EXPLORING THE RELATIONSHIPS BETWEEN MINDFULNESS, SELF-COMPASSION, AND ETHNIC IDENTITY DEVELOPMENT

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Thesis Prepared for the Degree of

MASTER OF SCIENCE

UNIVERSITY OF NORTH TEXAS

May 2012

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Sinha, Aditi. Exploring the relationships between mindfulness, self-compassion, and ethnic identity development. Master of Science (Psychology), May 2012, 102 pp., 11 tables, 1 illustration, references, 128 titles.

Ethnic identity development is a process that occurs for all individuals, and weakness in ethnic identity is associated with numerous psychosocial difficulties. Security in ethnic identity can be difficult for those exposed to varying attitudes and behaviors in a multicultural society. As such, the current study examined the influence of mindfulness and self-compassion on ethnic identity development. A sample of 479 undergraduate students completed online self-report questionnaires measuring demographic information, mindfulness, self-compassion, ethnic identity status, and self-esteem. Results suggested that mindfulness and self-compassion are significant negative predictors of ethnic identity, and that self-compassion was a better predictor of ethnic identity status than was mindfulness. Self-compassion did not moderate the relationship between mindfulness and ethnic identity status, as was hypothesized. The sample included primarily Caucasian (n = 278) individuals born in the United States, which likely limited generalizability of findings. Implications of the current findings and suggestions for future research are discussed.

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ACKNOWLEDGMENTS

There are a number of people that I would like to thank for their insights and direction with the following thesis. First, I am indebted to my major professor and mentor, Dr. Amy R. Murrell, whose unconditional, comprehensive support and guidance through every stage of my professional development has shaped me into a better researcher, therapist, and human being. She has truly created a space in which her labbies can live a life that is full – one that does not require that they "disconnect from themselves or their lives outside of psychology" – in order to pursue excellence in scholarship. For this, I am forever changed and inspired. Thank you.

Next, I would like to thank my thesis committee members, Dr. Jennifer Callahan and Dr. Randall Cox, for their time, insights, and encouragement that helped to guide this project to completion. Your personal interest in the success and well-being of students does not go unnoticed.

I also truly appreciate the help and support I have received from my research team. In this regard, I would like to specifically acknowledge Rawya Al-Jabari for her time and commitment to this project.

To my partner, Nate Werth, your love, friendship, patience, encouragement, and care for my well-being has been invaluable through this process. Thank you for the joy and meaning that you bring to my life.

Finally to my parents, your nurturance, selflessness, and dedication to helping me pursue my educational goals are beyond measure. There are simply no words that could express how grateful I am for the both of you. You are everything to me and I am blessed to have your love.

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CHAPTER 1

INTRODUCTION

Exploring the Relationships between Mindfulness, Self-Compassion, and Ethnic Identity

Development

The United States of America is known to be a world leader in various domains, one of which is the immigration movement. Between the years 2000 and 2010, over 10 million foreignborn individuals moved to the United States. The country also accepts more legal immigrants as permanent residents than all other countries in the world combined (U.S. Census Bureau, 2000a). Since the 1960s, the influx of residents from different parts of the world has increased the growth and ethnic diversity of the United States, and has also caused widespread economic, political, social, religious, and cultural change. The 2000 Census was the first time in which individuals were allowed to identify as belonging to two or more races, and the numbers totaled over 6.8 million individuals (U.S. Census Bureau, 2000b). Importantly, the immigration movement has also increased the amount of contact that any individual has with other ethnic and cultural traditions in domains outside the home, regardless of their background.

Furthermore, the recent economic recession and the terrorist attacks that occurred on September 11, 2001, have resulted in changing attitudes toward specific ethnic groups and immigrants over the last decade. Current research indicates that young adults who are African American and Muslim have difficulty integrating their religious beliefs with their ethnic identities as African Americans (Munsey, 2010). Britto and Amer (2007) found that Christian Arab Americans demonstrate greater cultural adaptation, stronger social support, and have fewer psychological symptoms in comparison to Muslim Arab Americans. Obtaining a sense of what one's own ethnicity means as well as forming a set of beliefs about other ethnicities are parts of a

process of development that occurs for individuals of all racial and ethnic backgrounds.

Difficulties may arise as a result of exposure to varying social norms, ethnic attitudes, behaviors, and traditional practices. It was proposed that the maintenance of a balanced awareness of one's own negative thoughts and feelings in the midst of such difficulties, through mindfulness and self-compassion, may help with the various problems associated with the development of a secure ethnic identity. As such, this study examined the relationship between these variables and investigated their impact on ethnic identity development.

Mindfulness

Historical knowledge of the efficacy of mindfulness is rich, though it has recently become an empirically studied phenomenon in the Western world. Mindfulness is thought to have developed out of Eastern spiritual traditions that suggest it could be cultivated through regular meditation practice and that the development of mindfulness would likely result in increases in positive personal qualities, such as awareness, insight, wisdom, compassion, and equanimity (Goldstein, 2002; Kabat-Zinn, 2000; Shapiro, Carlson, Astin, & Freedman, 2006). Mindfulness in Buddhist tradition has been considered a means to decrease mental suffering (Thera, 1992). In fact, mindfulness has been called the "heart" of Buddhist meditation (Kabat-Zinn, 2003; Thera, 1962). Mindfulness, however, is more than meditation. It is "inherently a state of consciousness," (Brown & Ryan, 2003) while meditation practice is simply a "scaffolding" used to develop the state, or skill, of mindfulness (Kabat-Zinn, 2005).

Mindfulness has been touted as an important phenomenon in both the clinical and empirical domains. Though some debate over the exact definition of mindfulness continues, especially over whether mindfulness is a multi- or unidimensional construct, a generally accepted definition suggests that mindfulness involves intentionally bringing one's complete

Ryan, 2003; Kabat-Zinn, 1990; Linehan, 1993; Marlatt & Kristeller, 1999). Another common definition of mindfulness is as a process that leads to a mental state characterized by nonjudgmental awareness of one's sensations, thoughts, bodily states, consciousness, and other factors in the environment, while encouraging openness, curiosity, and acceptance (Bishop et al. 2004; Kabat-Zinn, 2003). Shapiro and Carlson (2009) defined mindfulness as the awareness that arises through intentionally attending in an open and discerning way to whatever is happening in the present moment. Bishop et al. (2004) also propose an attitudinal component in the operational definition of mindfulness, referred to as the *orientation to experience*, which involves curiosity, nonstriving and acceptance. They further distinguish two components of mindfulness: one that involves self-regulation of attention and one that involves an orientation toward the present moment.

The basic premise underlying mindfulness practices is that experiencing the present moment nonjudgmentally and openly can effectively counter the effects of stressors, because excessive orientation toward the past or future when dealing with stressors can be related to feelings of depression and anxiety (Kabat-Zinn, 2003). It is further believed that by teaching people to respond to stressful situations reflectively rather than reflexively, mindfulness-based therapy (MBT) can effectively counter experiential avoidance strategies, or attempts to alter the intensity or frequency of unwanted internal experiences (Hayes, Luoma, Bond, Masuda, & Lillis, 2006). Experientially avoidant behaviors are generally maladaptive strategies and are believed to contribute to the maintenance of many, if not all, emotional disorders (Bishop et al., 2004; Hayes, Follette, & Linehan, 2004). Experiential acceptance, on the other hand, potentially

fostered through mindfulness, has been associated with higher quality of life (Wicksell, Melin, Lekander, & Olsson, 2009).

A large body of literature has supported the relationship between mindfulness and psychological symptoms. Hoffman, Sawyer, Witt, and Oh (2010) conducted a meta-analytic review of the efficacy of mindfulness-based therapy (MBT). The analysis was based on 39 studies with a total of 1,140 participants that received MBT for a range of conditions, including cancer, generalized anxiety disorder, depression, and other psychiatric or medical conditions. Results indicated that mindfulness-based interventions improve symptoms of anxiety and depression across a relatively wide range of severity, even when these symptoms are associated with other disorders, such as medical problems. The authors concluded that MBT may be associated with a general reduction in stress, perhaps by encouraging patients to relate differently to their physical symptoms so that when they occur, their consequences are less detrimental.

Shapiro, Brown, and Biegel (2007) lent preliminary supporting evidence that increases in mindfulness cultivated through mindfulness-based stress reduction (MBSR) mediated mental health outcomes in counseling psychology students. Carmody and Baer (2007) reported similar results, finding that improvements in psychological functioning were mediated by increases in mindfulness in individuals with stress-related disorders. Mindfulness mediation has long been considered helpful in decreasing stress, and the slow and deep breathing used in the practice has been found to alleviate bodily symptoms of distress by balancing sympathetic and parasympathetic responses (Kabat-Zinn, 2003).

Further, Brown and colleagues (Brown & Ryan, 2003; Carlson & Brown, 2005) found that trait measures of mindfulness are correlated with a variety of cognitive and affective indicators of mental health, including lower levels of emotional disturbance (e.g., depressive

symptoms, anxiety, and stress) and higher levels of well-being (e.g., vitality, positive affect, satisfaction with life). Self-report measures of mindfulness have also demonstrated positive correlations with openness to experience, emotional intelligence, and self-compassion, and negative correlations with neuroticism, psychological symptoms, thought suppression, difficulties in emotion regulation, alexithymia, dissociation, experiential avoidance, and absent-mindedness (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006).

Self-Compassion

In addition to mindfulness, self-compassion is an important concept in the Eastern conceptualization of human suffering. In the Buddhist tradition, compassion involves awareness and understanding of distress as well as a desire to alleviate it. It also involves the recognition that failures are a part of the human experience as well as an open-hearted willingness to face suffering rather than denying or avoiding it (Goldstein & Kornfield, 2001).

The Western conceptualization of self-compassion has been defined in numerous ways, with definitions containing similar themes and components. Gilbert and colleagues (Gilbert, 2000; Gilbert & Irons, 2004, 2005; Gilbert & Procter, 2006) conceptualized self-compassion as biologically-based capacities to care for others, particularly to enhance survival. Self-compassion is defined by these researchers as having concern for one's own well-being, being sensitive and sympathetic to one's own distress, tolerance of the distress without self-criticism or judgment, understanding of the cause of the suffering, and treatment of self with a tone of emotional warmth. Another commonly used definition of self-compassion is offered by McKay and Fanning (2000), who suggest that compassion is a set of three skills: understanding, or insight into how thoughts, feelings, and behavior influence each other; acceptance, or acknowledgment

of the facts of a situation without evaluation; and forgiveness, including recognition of wrongdoing, letting go of self-blame, and moving forward with intent to do better in the future.

Kristin Neff's conceptualization of self-compassion is multi-faceted and closest in similarity to Buddhist philosophy. Self-compassion, in Neff's approximation, is considered to include three essential elements: treating oneself kindly and without judgment, recognizing that failures and hardships are part of the larger, common human experience, and maintaining a balanced awareness of painful thoughts and feelings, rather than avoidance, suppression, or overidentification with them. Neff's conceptualization also distinguishes self-compassion from other constructs, such as self-centeredness, self-pity, and self-esteem (Neff, 2003a). Rather than an exclusive concern for one's own problems, compassion for others is fostered by the acknowledgment that suffering is a universal experience. Self-pity often includes a quality of becoming absorbed in one's own problems and forgetting that others have suffered, in conjunction with an overidentification with negative emotions. In addition, true self-compassion includes a desire to heal oneself kindly, with gentle efforts to change behavior that is distressful. Harsh self-judgment is often thought to be a motivator for many individuals, but selfcondemnation is theoretically linked to experiential avoidance and may actually hinder efforts to create change (Neff, 2003a).

Self-compassion is also considered to be conceptually distinct from self-esteem. One of the most commonly used definitions was developed by Rosenberg (1979), who described global self-esteem as an individual's positive or negative attitude toward his or her self as a totality. Since then, the ways in which self-esteem has been described in the literature have become more numerous as well as complex. For example, Neff and Vonk (2009) recently described self-esteem as an attitude toward self that is the result of an evaluative process in which personal

abilities, performance, or characteristics, are compared to standards of others, such that selfesteem is increased if respect or approval of others is apparent. The authors also noted that these comparisons often involve judgments about personal value or worth in important life domains and may rely on others' opinion about themselves.

