual factors (e.g., neighborhood and school environments) also contribute or hinder the process of ethnic identity achievement. As noted above, sociologists and education researchers have already begun to examine how factors such as peer socialization (Matute-Bianchi 1986), school context (Lewis 2001; Shiao and Tuan 2008), and neighborhood context (Waters 1994) can influence ethnic identity development. This research has pointed to the importance of factors such as the ethnic makeup of a neighborhood or school, the tolerance shown for cultural diversity in a school context, as well as the infusion of cultural and social capital provided by an immigrant community as being very important to the formation and development of an ethnic identity. By explicitly tying these contextual factors into the ethnic identity achievement models presented in this research, future work can gain a broader understanding of how social factors influence this developmental process.

For instance, some research suggests that when the developmental process yielding an achieved ethnic identity occurs in social contexts prevalent with racially-based structural impediments to mainstream goals, this might foster an oppositional orientation – where people may hold negative attitudes towards other ethnic groups (Anderson 1999; Fordham and Ogbu 1986; Portes and Rumbaut

2001). In essence, people respond to the structural impediments by adopting a definition for their ethnic identity that is in opposition to the dominant culture and possibly other ethnic groups. This may then lead to greater hostility towards other ethnic groups as well as the adoption of counter-normative beliefs that yield adverse behavioral outcomes such as increased substance use, violence, and poorer academic performance. This would suggest that ethnic identity development does not always lead to healthier intergroup relations, and that, more broadly, social context is vital to understanding when these divisive outgroup attitudes may arise.

Future work can also address the extent to which the predictions of the two processes presented in this research might vary across ethnic groups. While the processes were found to mostly hold across a multi-ethnic sample, this does not necessarily mean that they are invariant across ethnic groups. Given the differential exposure across ethnic groups to immigrant enclaves that provide rich sources of cultural and social capital (Portes and Rumbaut 2001) as well as the different cultural values of different ethnic groups, the meanings of an achieved identity might also vary across ethnic groups. If so, this would suggest that the affective, cognitive and evaluative processes underlying the model of ethnic identity achievement presented in this research might also vary. Future research using large and maximally diverse sample sizes could assess the extent to which these processes are invariant across ethnic groups.

In a similar vein, future work could assess the extent to which these processes operate similarly between majority and minority ethnic groups. For

instance, this research suggested that while the role of private regard would generally aid in increasing psychological health, that this effect would be particularly strong where people had a highly central ethnic identity. Like past work (Verkuyten 1988; Phinney and Alipuira 1990), this research found that members of ethnic minority groups reported ethnic identities that were more central, and thus a more vital component of the self concept. Given this, it is possible that the role private regard plays in promoting psychological health might be stronger for these groups.

Finally, future research should examine the extent to which the developmental processes specified by this model apply to other social identities. Like ethnicity, people adopt other potentially polarizing social identities that cannot only be a source of intergroup conflict and strife, but also the basis for positive psychological adjustment. While social identity theory has studied national identities (Esses et al. 2001; van Leeuwen and Mashuri 2013), religious identities (Verkuyten and Martinovich 2012; Ysseldyk, Matheson, Anisman 2010), and political identities (Duck, Terry and Hogg 1998), the developmental approach has focused largely on ethnic identities. Might the developmental process specified by the ethnic identity achievement model operate similarly for other social identities? For instance, do people achieve a religious identity in the same way they do an ethnic identity? And, if so, would it operate similarly to promote psychological health by fostering healthy intergroup relations and facilitating a positively defined and stable identity as was suggested by this study? In pursuing these questions,

future research can better understand the mechanisms and conditions under which

a strong social identity can lead to healthier social relations, and more broadly to

improved psychological health.