Regardless of the exact language used to describe self-esteem, there exists a large, consistent body of literature demonstrating the impact of self-esteem on psychological health. Self-esteem is a strong predictor of psychological well-being and low self-esteem has been found to be related to psychological difficulties such as depression and anxiety in children, adolescents and the elderly (Harter, 1999; Rosenberg, 1985, 1989; Rosenberg, Schooler, Schoenbach, & Rosenberg, 1995; Wylie, 1979). It has also been demonstrated, however, that high self-esteem may be related to narcissism, self-absorption, and lack of concern for others (Seligman, 1995). Baumeister, Smart, and Boden (1996) found that individuals may engage in maladaptive behaviors such as ignoring, dismissing, or reacting aggressively to constructive feedback or viewpoints different from their own in effort to bolster their sense of self-esteem. In addition, individuals may engage in downward social comparisons in a manner that leads to increased prejudice against others as a means of preserving their sense of self (Neff & Vonk, 2009).

Interestingly, Kernis (2003) suggested that optimal self-esteem is stable and does not rely on contingent self-evaluation. Self-compassion, therefore, can also be considered a way of relating to oneself that is not based on evaluations, performance standards, or the approval of others. Baer (2010) further clarifies the distinction between self-compassion and self-esteem by noting that the latter focuses on caring for oneself and others rather than a need for higher achievements or greater recognition. In addition, self-compassion discourages harsh self-judgment and self-centeredness while encouraging individuals to notice that hardships and

failure are part of the human experience.

Neff (2009) demonstrated that self-compassion has a stronger negative association with social comparison, public self-consciousness, self-rumination, anger, and need for cognitive closure than does self-esteem. The study also found that self-esteem, but not self-compassion, was positively associated with narcissism. Additionally, self-compassion has been found to be a significant predictor of happiness, optimism, and positive affect (Neff & Vonk, 2009). It is also associated with greater psychological well-being and may provide a buffer against acute stressors (Neff, Kirkpatrick, & Rude, 2007).

Mindfulness and Self-Compassion

The relationship between mindfulness and self-compassion has been described in several ways. Some authors have described these constructs as separate while others have described them as components of one another, in that adopting a mindful stance toward the present moment includes an attitude of self-compassion. For example, Kabat-Zinn (2003) notes that mindful attention to the present includes an "affectionate, compassionate quality within the attending, [with] a sense of openhearted friendly presence and interest" (p. 145). Similarly, Marlatt and Kristeller (1999) suggest that mindfulness involves paying attention to the present with an attitude of "acceptance" and "loving-kindness."

Other authors have alluded to the relationship between mindfulness and self-compassion by highlighting the importance of a recognized difference between elements and outcomes.

Rather than a facet of mindfulness, Bishop and colleagues (2004) suggest that self-compassion may be the result of practicing mindfulness over time. Brown, Ryan, and Creswell (2007) also suggest that self-compassion may be an outcome associated with mindfulness or an attitude that helps cultivate it. In Neff's conceptualization (2003a), mindfulness is one of three components of

self-compassion, all of which are described as reciprocally facilitating and enhancing one another. For example, a mindful, nonjudgmental stance toward ongoing experience reduces self-criticism and helps feelings of self-kindness and connectedness with human experience to grow. Simultaneously, self-compassion is thought to reduce the impact of negative thoughts and emotions, making it easier to remain mindfully aware of them and reduce the likelihood of negative rumination.

There is preliminary evidence that mindfulness training leads to higher levels of self-compassion (Moore, 2008; Shapiro, Astin, Bishop, & Cardova, 2005; Shapiro et al., 2007). For example, Shapiro et al. (2007) studied the effects of mindfulness-based stress reduction (MBSR; Kabat-Zinn, 1982, 1990) on a group of therapists in training and compared them to a group of graduate students who did not receive the MBSR program. Participants who received MBSR demonstrated significant decreases in perceived stress, negative affect, anxiety, and rumination, and increases in positive affect, mindfulness, and self-compassion. The degree of change in mindfulness was correlated with the degree of change in self-compassion, rumination, anxiety, and perceived stress. The authors suggested that increased mindfulness may be partially responsible for the other outcomes and recommended that full mediational analyses be conducted to confirm their findings (Shapiro et al., 2007).

Prior to the current study, researchers at the University of Albany, State University of New York (SUNY) had conducted the most current research (of which the author is aware) on the relationships among mindfulness, self-compassion, and psychological constructs such as distress and quality of life. Van Dam, Sheppard, Forsyth, and Earleywine (2010) compared the ability of the Self Compassion Scale (SCS; Neff, 2003b) and the Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) to predict anxiety, depression, worry, and quality of life in

a sample of 504 individuals seeking self-help for anxious and depressive distress. Importantly, their findings suggest that self-compassion is a more robust predictor of depressive and anxious symptoms and quality of life than is mindfulness as measured by the MAAS. The SCS uniquely accounted for between 10 and 27% of the variance in the individual outcome variables as compared to only 1 to 3% of variance accounted for by the MAAS. The Pearson's r correlation between the SCS and the MAAS was found to be .428, p < .01, suggesting that these measures of self-compassion and mindfulness tap into different constructs.

In addition, the mindfulness subscale of the SCS is likely to measure a different latent construct than that of the MAAS, given that the partial correlation was found to be .097, p < .05. Importantly, Van Dam et al. concluded that it is the SCS as a whole, rather than its mindfulness subscale, that makes it a more robust predictor of depressive and anxious symptomatology. The Van Dam et al. project was the first study to directly assess the individual contributions of self-compassion and mindfulness in relation to anxiety and depression. However, further research is needed to clarify whether findings are limited to the use of a particular measure of mindfulness (the MAAS) rather than the underlying construct. The current study attempted to address some of the weaknesses in previous literature by assessing the degree of overlap between mindfulness and self-compassion with the use of another mindfulness measure, the Kentucky Inventory of Mindfulness Skills (KIMS; Baer et al., 2004). Additionally, the present project assessed the extent to which mindfulness and self-compassion contributed to another important aspect of psychological functioning—ethnic identity status.

Identity Formation

A dominant aspect of human experience is the sense of one's unique existence (Bruner, 1994, 2002). This individual search for meaning, as Bruner (1996, 2002) suggests, is synthesized

in the self-concept, or in the construction of one's own identity. Identity can be considered a synthesis of personalized and subjective clusters of different selves: current self, relational self, past, future and possible selves, the unconscious self, and so on. Weinreich (1980, 2003, 2009) defined a person's identity as the totality of one's self-construal, which incorporates and expresses a continuity of self in the past, present, and future.

The formation of identity can happen in a variety of ways for different individuals. It is suggested that environmental and situational factors play a significant role in various pathways of identity formation (Kroger & Haslett, 1987, 1991). In addition, there are several studies that describe the construction of self as based upon a reciprocal relationship between the individual and his or her context, which may include the social, economic, and cultural conditions of the person's environment (Adams et al., 2001; Dunkel, 2002; Jensen, Kristiansen, Sandbekk, & Kroger, 1998; Stegarud, Solheim, Karlsen, & Kroger, 1999). This literature has noted that context also includes the significant others in an individual's life. As such, the construal of identity in relation to important individuals and groups, or the relational self, is an important component in identity formation (Andersen & Chen, 2002).

Ethnic Identity

The study of the relational self has been subdivided into two major categories: the development of identity in relation to another *individual* or with a particular *group*. The present study focuses on an individual's construal of self in relation to others who share the same ethnicity. An ethnic identity refers to a specific construction of self that involves a shared sense of identity with others who belong to the same ethnic group. Ethnicity cannot be chosen by the individual, but rather is determined at birth or assigned to one on the basis of ethnic background

or phenotype. Nevertheless, people have choices about how they deal with their assigned ethnic categories and in the meanings that they attribute to their group membership.

Accordingly, ethnic identity is considered a multidimensional construct that is dynamic and changes over time, context, and with life experience (Phinney & Ong, 2007). Two distinct approaches have been used to study ethnic identity: social identity theory (Tajfel & Turner, 1986) and the developmental theories of Erikson (1968) and Marcia (1966; 1980). Social identity theory posits that group identity is an important part of the self-concept; individuals generally attribute value to the groups in which they belong and derive self-esteem from their senses of belonging to that group. As such, ethnic identity is considered one type of group identity that is central to the self-concept of members of ethnic minority groups.

From this theoretical perspective, ethnic identity is an aspect of social identity, defined by Tajfel (1981) as "that part of an individual's self-concept which derives from [his] knowledge of [his] membership of a social group (or groups) together with the value and emotional significance attached to that membership" (p. 255). Ethnic identity is also considered conceptually different than an individual's racial identity. Helms (2007) noted that the study of racial identity has focused on responses to racism and measures of the construct assess experiences related to internalized racism. In contrast, the study of ethnic identity has focused on the sense of belonging to an ethnic group as defined by one's cultural heritage, values, traditions, and language.

A second approach to the study of ethnic identity has been based upon both Erikson's theory of identity development (1968) and Marcia's developmental model of ego identity formation (Marcia, 1966, 1980). Identity formation is considered to take place through a process of exploration of identity issues and alternatives, and commitment, or decisions regarding one's

direction and purpose in key areas. Stated differently, exploration is a process in which the individual actively searches for his or her own identity through different options, goals, actions, and beliefs. Commitment represents the actual resolution of identity issues by adhering to selected goals or beliefs. From a developmental perspective, this process typically occurs during adolescence and an individual's identity is typically seen as changing from a less mature to a more mature form over time, but not necessarily through a linear path (Newman, 2005; Waterman, 1982).

Marcia (1966) proposed four distinct ego identity statuses: diffusion, foreclosure, moratorium, and identity achievement. These stages depend on the presence and absence of exploration and commitment, and describe the process of identity development throughout the course of an individual's life. While Marcia (1966, 1980) primarily focused on personal identity formation, Phinney (1989) extended Marcia's descriptions of ego statuses to encompass the process of ethnic identity formation. The ethnic identity statuses in this model are also defined by the presence or absence of exploration and commitment. Exploration, in regard to ethnic identity, involves learning about one's ethnic group and its implications for one's life. Commitment refers to a decision regarding the meaning of one's ethnicity and the way one will live as a group member.

The ethnic identity diffuse individual shows little interest in or little understanding of his or her ethnicity; as such he or she is considered the least mature status and lacks both exploration and commitment. Ethnic identity foreclosed individuals may show pride in their ethnicity and have a distinct sense of belonging to a group; however, their views are largely derived from outside sources. Foreclosed individuals have not engaged in the process of exploring the meaning of their ethnicity for themselves. Ethnic identity moratorium individuals are either

currently exploring the meaning of their ethnicity, or they have already learned and understood their ethnicity. They have not committed to a decision about the role that their ethnicity plays in their life, however, and may remain unclear or ambivalent about their sense of membership to the group. These two statuses lack one of the necessary requirements for an achieved ethnic identity status. The most mature status is characterized by both exploration and commitment, and this type of individual is described as the achieved ethnic identity. He or she has made an effort to understand the meaning and implications of his or her ethnic group membership and has a clear sense of belonging based on that knowledge. It is implied that a person with an achieved status has examined attitudes toward the group and has independently evaluated them, such that internalizations are not simply the result of the opinions of important others.

In addition to exploration and commitment, there are several other components that are important in conceptualization and measurement of ethnic identity. In order to be part of an ethnic group, a person must self-identify as such, and it has been well documented that individuals use different labels at different times (Portes & Rumbaut, 2001). Self-identification is an important component for ethnic identity researchers to consider in making comparisons across groups, but it is the importance and salience of these labels that influences the psychology of the individual. For example, it has been shown that minority groups attribute greater importance to their ethnicity than do members of the majority, and that salience on a daily basis is associated with positive well-being for individuals with high ethnic identity but not for those with a low ethnic identity (Phinney & Alipuria, 1990; Yip & Fuligni, 2002).

Participation in ethnic behaviors, such as speaking the language, eating the food, and associating with members of one's ethnic group, has also been used as an indicator of ethnic identity in several measures (Felix-Ortiz, Newcomb & Meyer, 1994; Phinney, 1992). These

behaviors are considered to be expressions of identity and are closely linked with the process of exploration. In a factor analysis, Umaña-Taylor, Yazedjian, & Bamaca-Gomez (2004) found that an evaluation of one's ethnicity is a distinct component of ethnic identity, separate from the processes of exploration and commitment. While the interpretation of this finding is tentative due to a lack of variance in the wording of the items used, the authors' assumption that one can hold a negative attitude about one's ethnicity and yet remain behaviorally committed to the group is an important consideration in the measurement of the construct.

A component of ethnic identity that is often evaluated by individuals is the traditional set of values and beliefs the group holds, such as familism for Latinos and filial piety for Asians. Given that the assessment of values and beliefs differs across groups, most measures of ethnic identity have been atheoretical and have focused on unique aspects of specific groups such as Mexican Americans (Felix-Ortiz et al., 1994; Garcia, 1982), Chinese Americans (Ting-Toomey, 1981), or Cubans (Garcia & Lega, 1979). In order for researchers to examine similarities and differences across ethnic groups, however, ethnic identity has also been considered a broad concept with common characteristic across various ethnic groups. Phinney's literature review of ethnic identity research (1990) identified several components that are considered central to the construct and have been used in studies across a wide span of ethnic groups.

These fundamental components served as the basis for assessing ethnic identity across diverse samples and comprise Phinney's Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). Facets include a sense of attachment or belonging, the concept of an achieved identity, and involvement in ethnic practices, which are assessed by the three major subscales of the MEIM, Affirmation and Belonging, Ethnic Identity Achievement, and Ethnic Behaviors.

Specifically, items measure the strength and valence of one's ethnic identity, including

attachment, pride, and good feelings about one's ethnicity. The MEIM also assesses the extent to which a person has achieved a secure sense of his or her ethnicity, through items that assess both exploration (efforts to learn about one's ethnic group) and commitment (understanding of one's ethnicity). A third aspect of ethnic identity included in the MEIM involves behaviors associated with ethnicity such as customs, traditions, and social interactions. Importantly, the scale also includes the assessment of ethnic self-identification or labeling.

Individuals appear to derive positive self-attitudes from belonging to groups that are meaningful to them (Phinney, 1989; Tajfel & Turner, 1986). Roberts et al. (1999) found that, across ethnic groups, MEIM scores have a moderately strong positive correlation with the degree of salience that a person's ethnicity has in his or her life. It is also suggested that a well-developed ethnic identity serves as a secure position that allows people to be more open and accepting toward those from other ethnic groups. In a study by Phinney, Jacoby, and Silva (2007), 1713 college freshmen were surveyed on their attitudes toward other groups. Results indicated that Asian American and Latino students with an achieved ethnic identity, as measured by the MEIM, reported significantly more positive attitudes toward other ethnic groups than did those individuals in identity diffusion. Ethnic identity-achieved individuals also demonstrated greater awareness and understanding of intergroup relations than did those in identity diffusion.

Ethnic identity has been found to correlate positively with measures of psychological well-being, such as coping ability, mastery, self-esteem, and optimism, and negatively with measures of loneliness and depression (Roberts et al., 1999). Phinney and Kohatsu (1997) presented evidence that ethnic identity diffusion is positively correlated with low self-regard and feelings of inadequacy whereas ethnic identity achievement is associated with a positive self-concept and the absence of psychological distress. In fact, a large body of work has shown a

consistent positive correlation between ethnic identity and self-esteem (Belgrave et al., 1994; Phinney, 1992; Phinney, Cantu, & Kurtz, 1997; Wright, 1985).

Problems in developing a stable ethnic identity, or ethnic identity conflict (EIC), have also been associated with depression, social difficulty, and behavioral problems and negatively correlated with measures of life satisfaction and school adjustment (Ward, 2008). Additionally, strong national and ethnic identities are both associated with decrements in EIC (Stuart, 2007). Ethnic identity conflict has also been found to share some common features with Marcia's (1994) notion of moratorium (Stuart, 2007). It has been suggested that the lack of commitment may be based more on the perceived incompatibility of multiple identities than the tentative exploration of options. Several studies have indicated that difficulties in choosing traditional versus modern values is a significant source of ethnic identity conflict, along with broader patterns of tension and harmony between parents and children (Lin, 2006). There is even stronger support for the influence of intergenerational conflict, regarding issues such as the retention of the ethnic language and the practice of ethnic traditions, on identity conflict in adolescents and young adults (Stuart, 2007). Conversely, research shows that family cohesiveness and congruence mitigate against identity conflict in migrant youth, as does a secure attachment style (Lin, 2006; Stuart, 2007).

Purpose of this Study

The development of a stable sense of ethnic identity is important for psychological health. It has been shown that problems in forming a secure sense of ethnic identity are associated with symptoms of depression, low self-esteem, feelings of inadequacy, and social difficulty, amongst numerous other psychosocial troubles. Given that the United States continues to have a growing number of immigrants, individuals who are of mixed ethnic and racial

backgrounds, as well as persons who experience varying ethnic attitudes in the home, school, and workplace, it is important to understand what factors may help contribute to the development of a secure sense of ethnic identity.

As individuals explore the meaning of their ethnic identity by engaging in various ethnic practices and customs, they are likely to experience a continuum of positive and negative thoughts and feelings about themselves as a part of their ethnic groups. Those individuals who are mindfully aware of these thoughts and emotions, and who are self-compassionate when difficulties inevitably arise, may have a higher capacity to tolerate distress associated with the development of identity. This particular study investigated the relationships among mindfulness, self-compassion, and ethnic identity status and specifically tested the following hypotheses:

Hypotheses

Hypothesis 1a. Mindfulness was expected to have a positive correlation with self-compassion and self-esteem.

Hypothesis 1b. Self-compassion was expected to have a positive correlation with self-esteem.

Hypothesis 2a. Mindfulness would be a significant predictor of ethnic identity status, such that individuals with higher levels of mindfulness would have a better developed ethnic identity.

Hypothesis 2b. Self-compassion would be a significant predictor of ethnic identity status, such that those with higher levels of self-compassion would have a better developed ethnic identity.

Hypothesis 3a. Self-compassion would be a better predictor of ethnic identity status than mindfulness.

Hypothesis 3b. Self-compassion would moderate the effect that mindfulness has on ethnic identity status, such that higher levels of self-compassion would increase the likelihood of having a well-developed ethnic identity given equal levels of mindfulness.

CHAPTER 2

METHOD

Participants

Participants of this study were undergraduate students enrolled in the University of North Texas. They voluntarily chose to take part in the study through the Sona-System as part of their course curriculum or for extra credit, and completed an online survey that included a number of self-report measures. To be included in the study, participants had to be at least 18 years of age. No other specific inclusionary or exclusionary criteria were made.

A total of 497 participants logged on to the survey website, provided consent, and completed some part of the survey (e.g., demographics questionnaire). Several participants needed to be removed from the database for a variety of reasons, which are further addressed in the Results section. Data from a total of 479 participants that completed the survey in its entirety were used in statistical analyses (N = 479). Descriptive information, including age, gender, ethnicity, birth place, and other significant demographic characteristics of the sample were obtained and are presented in Table 1. Mean age of the sample was 21.08 years (SD = 4.37), with a range of 18 to 65 years. In regard to gender, the sample was 69.3% female (n = 332) and 30.7% male (n = 147). The following ethnic demographic characteristics were observed in the sample, which are similar to the general university population: 58.0% White/Caucasian (n = 278), 12.5% Hispanic/Latino (n = 60), 11.5% African American/Black (n = 55), 7.7% Biracial (n = 37), 7.3% Asian/Pacific Islander (n = 35), 2.5% "Other" (n = 12), 0.2% Middle Eastern/Arab (n = 1), and 0.2% Native American (n = 1). Foreign-born participants comprised 10.2% of the sample (n = 49), while 89.8% of participants were born in the United States of America (n = 430).

Information on religious preferences, annual income, and other demographic characteristics were obtained and are presented in Table 1.

Measures

Participants completed a demographics questionnaire, as well as four self-report measures in a single, online administration using the participant database Survey Monkey. The self-report instruments measured specific variables including mindfulness, ethnic identity status, self-compassion, and self-esteem. Descriptive statistics for each variable of interest are included in Tables 2 and 3. The informed consent form and all questionnaires, as they were presented to the participants, are included in the appendix.

Demographics questionnaire. The questionnaire required participants to provide demographic information such as age, gender, self-identified ethnicity and ethnicity of parents, birth place, and birth place of parents, first language, religious preference, annual income, as well as other general demographic variables.

The Kentucky Inventory of Mindfulness Skills (KIMS). The Kentucky Inventory of Mindfulness Skills (KIMS; Baer et al., 2004) is a self-report measure that is designed to assess distinct components of mindfulness across a wide range of populations, including individuals with no previous exposure to mindfulness exercises and meditation. The facets of mindfulness assessed by this scale include: observing, or attending to internal and external stimuli, describing, or labeling of phenomena that is noticed, acting with awareness, or engaging in present-moment activity without distraction, and accepting, or allowing experience without judgment. The KIMS items are on a 5-point Likert-type scale ranging from 1 (never true) to 5 (almost always or always true).

Norms for the KIMS were established using three separate samples: two student samples consisting of 205 and 215 undergraduates, respectively, and a clinical sample consisting of 26 adults diagnosed with borderline personality disorder (BPD). Internal consistency estimates in both student samples and the clinical sample were satisfactory to excellent, ranging from .76 to .91. Test-retest reliabilities were conducted on a sample of 49 students after a 14 to 17 day time interval. Test-retest reliabilities ranged from .65 to .86, indicating adequate to good stability across time. All of the subscales of the KIMS, except for the observe facet, display moderate to strong correlations (r = .24 to .57) with the Mindful Attention and Awareness Scale (MAAS; Brown & Ryan, 2003). Additionally, the subscales of the KIMS have demonstrated convergent validity with measures of constructs theoretically related to mindfulness (e.g., emotional intelligence, life satisfaction, and openness) and divergent validity in regard to measures of general symptomatology, neuroticism, alexithymia, experiential avoidance, and dissociation (Baer et al., 2004).

Currently, research that has investigated the factor structure and psychometric properties of mindfulness questionnaires has found support for the conceptualization of mindfulness as a multifaceted construct (Baer et al, 2006). In the current study, the four subscales of the KIMS were summed to obtain a composite score, which was then used in analyses as a measure of an individual's overall mindfulness skills. The internal consistency for the composite score in this sample is adequate, $\alpha = .78$. The subscales of the KIMS were also examined in an exploratory fashion, and their internal consistencies ranged from acceptable to good: Observing ($\alpha = .87$), Describing ($\alpha = .86$), Acting with Awareness ($\alpha = .73$), and Accepting ($\alpha = .87$).

The Multigroup Ethnic Identity Measure (MEIM). The Multigroup Ethnic Identity

Measure (MEIM; Phinney, 1992) is a 14-item self-report measure that is designed to assess an

individual's ethnic self-identification and is appropriate for use with ethnically diverse samples. The MEIM has three subscales that measure components of ethnic identity: affirmation and belonging, or a sense of group membership and attitudes toward the individual's group; ethnic identity achievement, or the extent to which a person has achieved a secure sense of ethnicity; and ethnic behaviors, or activities associated with group membership, as well as a total score. Items are rated on a 4-point Likert-type scale, ranging from 1 (*strongly disagree*) to 4 (*strongly agree*), and higher total scores on the MEIM indicate stronger ethnic identity. For this study, the total score of the MEIM was used as a measure of strength in ethnic identity for analyses relevant to hypothesis testing. The subscales of the MEIM were also examined to provide additional information relevant to exploratory analyses. Additional items, not included in the total score, assessed ethnic self-identification and ethnicity of parents.

Also included in the questionnaire were 6 items designed to assess attitudes toward other groups, or other-group orientation. Although this a conceptually different construct than ethnic identity, these items were included in the study to obtain more detailed information about the participants. Other-group orientation items were not included in the MEIM total score.

The MEIM was normed on two student samples consisting of 417 high school students and 136 college students, both from ethnically diverse schools. Overall internal consistency reliability was found to be .81 in the high school sample and .90 in the college sample (Phinney, 1992). Three subscales demonstrated adequate to strong internal consistency estimates, ranging from .69 to .86, and the 6-item other-group orientation showed estimates of .71 and .74 for the high school and college sample, respectively. The MEIM demonstrated adequate to good internal consistency in the current study, with the exception of the Ethnic Behaviors subscale: Total (α = .89), Affirmation and Belonging (α = .88), Ethnic Identity Achievement (α = .80), Ethnic

Behaviors (α = .51), and Other-Group Orientation (α = .76). The less than satisfactory internal consistency estimate for the Ethnic Behaviors subscale is likely a result of the low number of items (2 items) that comprise the scale.

The Self-Compassion Scale (SCS). The Self-Compassion Scale (SCS; Neff, 2003b) is a 26-item self-report measure designed to assess self-compassion in six domains: self-kindness, or extending kindness and understanding to oneself; judgment, or harsh self-criticism; common humanity, or seeing one's experiences as part of the larger human experience; isolation, or viewing one's problems as unique and separate from others; mindfulness, or holding one's painful thoughts and feelings in balanced awareness; and over-identification, or an over-emphasis on thoughts and feelings.

The SCS is comprised of six subscales that are paired into three general groups: self-kindness vs. judgment, common humanity vs. isolation, and mindfulness vs. over-identification. Individuals are instructed to indicate how often they act in the manner stated in each of the items using a Likert-type scale ranging from 1 (almost never) to 5 (almost always). Similar to previous research using the SCS, the mean of the subscale scores on the SCS were summed to create a total score that represents an individual's overall level of self-compassion. In the present study, the total score of the SCS was used for all analyses relevant to hypotheses testing. The subscales of the SCS were also examined to provide additional information relevant to exploratory analyses.