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Appendix A: Survey Items

Ethnic Identity Achievement

Thinking about your ethnic group, how strongly do you agree or disagree with the following:	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.	○	○	○	○	○
I have often talked to other people in order to learn more about my ethnic group.	○	○	○	○	○
I have often done things that will help me better understand my ethnic background.	○	○	○	○	○
I have a strong sense of belonging to my ethnic group.	○	○	○	○	○
I feel a strong attachment towards my ethnic group.	○	○	○	○	○
I understand pretty well what my ethnic group membership means to me.	○	○	○	○	○

Ethnic Identity Private Regard

Reflecting on your feelings about your own ethnic group, how strongly do you agree or disagree with the following:	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I am proud of my ethnic heritage.	○	○	○	○	○
I have pride in the values of my ethnic group.	○	○	○	○	○

Ethnic Identity Centrality

Next, we would like to ask you some questions about any practices associated with your ethnicity that you may engage in. Please indicate the extent to which each of the following ethnic practices are important to you.	Not Important	A Little Important	Somewhat Important	Very Important	Extremely Important
Eating foods associated with my ethnicity	○	○	○	○	○
Engaging in ethnic traditions	○	○	○	○	○
Speaking the language associated with my ethnicity	○	○	○	○	○
Sharing my ethnic heritage with my family	○	○	○	○	○
Holding on to my ethnic beliefs and attitudes	○	○	○	○	○
Observing the religious traditions associated with my ethnicity	○	○	○	○	○
Participating in ethnic holidays/festivals	○	○	○	○	○
Having friends with the same ethnic background	○	○	○	○	○
Looking like my ethnicity	○	○	○	○	○
Listening to music associated with my ethnicity	○	○	○	○	○
Being in my ethnic community	○	○	○	○	○
Dating within my ethnic community	○	○	○	○	○
Wearing clothing styles associated with my ethnicity	○	○	○	○	○
Maintaining an ethnic home	○	○	○	○	○

Ethnic Identity Verification

Next, we would like to ask about how much difficulty you experience being able to do each of these ethnic practices when you want to. <u>Please indicate how much difficulty you experience being able to do each of these practices when you want to.</u>	No Difficulty at All	Not Much Difficulty	Some Difficulty	Quite a Bit of Difficulty	A Great Deal of Difficulty
Eating foods associated with my ethnicity	○	○	○	○	○
Engaging in ethnic traditions	○	○	○	○	○
Speaking the language associated with my ethnicity	○	○	○	○	○
Sharing my ethnic heritage with my family	○	○	○	○	○
Holding on to my ethnic beliefs and attitudes	○	○	○	○	○
Observing the religious traditions associated with my ethnicity	○	○	○	○	○
Participating in ethnic holidays/festivals	○	○	○	○	○
Having friends with the same ethnic background	○	○	○	○	○
Looking like my ethnicity	○	○	○	○	○
Listening to music associated with my ethnicity	○	○	○	○	○
Being in my ethnic community	○	○	○	○	○
Dating within my ethnic community	○	○	○	○	○
Wearing clothing styles associated with my ethnicity	○	○	○	○	○
Maintaining an ethnic home	○	○	○	○	○

Perceived Threat

Imagine you are the subject in each of the scenarios described below. If you were treated in this way, in your opinion, what is the likelihood that it would be due to ethnic/racial discrimination?	Not all Due to Discrimination	Possibly Due to Discrimination	Probably Due To Discrimination	Definitely Due to Discrimination
Suppose you go into a "fancy" restaurant. Your server seems to be taking care of all the other customers except you. You are the last person whose order is taken. This would be:	○	○	○	○
Suppose you apply for a job that you believe you are qualified for. After the interview you learn that you didn't get the job. This would be:	○	○	○	○
Suppose you wish to buy a house. You go to a real estate company and the agent there takes you to look at homes that you know are mainly populated by your ethnic group. This would be:	○	○	○	○
Suppose you parked your car at a parking meter and it has just expired. You arrive back at the car just as an officer is writing up a ticket. You try to persuade the officer not to give you the ticket. The officer gives you the ticket anyway. This would be:	○	○	○	○
Suppose you go to look at an apartment for rent. The manager of the building refuses to show it to you, saying that it has already been rented. This would be:	○	○	○	○
Suppose you have to fill out some government forms in order to apply for a loan that is important to you. You go to one office and they send you to another, then you go there and are sent somewhere else. No one seems to be really willing to help you out. This would be:	○	○	○	○
Suppose you are attracted to someone from another ethnic group and ask that person out for a date and are turned down. This would be:	○	○	○	○
Suppose you are driving a few miles over the speed limit and the police pull you over. You receive a ticket for the maximum amount allowable. This would be:	○	○	○	○
Suppose you want to join a social organization. You are told that they are not taking any new members at this time. This would be:	○	○	○	○
Suppose your boss tells you that you are not performing your job as well as others doing that job. This would be:	○	○	○	○