Norms for the SCS were established on two samples of undergraduate students from an educational-psychology subject pool (n = 391 and n = 232). Overall internal consistency reliability of the SCS was found to be .92, with subscale internal consistency estimates ranging from .75 to .81. The SCS was administered twice over a 3-week time interval to establish test-

retest reliability. Results suggest good test-retest reliability, .92 for the overall score, and subscale reliabilities ranging from .80 to .88. Convergent validity of the SCS has been established with measures of constructs related to self-compassion, including social connectedness, emotional intelligence, and life satisfaction. The SCS has also demonstrated divergent validity with significant negative correlations with measures of self-criticism, neurotic perfectionism, anxiety, and depression (Neff, 2003b). Internal consistency estimates ranged from good to excellent in the present sample: Total (α = .93), Self-Kindness (α = .86), Judgment (α = .84), Common Humanity (α = .82), Isolation (α = .78), Mindfulness (α = .80), and Over-Identification (α = .78).

The Rosenberg Self-Esteem Scale (RSES). The Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1989) is a 10-item self-report measure that is used to assess an individual's global self-esteem. The measure uses a 4-point Likert-type scale, ranging from 1 (strongly disagree) to 4 (strongly agree), and counterbalances positive and negatively worded items to avoid response bias. The RSES is considered a unidimensional scale, with higher scores indicating greater self-esteem. Example items include "All in all, I am inclined to feel that I am a failure" and "I take a positive attitude toward myself" (Rosenberg, 1989). The items of the RSES were appropriately reverse-scored and summed to create the total score of the RSES, which was utilized in the current study to measure the participants' self-esteem.

The RSES was initially developed to assess self-esteem in a sample of 5,024 adolescents in New York (Rosenberg, 1965). Since that study, psychometric studies have largely supported the unidimensionality of the scale (Corwyn, 2000; Dunbar, Ford, Hunt, & Der, 2000). Schmitt and Allik (2005) translated the RSES into 28 languages and the scale was administered to 16,988 participants from 53 different nations. Results of the principal components analysis indicated

that, for most nations, the factor structure was one-dimensional with all items highly loaded on the first principal component. Some studies have resulted in a two-factor solution (Goldsmith, 1986; Wang, Siegel, Falck, & Carlson, 2001), with the two factors reflecting positively and negatively worded items.

A number of studies have supported the reliability and validity of the RSES. Rosenberg (1979) reported an internal consistency reliability of 0.92, while a two-week, test-retest reliability was found to be .88 for a sample of college students (Silber & Tippet, 1965). The RSES has often been referred to as the gold standard of measurement of self-esteem and has been used in numerous settings and with a wide variety of cultures. Internal consistency reliability for the current study was found to be 0.91.

Procedure

Participants were informed about the current study through the Sona-system, at which point they voluntarily signed up to complete it. After sign-up, participants were asked to follow a link to the Survey Monkey website to complete the online survey. They were initially presented with the informed consent form and asked to read and consent to their participation. Consent was assumed if the participant clicked "yes" on the consent form and continued with the survey. Upon completion of the informed consent form, the participants were first presented with the demographics questionnaire, followed by the self-report measures in a specific order of critical variables: the KIMS, MEIM, SCS, and RSES. The participants were then automatically re-routed to a separate survey that requested them to provide their contact information for Sona credit. Each participant that completed the survey and provided their contact information was granted one Sona credit. The total time required for completion of the study was 15 to 30 minutes. The

Survey Monkey website was password-protected and all participant data was kept separate from information that could be considered personally identifiable.

CHAPTER 3

RESULTS

Preliminary Data Analysis

Following general screening guidelines set forth by Tabachnick and Fidell (1996), the distribution and pattern of missing data was first evaluated. There were 537 individuals that opened the website link; however, it was discovered that 40 of these participants did not provide their consent and therefore were not allowed to move forward nor provide any data. An additional three participants completed the consent but did not provide any data relevant to hypothesis testing. These 43 cases were deleted.

The online survey was designed such that all items on a displayed webpage had to be entered before clicking to the next page. This was done in efforts to reduce missing data, but likely resulted in some participants terminating their participation at page breaks. There were 10 cases that had missing data on the outcome measures, and the attrition in each of these cases appeared to be consistent with described page breaks. Each of these 10 cases was therefore deleted. There was one case in which the point of attrition could have occurred at a point directly related to question content, but that was deemed unlikely given the pattern of all other responses.

Participant IP addresses and demographic information were then examined, and 3 additional cases were removed due to completion of the survey multiple times by the same individuals. Finally, another 2 cases were deleted because the participants were less than 18 years of age. The remaining 479 cases had no missing data and were further examined to assess their appropriateness for statistical analyses.

Standardized scores and frequency histograms were examined for univariate outliers on variables relevant to hypothesis testing: the composite score of the KIMS and the total scores of

the MEIM, SCS, and RSES. The suggested *Z*-score of +/- 3.29 was used as the value of significance (Tabachnick & Fidell, 1996). One case was found to have an extreme value on the KIMS, but no other measure relevant to hypothesis testing. As one extreme score on a single measure would not significantly impact the overall mean, this case was not removed. It was also determined that there were no multivariate outliers in the sample. All variables relevant to hypothesis testing were then examined to determine if the normality assumption was met. Specifically, skewness and kurtosis data were examined to determine if the distribution of variables deviated from a normal distribution. Using the calculation for excessive skewness and kurtosis (skewness/standard error of skewness and kurtosis/standard error of kurtosis), as suggested by Tabachnick and Fidell (1996), an absolute value of 3.3 or greater was used to determine significant deviations from normality. Examination revealed that no variables were significantly skewed or kurtotic.

Hypothesis Testing

Prior to hypothesis testing, the assumptions corresponding to each statistical test were assessed through graphic exploration and/or through statistical analyses. All variables, independent and dependent, were examined to determine if the normality assumption was met for hierarchical multiple regression. In order to conduct the regression analyses, preliminary analyses were conducted to ensure that there were no violations of the assumptions of linearity, homoscedasticity, and homogeneity of error variance. A series of correlations were conducted to test the assumption of multicollinearity (see table 5 and 11). No variables utilized in hypotheses testing were found to have correlations large than .70, which would suggest no concern about multicollinearity (Tabachnick & Fidell, 1996). Additionally, the correlation coefficients, tolerance and variance inflation factor (VIF), were examined. The tolerance coefficient was

found to be greater than .20 and VIF was found to be below 4, indicating that the assumption of multicollinearity was not violated (Howell, 2010). Visual inspection for univariate and multivariate outliers through the use of scatterplots further indicated the lack of outliers.

Finally, the assumptions of linearity, homoscedasticity, and homogeneity of error variance were further examined for each regression equation with a series of scatterplots. Normal probability plots and standardized residual scatterplots were visually examined. Visual inspection of these plots indicated that there were no violations. Bivariate scatterplots, however, indicated a nonlinear relationship between each independent variable (composite score of the KIMS and total score of the SCS) and the dependent variable. As such, square root data transformation of the dependent variable (total score of the MEIM) was performed. Heteroscedasticity was reduced after the transformation, but visual inspection of scatterplots indicated that the relationships between the independent and dependent variables was less than ideal. However, given that minor deviations from linearity tend to weaken, rather than invalidate, the likelihood of statistical significance in regression analyses, it was deemed appropriate to proceed with the analyses.

Hypothesis 1. The hypotheses that mindfulness would have positive correlations with self-compassion and self-esteem, and that self-compassion would have a positive correlation with self-esteem, were analyzed through a series of Pearson's product moment correlations.

Hypothesis 1a. Pearson's product moment correlations were conducted between the composite score of the KIMS and the total score of the SCS (r = .44, p < .01). The composite score of the KIMS was also correlated with each of the SCS subscales; see Table 6 for a complete summary of the results. A Pearson product moment correlation was conducted on the composite score of the KIMS and the total score of RSES (r = .50, p < .01). As such, the

hypotheses that mindfulness would have positive correlations with self-compassion and selfesteem were supported.

Hypothesis 1b. A Pearson's product moment correlation was conducted between the total score of the SCS and the total score of the RSES (r = .67, p < .01). The hypothesis that self-compassion and self-esteem would be positively correlated was supported. Please refer to Tables 6, 7, 8, and 11 for complete summaries of correlations among variables of interest.

Hypothesis 2. The hypothesis that mindfulness (a) and self-compassion (b) would be significant positive predictors of ethnic identity status was analyzed through a multiple regression model.

Hypothesis 2a & b. A multiple regression analysis was conducted using two independent variables, the composite score of the KIMS and the Total Score of the of the SCS, with the transformed total score of the MEIM as the dependent variable. Mindfulness and self-compassion accounted for a significant portion of the variance in ethnic identity status scores, $R^2 = .12$, Adj. $R^2 = .12$, F(2, 476) = 32.52, p < .001. Mindfulness and self-compassion significantly predicted ethnic identity status, such that as mindfulness and self-compassion scores increased, strength in ethnic identity status scores decreased; see Table 9. As such, hypotheses 2a and 2b were not supported. Specifically, findings indicated that mindfulness and self-compassion had a negative predictive relationship on ethnic identity status, rather than positive as was expected.

Hypothesis 3. A series of regression analyses were used to test the hypothesis that (a) self-compassion would better predict ethnic identity status than mindfulness and (b) that self-compassion would moderate the effect that mindfulness has on ethnic identity status.

Hypothesis 3a & b. The moderation analysis was conducted as outlined in Frazier, Tix, and Barron (2004). In the first step of the analysis, the predictor variables (the composite score of the KIMS and the total score of the SCS) were centered by subtracting the sample means to produce revised sample means of zero. After centering each variable, a product term was created to represent the interaction between the independent variable (total mindfulness score) and the moderator variable (total self-compassion score). The product term was created by multiplying the centered mindfulness score variable with the centered self-compassion score variable (Frazier, Tix, & Barron, 2004).

The final step of the moderation analysis utilized a hierarchical multiple regression. The composite score of the KIMS, Total Score of the SCS, and product term were entered as independent variables and the transformed Total Score of the MEIM served as the dependent variable. The mindfulness score was entered into step 1, explaining 7.6% of the variance in ethnic identity status scores ($R^2 = .078$, adj $R^2 = .076$, $\beta = -0.279$, p < .001). After the entry of the self-compassion score at step 2, the total variance explained by the model was 11.7% (R^2 change = .042, $\beta = -0.230$, p < .001). Self-compassion accounted for an additional 4.1% of the variance in ethnic identity status scores, above and beyond that of mindfulness. As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was supported.

In the final step of the analysis, the product term was entered. After the entry of the product term, the total variance explained by the model as a whole was 11.7% (R^2 change =.002, β = .048, p > .05; see Table 10). While the model as a whole was significant, the product term did not significantly contribute to variance in total MEIM scores. In other words, there was not a significant proportion of the variance explained by the interaction of mindfulness and self-

compassion total scores. Thus, the hypothesis that self-compassion would moderate the interaction between mindfulness and ethnic identity status was not supported.

Exploratory analyses. In addition to the main hypotheses, several exploratory analyses were conducted to examine the relationship between mindfulness, self-compassion, and ethnic identity status. These analyses were run with distinct subgroups of the larger sample in efforts to explain the unexpected direction of hypothesis two (i.e., mindfulness and self-compassion negatively predicting ethnic identity status) and gather specific information about factors relevant to hypothesis three.

Due to the fairly small number of participants belonging to ethnic minority groups, a moderate estimate of required number of participants per group was used to conduct exploratory analyses. This calculation, suggested by Tabachnick and Fidell (1996), incorporates both effect size and the number of predictors in a regression analysis. It was determined that the minimum number of participants needed in each group was greater than or equal to 55. As such, Hypotheses 2 and 3 were examined with the following subsets of participants considered to have sufficient sample sizes: Caucasians (n = 278; ethnic majority), participants belonging to all other ethnic minority groups (n = 201; ethnic minority), Hispanic/Latino (n = 60), African American (n = 55), Christian (n = 306), Non-Christian (n = 173), Agnostic (n = 68), and those who had no religious preference, None (n = 69).

Before conducting the regression analyses, the data from each subset was screened for univariate and multivariate outliers and examined to determine if the assumptions of normality, linearity, homoscedasticity, and homogeneity of error variance were met. No univariate or multivariate outliers were found. Similar to the main analyses, bivariate scatterplots indicated a nonlinear relationship between each independent variable and the dependent variable. As such,

square root data transformation of the dependent variable (Total Score of the MEIM) was performed for the following subsets: ethnic majority, ethnic minority, Hispanic/Latino, African American, and Christian samples. Heteroscedasticity was reduced after the transformations, but the relationship between independent and dependent variables remained less than ideal. No other violations were noted. No violations of assumptions were found in the Agnostic group or with those who had no religious preference; as such, transformation was deemed unnecessary with these two samples.

Ethnic majority and minority. In the sample of Caucasian participants, mindfulness and self-compassion accounted for a significant portion of the variance in ethnic identity status scores, $R^2 = .16$, adj. $R^2 = .16$, F(2, 275) = 26.49, p < .001. In the sample of participants belonging to the ethnic minority, mindfulness and self-compassion accounted for a significant portion of the variance in ethnic identity status scores, $R^2 = .08$, adj. $R^2 = .07$, F(2, 198) = 8.88, p < .001. In both the ethnic majority and minority samples, mindfulness and self-compassion significantly predicted ethnic identity status, such that as mindfulness and self-compassion scores increased, strength in ethnic identity status scores decreased. As such, Hypotheses 2a and 2b were not supported. Specifically, findings indicated that mindfulness and self-compassion had a negative predictive relationship on ethnic identity status, rather than positive as was expected.

Hypotheses 3a and 3b were tested using the same moderation analysis procedure as described in the primary data analysis section with both subsets of participants. In the sample of Caucasian participants, mindfulness was entered into step 1 and explained 13.8% of the variance in ethnic identity status scores ($R^2 = .141$, adj $R^2 = .138$, $\beta = -0.375$, p < .001). After the entry of the self-compassion score at step 2, the total variance explained by the model was 15.5%

 $(R^2 \text{ change} = .021, \, \beta = -0.165, \, p < .05)$. Self-compassion accounted for an additional 1.7% of the variance in ethnic identity status scores, above and beyond that of mindfulness. As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was supported. The entry of the product term did not lead to statistically significant change $(R^2 = .162, \text{ adj } R^2 = .152, R^2 \text{ change} = .000, \, \beta = .002, \, p > .05)$. Self-compassion, therefore, did not moderate the interaction between mindfulness and ethnic identity status, as the product term did not significantly contribute the variance in total MEIM scores. As such, the hypothesis of moderation was not supported in the sample of Caucasian participants.

In the sample of participants belonging to ethnic minority, mindfulness explained 3.6% of the variance in ethnic identity status scores (R^2 = .040, adj R^2 = .036, β = -0.201, p <.01). After the entry of self-compassion, the total variance explained by the model was 7.3% (R^2 change =.042, β = -0.221, p < .001). Self-compassion accounted for an additional 3.7% of the variance in ethnic identity status scores, above and beyond that of mindfulness. As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was supported. The entry of the product term did not lead to statistically significant change (R^2 = .084, adj R^2 = .070, R^2 change =.002, β = .041, p >.05). Self-compassion, therefore, did not moderate the interaction between mindfulness and ethnic identity status, as the product term did not significantly contribute the variance in total MEIM scores. The hypothesis of moderation was not supported in the sample of participants belonging to ethnic minority groups.

Ethnic minority groups. The relationship between mindfulness, self-compassion, and ethnic identity status was explored with the Hispanic/Latino (n = 60) and African American (n = 55) samples.

Hispanic/Latinos. In the sample of Hispanic/Latino participants, mindfulness and self-compassion did not account for a significant portion of the variance in ethnic identity status scores, $R^2 = .07$, adj. $R^2 = .04$, F(2, 57) = 2.24, p > .05. As such, support for Hypotheses 2a and 2b were not found with this group of ethnic minorities.

The moderation analysis was also conducted with the Hispanic/Latino ethnic group. Mindfulness explained 5.6% of the variance in ethnic identity status scores (R^2 = .072, adj R^2 = .056, β = -0.268, p < .05). After the entry of self-compassion, the total variance explained by the model was 4.0% (R^2 change = .001, β = -.043, p > .05). Self-compassion did not account for any additional variance in ethnic identity status scores, above and beyond that of mindfulness. As such, Hypothesis 3a, that self-compassion would be a better predictor of ethnic identity status than mindfulness, was not supported. The overall model was not found to be significant, and there was not a significant proportion of the variance explained by the interaction of mindfulness and self-compassion total scores, R^2 = .074, adj R^2 = .024, R^2 change = .001, β = .026, p > .05). Self-compassion did not moderate the interaction between mindfulness and ethnic identity status and the hypothesis of moderation was not supported in the Hispanic/Latino ethnic group.

African Americans. In the sample of African American participants, mindfulness and self-compassion did not account for a significant portion of the variance in ethnic identity status scores, $R^2 = .07$, adj. $R^2 = .03$, F(2, 52) = 1.85, p > .05. As such, support for Hypotheses 2a, 2b, and 3a were not found with this group of ethnic minorities; mindfulness and self-compassion did not predict ethnic identity status scores. Support was not found for Hypothesis 3b, as the overall model was not found to be significant ($R^2 = .09$, adj. $R^2 = .03$, $\beta = .175$, p > .05). The hypothesis of moderation was not supported in the African American sample of participants.

Religious preferences. In order to examine the relationships between mindfulness, self-compassion, ethnic identity status, and religious preferences, Hypotheses 2 and 3 were tested with the following samples of participants - Christian (n = 306), Non-Christian (n = 173), Agnostic (n = 68), and those who reported no religious preference (None; n = 69).

Christian and Non-Christian. In the sample of Christian participants, mindfulness and self-compassion accounted for a significant portion of the variance in ethnic identity status scores, $R^2 = .11$, adj. $R^2 = .10$, F(2, 303) = 17.68, p < .001. Support for Hypotheses 2a and 2b were not found; mindfulness and self-compassion were found to the significant negative predictors of ethnic identity status. With regard to Hypothesis 3, mindfulness explained 7.0% of the variance in ethnic identity ($R^2 = .073$, adj $R^2 = .070$, $\beta = -0.270$, p < .001). After the entry of self-compassion, the total variance explained by the model was 9.9% (R^2 change = .032, $R^2 = .0.195$, $R^2 = .01$). Self-compassion accounted for an additional 2.9% of the variance in ethnic identity status scores, above and beyond that of mindfulness. As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was supported.

The entry of the product term did not lead to statistically significant change ($R^2 = .105$, adj $R^2 = .097$, R^2 change = .001, $\beta = .030$, p > .05). While the model as a whole was significant, the product term did not significantly contribute the variance in total MEIM scores. Self-compassion did not moderate the interaction between mindfulness and ethnic identity status, and the hypothesis of moderation was not supported in the sample of Christian participants.

In the sample of participants who did not identify as Christian, mindfulness and self-compassion were found to be significant negative predictors of ethnic identity status, $R^2 = .15$, adj. $R^2 = .14$, F(2, 170) = 14.57, p < .001. Support for Hypotheses 2a and 2b were not found. With regard to Hypothesis 3, mindfulness explained 11.0% of the variance in ethnic

identity ($R^2 = .115$, adj $R^2 = .110$, $\beta = -0.340$, p < .001). After the entry of self-compassion, the total variance explained by the model was 13.6% (R^2 change = .031, $\beta = -0.205$ p < .05). Self-compassion accounted for an additional 2.6% of the variance in ethnic identity status scores, above and beyond that of mindfulness. As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was supported. The entry of the product term did not lead to statistically significant change ($R^2 = .147$, adj $R^2 = .132$, R^2 change = .000, $\beta = .021$, p > .05). While the model as a whole was significant, the product term did not significantly contribute the variance in total MEIM scores. Self-compassion did not moderate the interaction between mindfulness and ethnic identity status, and the hypothesis of moderation was not supported in the sample of Non-Christian participants.

Agnostic. In the sample of Agnostic participants, mindfulness and self-compassion were found to be significant negative predictors of ethnic identity status, $R^2 = .16$, adj. $R^2 = .14$, F(2, 65) = 6.27, p < .01, and support of Hypotheses 2a and 2b were not found. With regard to Hypothesis 3, mindfulness explained 6.8% of the variance in ethnic identity ($R^2 = .082$, adj $R^2 = .068$, $\beta = -0.287$, p < .05). After the entry of self-compassion, the total variance explained by the model was 13.6% (R^2 change = .079, $\beta = -0.345$, p < .05). Self-compassion accounted for an additional 6.8% of the variance in ethnic identity status scores, above and beyond that of mindfulness. As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was supported.

The entry of the product term did not lead to statistically significant change ($R^2 = .183$, adj $R^2 = .145$, R^2 change = .021, $\beta = .151$, p > .05). While the model as a whole was significant, the product term did not significantly contribute the variance in total MEIM scores. Self-

compassion did not moderate the interaction between mindfulness and ethnic identity status, and the hypothesis of moderation was not supported in the sample of Agnostic participants.

None. In the sample of participants that reported no religious preference, mindfulness and self-compassion were found to be significant negative predictors of ethnic identity status, $R^2 = .18$, adj. $R^2 = .16$, F(2, 66) = 7.269, p < .01. Support for Hypotheses 2a and 2b were not found. With regard to Hypothesis 3, mindfulness explained 12.7% of the variance in ethnic identity ($R^2 = .140$, adj $R^2 = .127$, $\beta = -0.374$, p < .01). The entry of self-compassion did not lead to statistically significant change ($R^2 = .181$, adj $R^2 = .156$, R^2 change = .040, $\beta = -0.236$, p > .05). As such, the hypothesis that self-compassion would be a better predictor of ethnic identity status than mindfulness was not supported. Self-compassion did not moderate the interaction between mindfulness and ethnic identity status, $R^2 = .187$, adj $R^2 = .150$, R^2 change = .007, $R^2 = .084$, $R^2 =$

Demographic variables. In addition to these analyses, the mean scores of all four measures were examined on several key demographic variables (i.e., gender, age, ethnicity, religious preference) to identify potentially significant trends in the data. In general, males tended to score slightly higher than females in self-compassion and mindfulness, whereas females had slightly higher self-esteem and ethnic identity scores than males. Likely given that approximately 90% of the sample was 24 years or younger, no significant age differences were found between those who were above and below age 28 (1.5 standard deviations above the mean) on any measure in the study.

In regard to ethnicity, the mean scores of the three largest size ethnic groups were examined. Generally, Latinos reported the highest levels of self-compassion, followed by

African Americans, and Caucasians, respectively. Strength in ethnic identity showed the opposite trend; Latinos had the lowest ethnic identity scores, followed by African Americans, and Caucasians, respectively. African Americans and Caucasians had negligible differences between their mean mindfulness scores, whereas Latinos evidenced slightly higher levels of mindfulness than the former two groups. Latinos demonstrated the lowest mean self-esteem scores of the three groups, followed by African Americans, and Caucasians respectively. Given that mindfulness and self-compassion stem from traditionally Eastern traditions, the mean scores on all four measures were also examined for the Buddhists in the sample (n = 12). The mean self-compassion and self-esteem scores for those who identified as Buddhist were slightly higher than the means for the rest of the participants (n = 467), while the mean ethnic identity scores between the groups had negligible differences. The Buddhists also evidenced a slightly lower mean mindfulness score in comparison to the rest of the sample. Please see Table A4 for a complete summary of mean scores by variables of interest.

CHAPTER 4

DISCUSSION

In order to better understand the factors that may contribute to the development of a secure ethnic identity, this study investigated the impact of mindfulness and self-compassion on ethnic identity status in a somewhat diverse sample of adult undergraduate students. Previous research has indicated that security and stability in ethnic identity is important for psychological health and that conflicts in ethnic identity are related to numerous negative psychological and behavioral correlates (Lin, 2006; Phinney & Kohatsu, 1997; Roberts et al., 1999; Stuart, 2007; Ward, 2008).

The purpose of this study was three-fold. The first set of hypotheses was included with the intent to replicate previous research findings. Specifically, it was hypothesized that mindfulness would have positive correlations with self-compassion and self-esteem, and that self-compassion would be positively correlated with self-esteem. Second, it was hypothesized that mindfulness and self-compassion would significantly predict ethnic identity status, such that individuals with higher levels of mindfulness and self-compassion would have a better developed ethnic identity. Third, it was hypothesized that self-compassion would moderate the relationship between mindfulness and ethnic identity status, such that higher levels of self-compassion would increase the likelihood of having a well-developed ethnic identity given equal levels of mindfulness.