Positive Outgroup Attitudes

Reflecting on your feelings about ethnic groups <u>other than your own</u>, how strongly do you agree or disagree with the following:	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I have positive feelings about the heritage of other ethnic groups	○	○	○	○	○
I have positive feelings about the values of other ethnic groups.	○	○	○	○	○

Depression

Over the last two weeks, how often have you been bothered by any of the following problems:	**Not at All**	**Several Days**	**More than Half the Days**	**Nearly Everyday**
Little interest or pleasure in doing things	○	○	○	○
Feeling down, depressed, or hopeless	○	○	○	○
Trouble falling or staying asleep, or sleeping too much	○	○	○	○
Feeling tired or having little energy	○	○	○	○
Trouble concentrating on things, such as reading the newspaper or watching television	○	○	○	○
Poor appetite or overeating	○	○	○	○
Feeling bad about yourself – or that you are a failure or have let yourself or your family down.	○	○	○	○
Moving or speaking so slowly that other people could have noticed. Or the opposite – being so figety or restless that you have been moving around more than usual	○	○	○	○
Thought of hurting yourself, or that you would be better off dead.	○	○	○	○

Negative Emotions

Over the last two weeks, how often have you felt each of the following emotions:	Not at all	Rarely	Sometimes	A lot	All of the Time
Anger	○	○	○	○	○
Sadness	○	○	○	○	○

Self-Esteem

How strongly do you agree or disagree with the following:	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
I am a person of worth, at least on an equal basis with others.	○	○	○	○
I feel that I have a number of good qualities.	○	○	○	○
I take a positive attitude toward myself.	○	○	○	○
On the whole, I am satisfied with myself.	○	○	○	○
I usually feel good about myself.	○	○	○	○
I feel I have a lot to offer as a person.	○	○	○	○

Demographic Variables

What is your age?
( ) 18
( ) 19
( ) 20
( ) 21
( ) 22
( ) 23
( ) 24
( ) 25
( ) 26
( ) 27
( ) 28
( ) 29
( ) 30+

What is your gender?
( ) Male
( ) Female

What best describes your ethnicity?
( ) Asian/Filipino/Pacific Islander
( ) Black/African-American
( ) Caucasian/White
( ) Chicano/Hispanic/Latino
( ) Native American/Alaska Native
( ) Other (please specify): _____*

What best describes your mother's highest level of education?
( ) No Formal Education
( ) Some Grade School
( ) Completed Grade School
( ) Some Middle School/Junior High
( ) Completed Middle School/Junior High
( ) Some High School
( ) Completed High School/GED
( ) Some College
( ) 2-Year College Degree (Associates)
( ) 4-Year College Degree (BA, BS)
( ) Some Graduate School
( ) Master's Degree
( ) Doctoral Degree (PhD) or Professional Degree (MD, JD)

What best describes your father's highest level of education?
( ) No Formal Education
( ) Some Grade School
( ) Completed Grade School
( ) Some Junior High/Middle School
( ) Completed Middle School/Junior High
( ) Some High School
( ) Completed High School/GED
( ) Some College
( ) 2-Year College Degree (Associates)
( ) 4-Year College Degree (BA, BS)
( ) Some Graduate School
( ) Master's Degree
( ) Doctoral Degree (PhD) or Professional Degree (MD, JD)

What best describes your parents' total income last year?
( ) $0 - $15,000
( ) $15,001 – $30,000
( ) $30,001 - $45,000
( ) $45,001 - $60,000
( ) $60,001 - $75,000
( ) $75,001 - $90,000
( ) $90,001 - $105,000
( ) $105,001 - $120,000
( ) $120,001+

What country were you born in?
( ) United States
( ) Other country (please specify): _____*