One of the three hypotheses was supported. Results indicated that mindfulness, self-compassion, and self-esteem had positive correlations with one another (hypothesis 1a and 1b). Contrary to the original hypothesis, mindfulness and self-compassion were found to be significant negative predictors of ethnic identity status. As levels of mindfulness and self-

compassion increased in individuals, strength in ethnic identity decreased, which was in the opposite direction of what was predicted (hypothesis 2a and 2b). Finally, self-compassion was not found to moderate the relationship between mindfulness and ethnic identity status as expected (hypothesis 3b). Each of these hypotheses will be discussed in detail; the consistencies and deviations with previous literature, as well as the implications of the findings, will be addressed. Then, the limitations of the current study and suggestions for future research will be presented.

Hypothesis 1. In the current study, mindfulness was found to have positive correlations with both self-compassion and self-esteem (Hypothesis 1a). These findings are consistent with several studies that have found support for the relationship between mindfulness and positive indicators of mental health such as self-compassion and general well-being (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; Brown & Ryan, 2003; Carlson & Brown, 2005). Some authors have conceptualized mindfulness and self-compassion as components of one another (Kabat-Zinn, 2003; Marlatt & Kristeller, 1999), others have described them as entirely separate constructs (Bishop et al., 2004), and yet others consider mindfulness and self-compassion to reciprocally enhance and facilitate one another (Neff, 2003a). While there has been debate as to how the two constructs are related, previous literature has been consistent in describing the relationship between mindfulness and self-compassion as positive. As such, it was hypothesized that mindfulness and self-compassion would be positively correlated with one another.

In the current study, the correlation between the total scores of the KIMS and SCS was .44 (p < .001), and the partial correlation between the total score of the KIMS and the mindfulness subscale of the SCS was found to be .35 (p < .001). As such, mindfulness and self-compassion are correlated in a theoretically consistent manner in the present study. This finding

is consistent with the work of Van Dam and colleagues (2010), and suggests that the SCS mindfulness subscale taps into a different latent construct than traditional mindfulness measures such as the KIMS and the MAAS.

Several research studies have indicated the similarity between self-compassion and self-esteem as methods of relating to oneself. Both constructs tap into positive feelings about oneself, and the hypothesis that self-compassion and self-esteem would have a positive correlation was supported in the current study (Hypothesis 1b). Of note, the partial correlations between the Total Score of the RSES and the Common Humanity and Mindfulness subscales of the SCS were .36 and .42, respectively, while the correlations among the other SCS subscales and the RSES were higher and ranged from .47 to .57 (see table B3).

These correlations appear to highlight the conceptual differences between self-compassion and self-esteem that have been examined by several researchers. Neff & Vonk (2009) describe esteem as a concept of self that fluctuates based on social approval and the attainment of goals, while self-compassion is a type of open-hearted awareness to all aspects of personal experience. In accordance, feeling special and unique is important in garnering high esteem and feelings of inadequacy are considered threats to one's construal of self. From a self-compassionate stance, however, negative feelings and events are met with mindful acceptance rather than evaluation, bolstered by an acknowledgment that these stimuli are shared and universal human experiences. Self-compassion, therefore, tends to highlight similarities rather than differences in others and is less impacted by negative internal and external stimuli than is self-esteem. It is this focus on common humanity and mindfulness that distinguishes the two constructs that share positive self-affect, and this is consistent with the finding that these two subscales of the SCS had the lowest correlations with the RSES. Alternatively, it could be that

these subscales are actually separate, independent constructs rather than facets of the larger, unitary construct of self-compassion. Thus, the examination of the cohesiveness and utility of the Self-Compassion Scale as a unitary, multifaceted construct (Neff, 2003a) versus a set of interrelated, independent constructs is warranted in future studies.

In summary, the results of hypothesis 1a and 1b were successful in replicating previous research findings. Moreover, the current study's findings highlight important conceptual differences among mindfulness, self-compassion, and self-esteem. Given these preliminary findings, future research may consider delineating the unique contributions of mindfulness and self-compassion in relation to their influence on ethnic identity development and associated identity conflicts. Additionally, future research should consider the shared variance of self-compassion and self-esteem when considering them as predictors of psychological outcomes.

Hypothesis 2. The second hypothesis resulted in an unexpected finding; in general, as levels of mindfulness and self-compassion increased, strength in ethnic identity decreased. In both the ethnic majority and minority groups, mindfulness and self-compassion were found to be significant negative predictors of ethnic identity status, accounting for 16% and 7% of the variance in ethnic identity status scores, respectively (ethnic majority –Adj. $R^2 = .16$, F(2, 275) = 26.49, p < .001; ethnic minority –Adj. $R^2 = .07$, F(2, 198) = 8.88, p < .001). There are several possibilities that may shed light on these findings.

Individuals that are highly self-compassionate tend to feel more connected with others, often through a tendency to recognize aspects of the shared human experience. Neff (2009) notes that this sense of interconnectedness occurs because self-compassion softens the boundaries between self and other. Thus, a self-compassionate stance encourages a worldview that emphasizes the shared features among humanity. It may be that as self-compassion rises,

belonging to a particular ethnic group becomes less necessary. This may be related to a shift in identity from the group to the universal level that occurs in highly self-compassionate individuals.

Ethnic identity develops through a series of careful considerations and decisions about the meaning of ethnicity, including one's attitudes and beliefs about his or her ethnic group (Phinney, 1989). Implicit in this idea is that individuals are heavily engaged in cognitive evaluations, comparisons, and judgments about themselves, their ethnic group, and other ethnicities. However, this also suggests that they are less engaged in the present moment experience. In fact, individuals who have not made such independent evaluations about the meaning of their ethnicity are considered to have the least developed identities (Phinney, 1989). As such, the negative predictive relationship between mindfulness and ethnic identity status may reflect a functional decrease in mindfulness that is associated with the process of exploration rather than a deficit of mindfulness skills in these individuals.

A consistent body of literature has indicated that highly mindful individuals tend to experience thoughts, feelings, and bodily sensations as a perpetual series of mental events, rather than direct perceptions of reality or the self (Masuda, Anderson, & Sheehan, 2009; Garland, Gaylord, & Park, 2009; Teasdale et al., 2002). Related to this, people high in mindfulness are also less likely to become entangled with verbal evaluations and conceptualizations (Brown, Ryan, & Creswell, 2007). According to Martin (1997), mindfulness shifts attention away from elaborative cognitive processing, especially thoughts that create stories about the self. It may be that as mindfulness increases, the interpretation of thoughts and feelings related to identity become less impactful. An increased awareness that thoughts and feelings are perpetually changing internal stimuli may result in decreased power associated with them. As such, the

current study's results may reflect changes in the way that individuals relate to their sense of identity as mindfulness and self-compassion rise, as opposed to a decrease in stability and security in identity that occurs as these two skills develop.

Results of exploratory analyses indicated that, in general, mindfulness and selfcompassion accounted for more variance in ethnic identity status scores for Caucasians than for individuals belonging to ethnic minority groups. There are several possibilities that may account for these findings. Virtually all minority ethnic groups have been exposed to racism; many have experienced discrimination, and others perceive themselves to have been subjected to white privilege (Phinney, 1989). Additionally, minority groups also face multiple stresses related to acculturation, some of which include changing customs, altering social behaviors, and adapting attitudes to better adapt to their culturally complex world (Ward, Bochner, & Furnham, 2001). The development of ethnic identity for minority groups thus involves a complex interaction of variables that may not be experienced by the ethnic majority. This likely explains why mindfulness and self-compassion play a smaller role in the prediction of ethnic identity status for minority participants. Additionally, while both constructs are traditionally considered to stem from Eastern philosophies, both measures used in the current study were developed by American psychologists and normed with samples living in the United States. As such, both scales reflect Western interpretations of mindfulness and self-compassion. It could be that some ethnic minority participants may be less willing to accept mindfulness and self-compassion as they are conceptualized in the KIMS and SCS than those belonging to the ethnic majority. If so, results may be confounded by issues related to the construct validity of these variables across cultures, rather than true relationships among them.

Exploratory analyses also indicated that mindfulness and self-compassion accounted for more variance in ethnic identity status scores for non-religious individuals than for those who ascribed to a specific religion. Self-compassion also played a bigger role in ethnic identity for agnostic individuals than for the other subsets of participants, and accounted for an additional 8.3% of the variance in identity status scores above and beyond that of mindfulness. Compassion tends to be emphasized in all of the world's major religions, and research indicates that religiosity exerts a positive influence on health by encouraging compassionate attitudes and behaviors toward others (Steffen & Masters, 2005). Self-compassion may account for more variance in ethnic identity status scores in non-religious individuals due to the shared variance between religiosity and compassion, some of which is likely directed toward the self.

The relationship between self-esteem and ethnic identity was also explored, and it was found that the correlations between the total scores of the RSES and the MEIM were as follows: -.35 for the entire sample, -.32 for Caucasian participants, and -.34 for those belonging to ethnic minority groups (p < .001). These findings diverge from a small body of literature that has empirically demonstrated small, but significant positive correlations between the two constructs (Belgrave et al, 1994; Phinney, 1992; Phinney, Cantu, & Kurtz, 1997; Romero & Roberts, 2003; Umaña-Taylor et al., 2004; Wright, 1985).

There are several differences between previous work and the current study that may help account for these findings. The bulk of past literature has focused on adolescent populations in which the samples were either, a) primarily composed of ethnic minorities and/or b) attended schools in which the student body was mostly African American or Latino (Phinney, 1992; Phinney, Cantu, & Kurtz, 1997; Romero & Roberts, 2003). The current study's sample, however, was composed of adult college students in which the majority of participants were Caucasian. It

is possible, then, that the relationship between ethnic identity and self-esteem changes with age, varies by ethnicity, and is influenced by the ethnic composition of the environment in which individuals inhabit.

Previous studies that did use college samples were either largely composed of minorities, used entirely different measures of ethnic identity, had different methods to classify participants into ethnic groups, or recruited participants from introductory courses across a wide variety of majors (Phinney, 1992; Umaña-Taylor et al., 2004). For example, the Ethnic Identity Scale and self-reported ethnicity were used to measure ethnic identity and classify participants into six major ethnic groups in Umaña-Taylor et al.'s 2004 study, while the current study used the MEIM and eight common ethnic group classifications to categorize participants. As such, differences in studied populations, research design, as well as sample-specific characteristics may have contributed to the findings of the present study. Replication with larger, more diverse adult populations is needed before the current study's results, and the relationship between self-esteem and ethnic identity in adults, can be better understood.

Hypothesis 3. The current study hypothesized that higher levels of self-compassion would increase the likelihood of having a well-developed ethnic identity given equal levels of mindfulness. Support for hypothesis 3 was not found for any ethnic group that comprised the sample. Self-compassion did not moderate the relationship between mindfulness and ethnic identity status, as the product term did not significantly contribute to the variance in ethnic identity status scores (R^2 change =.002, β = .048, p >.05; see table B6). There are several considerations that are important to note in light of the current study's results. First, it is important to note that this is the first study (of which the author is aware) that directly examined self-compassion as a moderator between mindfulness and ethnic identity status. It is not unlikely

that the role of racism, discrimination, and acculturation (amongst other variables) impact the relationship studied. Therefore, it could be that moderation was not found due to the exclusion of other such moderating or mediating variables. Results should be considered preliminary until these factors are incorporated into future work and further replicated with larger, more diverse populations.

Second, the hypothesized relationship stemmed from several loosely related, past studies that suggested that mindfulness, self-compassion, and ethnic identity may be positively correlated with one another. For example, mindfulness is associated with decreased anxiety, depression, stress, and other psychopathological symptoms (Carmody & Baer, 2007; Hoffman, Sawyer, Witt, & Oh, 2010; Kabat-Zinn, 2003; Shapiro, Brown, & Biegel, 2007). Further, Phinney and Kohatsu (1997) and Roberts et al. (1999) demonstrated that weakness in ethnic identity is associated with symptoms of depression, feelings of inadequacy, low self-esteem, and social difficulties. Related to these findings, self-compassion has been found to moderate the relationship between mindfulness and psychopathology, predicting unique variance in depression and anxiety (Neff, 2003a; Van Dam et al., 2010). In short, previous research suggests that as levels of mindfulness, self-compassion, and strength in ethnic identity increase, psychological symptoms tend to decrease.

Based on this work, it was expected that mindfulness, self-compassion, and ethnic identity status would be positively correlated with one another via their influence on psychological symptomatology, and that self-compassion would moderate the relationship between mindfulness and strength in ethnic identity. Results of the current study, however, did not fit with this body of research and indicate that mindfulness and self-compassion are significant negative predictors of ethnic identity status (see hypothesis 2). Therefore, self-

compassion may not have functioned as moderator between mindfulness and ethnic identity due to the unexpected, inverse relationship between the independent and dependent variables.

Alternatively, one must also consider the times that acting compassionately toward the self might be most beneficial for individuals - i.e., during times of distress. From a functional contextual perspective, which emphasizes the functional context for behavioral events (Hayes, 1993), self-compassion may provide its maximum psychological benefit when people are experiencing harsh, negative internal and external conflicts related to the meaning of their ethnicity. In other words, individuals who include a self-compassionate internal dialogue during times of distress provide themselves with an additional context from which to choose their behavior. Thus, the third reason moderation was not found might actually have been related to the outcome variable itself - identity status rather than identity conflict.

Previous research suggests that self-compassion is a moderator of psychological symptomatology (Van Dam et al., 2010). The current study focused on self-compassion's influence on ethnic identity development rather than ethnic identity conflict (EIC). Therefore, it may be equally important to examine the effect of self-compassion on those experiencing EIC and related psychopathology in future studies. Because such conflict is likely to wax and wane with time, future research may also consider focusing on the differential impact of mindfulness and self-compassion during various points during the developmental process.

Implications

Findings of the current study add important new findings to the literature on ethnic identity development. Specifically, the relationship between mindfulness, self-compassion, and ethnic identity status has been demonstrated, at least in one sample of adult college students. In general, as levels of mindfulness and self-compassion rise, strength in ethnic identity decreases.

This may be related to a change in the way people relate to their ethnic identity as they become more mindful and self-compassionate, rather than reflecting a decrease in importance of ethnicity or the role that it plays in one's life.

As such, these two variables may be important in fostering a healthy relationship with the self in relation to one's ethnic group, which has both theoretical and clinical applications. Future research should focus on first replicating and then contextualizing these findings before the role of mindfulness and self-compassion on ethnic identity can be made clear. Nevertheless, the current study highlights that both factors may significantly impact ethnic identity status and specific recommendations for future research will be made.

Limitations

While the current study offers some important findings and implications that deepen the understanding of factors that influence ethnic identity development, there are several limitations inherent in the study and study design that inhibit its generalizability. Limitations fall in three broad categories and will be presented in the following order - those related to participants and their characteristics, the study design, and statistical analyses.

Participants and Participant Characteristics Limitations. While the ethnic composition of the sample was similar to the larger, university population, the majority of the sample was comprised of White/Caucasian participants. As such, the relatively low number of participants who were Biracial, African-American, Asian/Pacific Islander, Native American, Middle Eastern/Arab, or who belonged to other ethnic groups limited the study's scope. Another threat to the external validity of the study is that the majority of the sample was female. Participants of this study were undergraduate college students at a university located in the south-central region of the United States, so results may not easily generalize to other populations. Also, the types of

people who choose to voluntarily sign up for a psychologically-oriented study may be somewhat atypical of the general population. Another consideration is that ethnic identity tends to develop during adolescent years, and the average age of participants in the study was 21.08 years. As such, results do not reflect the impact of mindfulness and self-compassion during the stage when identity is typically more fragile and malleable.

Study Limitations. There are a number of limitations in the design of the study that may compromise the generalizability of the findings. Some of these are considered acceptable and were considered carefully beforehand and others set the direction for future research in this domain.

In essence, it is impossible to account for the all of the contextual variables that may influence individuals' ethnic identity statuses. Although the study adds to a major gap in the literature by examining mindfulness, self-compassion, and ethnic identity status in a somewhat diverse sample of adults, the study did not include other cultural variables to better contextualize the findings. Other psychological variables that are particularly relevant to ethnic identity development, such as level of acculturation, parental behaviors, perceived and overt experiences of discrimination, peer influence, religiosity, and social class, and others, were not included (Cokley et al., 2007; Harter, 1999; Umaña-Taylor & Guimond, 2010; Umaña-Taylor & Updegraff, 2007; Zhai, 2009). Inclusion of such variables is essential for future research before conclusions can be derived about the role of mindfulness and self-compassion in the development of ethnic identity.

Another important acknowledgement is that not all individuals belonging to any given group can be considered alike. Heterogeneity exists in each subset of participants (ethnic and religious) included in statistical analyses. Beliefs, traditions, and behaviors vary widely among

ethnic and religious groups considered to have minority status. Importantly, they also vary within groups that would identify as belonging to the same ethnic group or religion. For example, those who identified as Hispanic/Latino may be of Mexican, Cuban, Puerto Rican, or South American descent and those who identified as Christian may be Protestant or Catholic. There are rich and likely important differences in these populations, and between-group and within-group variation should be taken into account when interpreting the results of current study.

The survey itself was designed to maximize information obtained about a few key factors related to ethnic identity development as well minimize the time that participants spent completing it. Questionnaires were presented in a specific order of critical variables (demographics, KIMS, MEIM, SCS, RSES). This was particularly important because it was completed online, so data related to main analyses were presented first. Participants did not have the added contextual influence of completing the study under the supervision of research assistants in a laboratory setting. This may have made the study more vulnerable to attrition, as comprehension difficulties and questions related to the importance of completing the entire survey could not be addressed.

A total of 53 individuals stopped the study prior to completion of all the questionnaires. Possible reasons may include: a lack of understanding that the survey could be completed by persons of any ethnic background, a lack of understanding about the importance of completing the entire survey, emotional reactivity to questions early in the survey series, or difficulty understanding the concept of ethnicity. Some research has also suggested that people respond differently to self-report questionnaires if they have reported identifying factors first (Choi, 2001). Additionally, it is difficult to know what participants are doing when surveys are completed online, which is a general limitation of online data collection. Randomization of

questionnaires, utilization of only the subscales related to main analyses, specific information regarding the length of the survey, the importance of its completion in entirety, more detailed information regarding ethnicity, and questions concerning effort level, may address these limitations in future research.

The current study was also cross-sectional in design and thus only captured the relationship between the studied variables at one particular point in time. Given that ethnic identity development consists of a series of evaluations about the self in relation to one's ethnic group across time, it is important to examine the differential impact of mindfulness and self-compassion on the status of identity using longitudinal designs.

Statistical Limitations. One potential limitation of the current study is that data from Likert-type scales with different item ranges were used for parametric statistical analyses, a method that continues to be debated in the literature. Because Likert and Likert-type scales are composed of items that are, in essence, ordered categories as opposed to truly continuous data, some researchers maintain that only nonparametric statistics should be used (Jamieson, 2004). Others argue that the use of parametric statistics is valid under certain circumstances, especially when social science researchers are limited in the methods by which they may record phenomena.

The latter researchers emphasize that the use of parametric statistics with Likert-type data is reasonably valid when the underlying constructs are essentially continuous, data meets the assumptions of normality and equality of residuals, scales have wide item ranges (5 to 7 points), and when stringent, .01 alpha levels are used (Glass, Peckham, & Sanders, 1972). While the scales used in the current study have excellent psychometric properties, results may be limited by the fact that they do not have the same item-response ranges and do not meet all of these

aforementioned criteria. Another limitation of the current study is data transformation was needed to meet the assumption of linearity between the independent and dependent variables. It should be noted, however, that the transformation was quite minor and relatively commonplace in social science research.

Another potential limitation of this study was that hierarchical regressions were used to compare the unique variance in outcomes associated with mindfulness and self-esteem. Although this is considered standard practice in the field, some researchers have argued that there are problems with this approach (Trafimow, 2004). The data also relied on correlational analyses of self-report data, which does not provide information about causality and may be vulnerable to socially desirable response patterns.

Frazier and colleagues (2004) note that moderator effects are typically very small and are generally difficult to detect. The number of participants who belonged to ethnic minority groups may not have provided sufficient power to detect the presence of a small moderator effect. This, in turn, also limited the study's scope and generalizability. Additionally, the majority of the sample was of Caucasian origin, and sample sizes for the other groups were too small to allow multiple-group analyses by national origin group or religion. In order to obtain data on a large scale, there must be sufficient support to recruit members of underrepresented populations to participate in research. Further research should be conducted with samples comprised of a larger number of ethnic minority participants, or exclusively with ethnic minority populations, before ruling out self-compassion as a moderator variable between mindfulness and ethnic identity status.

Future Directions

The current study attempted to identify factors that contribute to the development of a stable, secure ethnic identity. In doing so, mindfulness and self-compassion were found to be significant negative predictors of ethnic identity status and findings advance the literature with respect to ethnic identity formation. First and foremost, replication of the study, with larger and more diverse populations, is needed to increase the external validity and generalizability of the results. In particular, it will be important to examine the differential impact of mindfulness and self-compassion on ethnic identity status in consideration of factors such as level of acculturation and length of residence in the United States. Recent immigrants are likely to have differing experiences with respect to ethnicity than those who are natural-born citizens, people who have resided in the U.S. for longer, and/or those who are more acculturated to mainstream society.

The perception of one's ethnicity may also be impacted by experiences with discrimination. The manner in which individuals cope with such events, through religiosity or other means, is related to the meaning that is ascribed to ethnicity in individuals' lives. In only one of two longitudinal studies that have examined changes in ethnic identity over time, Pahl and Way (2006) found that African American adolescents demonstrated a growth in exploration of their identities during a 4-year period from 10th grade to one year post 12th grade, while Latino adolescents demonstrated a decrease in exploration. The authors suggested that the increase may have been related to the high levels of discrimination that African Americans experience, which may have stimulated continuous exploration of their ethnic identities. As such, examining the interaction of these factors in relation to mindfulness and self-compassion is also warranted in future research. Exploration will likely require mixed-method approaches using longitudinal

designs to gain a clearer understanding of how mindfulness and self-compassion influence development as people grow, change, and adapt to changing environmental contexts.

One particular context that has been found to promote ethnic identity development is the parental context, in which adolescents perceive having a secure base from which to engage in the process of ethnic identity exploration (Marcia, 1983). There is also preliminary evidence that self-compassion is related to maternal criticism and other family messages given to youths (Neff, 2008). Neff, Pisitsungkagarn, & Hseih (2008) also suggest that individual variation in selfcompassion may be related to a tendency to accept or reject dominant cultural messages, including the predominant attitudes toward the experience and the expression of emotion. Due to the variation in these factors across cultures, the manner in which individuals experience selfcompassion, self-criticism, and interpersonal connectedness are also likely to differ. Future research should examine the construct validity of the SCS and MEIM, as well as their dimensions, in relation these constructs in a diverse range of adolescent and adult populations. Doing so will likely highlight the complex interaction of these factors with mindfulness and selfcompassion in their influence on the development of ethnic identity. Additionally, when variables such as mindfulness, self-compassion, and self-esteem are used as predictors in hierarchical regressions, researchers should carefully consider the shared (R²) and unique variances (semi-partial r²) of these variables on the criterion, as doing so is necessary to understand the unique predictive utility of each factor.

Future research may also consider other aspects of the environmental context, including the ethnic composition of the neighborhoods, schools, and workplaces of individuals in relation to ethnic identity development. Peer influence is known to influence identity development (Harter, 1999), and may have differential impact for those individuals with highly developed

mindfulness and self-compassion skills. The function of these skills may also be particularly important for biracial and multiracial populations, whose experiences with self-identification, negotiating the self in different contexts, and feeling accepted and safe with others differs from monoracial populations.

Another area that may be important to consider stems from the results of Lee et al.'s (2001) study on factors that influence the relationship between social connectedness and psychological distress. Results of this study indicated that dysfunctional interpersonal behaviors fully mediated the association between social connectedness and psychological distress. The construct of social connectedness in this study is most similar to the Affirmation and Belonging subscale of the MEIM, a component that is considered central to strength in ethnic identity. It could be that dysfunctional interpersonal behaviors, including those that are culturally inconsistent, lead to psychological distress and weakness in ethnic identity. As such, future researchers may consider examining the relationship between these variables in order to better understand factors that contribute to or mitigate disturbances in ethnic identity. Finally, examining the role of mindfulness and self-compassion on ethnic identity conflict (EIC; Ward, 2008) is important for future studies. The management of internal conflicts such as prioritizing values, integrating multiple identities, and maintaining harmony with important others involve a series of cognitive evaluations and judgments that are likely influenced by a healthy relationship with one's thoughts, feelings, and construal of self.

Conclusion

The current study is novel in its approach to understanding factors that influence ethnic identity. The task of identity formation is a time often fraught with feelings of isolation, confusion, and self-evaluative anxiety. As a multicultural society, the influence of mindfulness

and self-compassion on this process is particularly relevant to individuals living in the United States. Data from this study indicate that these two variables significantly impact the ethnic identity status of individuals from a diverse range of backgrounds; with further contextual evidence in the future, these findings may provide some important theoretical and clinical applications. Accordingly, the present study adds a new, fruitful line of analyses with which to conceptualize and deepen the understanding of ethnic identity in relation to psychological health.

Table 1
Sample Descriptive Statistics

	Frequency	Percent
Gender		
Female	332	69.3
Male	147	30.7
Ethnicity		
White/Caucasian	278	58.0
Hispanic/Latino	60	12.5
Black/African American	55	11.5
Biracial	37	7.7
Asian/Pacific Islander	35	7.3
Other	12	2.5
Middle Eastern/Arab	1	0.2
Native American	1	0.2
Country of Birth		
U.S.A.	430	89.8
Foreign-Born (outside U.S.A.)	49	10.2
Biological Father's Country of Birth		
U.S.A.	375	78.3
Foreign-Born (outside U.S.A.)	100	20.9
Do not know	4	0.8
Biological Mother's Country of Birth		
U.S.A.	373	77.9
Foreign-Born (outside U.S.A.)	106	22.1
First Language		
English	419	87.5
Other Language	60	12.5
Religious Preference		
Christian	306	63.9
None	69	14.4
Agnostic	68	14.2
Buddhist	12	2.5
Other	11	2.3
Islam	6	1.3
Hindu	5	1.0
Jewish	2	0.4

(table continues)

Table 1 (continued)

	Frequency	Percent
Religious Attendance		
More than once a week	40	8.4
About once a week	93	19.4
About once a month	79	16.5
About once or twice a year	61	12.7
Seldom (less than once a year)	92	19.2
Never	114	23.8
Marital Status		
Single	400	83.5
Cohabiting	43	9.0
Married	28	5.8
Divorced	8	1.7
Widowed	0	0.0
Annual Income		
Less than \$20,000	414	86.4
\$20,000 - \$50,000	43	9.0
\$50,000 - \$100,000	16	3.3
More than \$100,000	6	1.3

Table 2

Descriptive Statistics for Variables of Interest

Scale	N	Possible Range of Scores	Min. (observed)	Max (observed)	Mean	SD
KIMS – Composite	479	39.00 – 195.00	89.00	166.00	122.94	12.45
KIMS – Observing	479	12.00 - 60.00	14.00	60.00	38.31	7.91
KIMS – Describing	479	8.00 - 40.00	11.00	40.00	27.22	5.45
KIMS – Acting with Awareness	479	10.00 - 50.00	12.00	41.00	28.54	4.95
KIMS – Accepting	479	9.00 - 45.00	9.00	44.00	28.86	6.29
MEIM – Total	479	1.00 – 4.00	1.00	4.00	2.22	.577
MEIM – Affirmation & Belonging	479	1.00 – 4.00	1.00	4.00	1.90	.665
MEIM – Ethnic Identity Achievement	479	1.00 – 4.00	1.00	4.00	2.36	.633
MEIM – Ethnic Behaviors	479	1.00 – 4.00	1.00	4.00	2.48	.793
MEIM – Other Group Orientation	479	1.00 – 4.00	1.00	3.50	1.70	.514

Note. KIMS = Kentucky Inventory of Mindfulness Skills. MEIM = Multigroup Ethnic Identity Measure.

Table 3

Descriptive Statistics for Variables of Interest

Scale	N	Possible Range of Scores	Min. (observed)	Max (observed)	Mean	SD
SCS – Total	479	6.00 – 30.00	7.80	29.80	17.92	3.85
SCS – Kindness	479	5.00 – 25.00	5.00	25.00	14.29	4.24
SCS – Judgment	479	5.00 – 25.00	5.00	25.00	14.44	4.48
SCS – Common Humanity	479	4.00 – 20.00	4.00	20.00	12.50	3.52
SCS – Isolation	479	4.00 – 20.00	4.00	20.00	11.87	3.53
SCS – Mindfulness	479	4.00 – 20.00	4.00	20.00	12.70	3.18
SCS – Over- Identification	479	4.00 – 20.00	4.00	20.00	11.63	3.52
RSES – Total	479	10.00 – 40.00	10.00	38.00	19.46	5.71

Note. SCS = Self – Compassion Scale. RSES = Rosenberg Self-Esteem Scale.

Table 4

Means Scores for Demographic Variables of Interest

Scale	Males	Females	Caucasians	African Americans	Latinos	Buddhists
KIMS – Composite	123.57	122.65	122.85	122.58	123.43	118.92
MEIM – Total	2.16	2.23	2.38	1.92	1.83	2.24
SCS – Total	18.26	17.77	17.53	18.92	19.13	18.48
RSES – Total	19.19	19.57	20.03	17.56	17.37	21.00

Note. KIMS = Kentucky Inventory of Mindfulness Skills. MEIM = Multigroup Ethnic Identity Measure. SCS = Self-Compassion Scale. RSES = Rosenberg Self-Esteem Scale.

Table 5
Summary of Correlations Among Variables of Interest Used in Analyses

Scale	1	2	3
KIMS – Composite			
MEIM – Total	28***		
SCS – Total	.44***	31***	
RSES – Total	.50***	35***	.67***

Note. KIMS = Kentucky Inventory of Mindfulness Skills. MEIM = Multigroup Ethnic Identity Measure. SCS = Self-Compassion Scale. RSES = Rosenberg Self-Esteem Scale. ***p < .001

Table 6
Summary of Correlations Among the Composite/Total Scores of Variables of Interest and the SCS Subscales

	KIMS	MEIM	RSES	SCS
SCS – Kindness	.38***	28***	.57***	.80***
SCS – Judgment	.32***	28***	.57***	.79***
SCS – Common Humanity	.33***	23***	.36***	.64***
SCS – Isolation	.32***	21***	.56***	.77***
SCS – Mindfulness	.35***	18***	.42***	.70***
SCS – Over-Identification	.29***	21***	.48***	.77***

Note. SCS = Self-Compassion Scale. KIMS = Kentucky Inventory of Mindfulness Skills. MEIM = Multigroup Ethnic Identity Measure. RSES = Rosenberg Self-Esteem Scale. *p < .05, **p < .01. ***p < .001

Table 7
Summary of Correlations Among the Composite/Total Scores of Variables of Interest and the KIMS Subscales

Scale	SCS	MEIM	RSES	KIMS
KIMS – Observing	02	01	.03	.48***
KIMS – Describing	.28***	23***	.35***	.69***
KIMS – Acting with Awareness	.29***	21***	.27***	.52***.
KIMS – Accepting	.44***	17***	.44***	.36***

Note. SCS = Self-Compassion Scale. KIMS = Kentucky Inventory of Mindfulness Skills. MEIM = Multigroup Ethnic Identity Measure. RSES = Rosenberg Self-Esteem Scale. *p<.05, **p < .01, ***p < .001

Table 8

Summary of Correlations Among the Composite/Total Scores of Variables of Interest and the MEIM Subscales

Scale	KIMS	SCS	RSES	MEIM
MEIM – Affirmation & Belonging	23***	30***	36***	.87***
MEIM – Ethnic Identity Achievement	28***	31***	31***	.93***
MEIM – Ethnic Behaviors	13**	10*	13**	.69***
MEIM – Other Group Orientation	12**	16***	22***	.15**

Note. SCS = Self-Compassion Scale. KIMS = Kentucky Inventory of Mindfulness Skills. MEIM = Multigroup Ethnic Identity Measure. RSES = Rosenberg Self-Esteem Scale. *p < .05, **p < .01. ***p < .001

Table 9

Regression Analysis for Mindfulness and Self-Compassion as Predictors of Ethnic Identity Status

Predictor	В	SE B	β	R^2
Mindfulness (KIMS – Composite)	003	.001	177	.120***
Self-Compassion (SCS – Total)	012	.002	230	

Note. KIMS = Kentucky Inventory of Mindfulness Skills. SCS = Self-Compassion Scale. *** p < .001.

Table 10

Summary Regression Moderation Analysis for Self-Compassion as a Moderator for Impact of Mindfulness on Ethnic Identity Status

	Model 1			Model 2			Model 3		
Variable	В	SE B	β	В	SE B	β	В	SE B	β
Mindfulness	055	.009	279***	035	.009	177***	035	.009	178***
Self- Compassion				045	.009	230***	045	.009	229***
Mindfulness x Self- Compassion							.008	.008	.048
R^2	.078		.120		.123				
$Adj. R^2$.076		.117		.117				
F for change in R^2	40.23***		22.96***		1.26				

Note. *** *p* < .001.

Table 11

Complete Summary of Correlations Among Key Variables

	Scale	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	KIMS – Composite																	
2	KIMS – Observing	.48***																
3	KIMS – Describing	.69***	.24***															
4	KIMS – Acting with Awareness	.52***.	10*	.15**														
5	KIMS – Accepting	.36***	43***	.08	.24***													
6	SCS – Total	.44***	02	.28***	.29***	.44***												
7	SCS – Kindness	.38***	.08	.25***	.21***	.27***	.80***											
8	SCS – Judgment	.32***	22**	.14**	.32***	.54***	.79***	.50***										
9	SCS – Common Humanity	.33***	.23***	.27***	.11*	.05	.64***	.58***	.21***									
10	SCS –Isolation	.32***	21***	.20***	.26***	.51***	.77***	.42***	.74***	.23***								
11	SCS – Mindfulness	.35***	.23***	.28***	.08	.08	.70**	.71***	.24***	.66***	.26***							
12	SCS – Over- Identification	.29***	18***	.10*	.28***	.49***	.77***	.39***	.76***	.21***	.72***	.31***						
13	MEIM – Total	28***	01	23***	21***	17***	31***	28***	28***	23***	21***	18***	21***					
14	MEIM – Affirmation & Belonging	23***	.08	24***	19***	20***	30***	25***	27***	22***	23***	17***	20***	.87***				
15	MEIM – Ethnic Identity Achievement	28***	07	21***	18***	15**	31***	29***	27***	22***	20***	19***	22***	.93***	.65***			
16	MEIM – Ethnic Behaviors	13**	01	08	18***	04	10*	11*	12*	08	06	04	05	.69***	.48***	.54***		
17	MEIM – Other Group Orientation	12**	09	08	.01	07	16***	10*	03	23***	08	21***	05	.15**	.16***	.14**	.03	
18	RSES – Total	.50***	.03	.35***	.27***	.44***	.67***	.57***	.57***	.36***	.56***	.42***	.48***	35***	36***	31***	13**	22***

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

APPENDIX

ONLINE SURVEY

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity

*****1.

University of North Texas Institutional Review Board Informed Consent Form

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity Development

Principal Investigator: Amy Murrell, Ph.D., University of North Texas (UNT), Department of Psychology.

Purpose of the Study: You are being asked to participate in a research study which involves an assessment of mindfulness, self-compassion, self-esteem, and ethnic identity.

Study Procedures: You will be asked to complete a set of online questionnaires that will take about 15 to 30 minutes of your time.

Foreseeable Risks: The potential risks involved in this study are minimal. You may experience some minor levels of discomfort from answering questions related to your sense of identity and self-esteem. You may withdraw from the study at any time without any negative consequences or loss of benefits.

Benefits to the Subjects or Others: The study is not expected to be of direct benefit to you. There is potential benefit to psychology, in that the research may advance understanding of factors related to ethnic identity development. It may inform treatment for individuals who present for psychotherapy with identity-related concerns.

Compensation for Participants: You will receive 1 Sona credit applied to one of your psychology courses. After completing the study, you will be prompted to complete another, separate survey in which you will be asked to provide your name and contact information. This is necessary to receive compensation for your participation.

Participants who do not complete the 2nd survey are not guaranteed to receive Sona

Page 1

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity

credit.

Extra credit is not limited to this study, and there are other means of gaining extra credit. See your course syllabus or speak with your instructor about the alternative research-related activities available to you to fulfill course requirements or earn extra credit.

Procedures for Maintaining Confidentiality of Research Records: You will be assigned a participant number after consenting to this study. All of your responses will be attached to this number and not to your name or any other personal identifying information. Further, the data collected from this study will be stored on password protected computers, and while it may be used for education and publication purposes, anonymity will always be maintained in presentations and publications.

Questions about the Study: If you have any questions about the study, you may contact Aditi Sinha at aditisinha@my.unt.edu or the faculty advisor, Dr. Amy Murrell, UNT Department of Psychology, at telephone number 940-565-2967.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights:

Clicking the YES button below indicates that you have read all of the above and that you confirm all of the following:

- You have read the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits
- Your decision whether to participate or to withdraw from the study will have no effect on your grade or standing in your UNT courses.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.

If you do not wish to provide your consent, please click the NO button or close your browser

Exploring the Impact of Mindfu	ulness and Self-	Compassion on Etl	nnic Identity
Yes			
□ No			

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity * 2. Your age (in years): * 3. Your biological sex: Male Female Intersexed * 4. Gender that you identify with: Male Female Transgendered * 5. YOUR ethnic/racial background (Please Specify): * 6. Ethnic/racial background of your biological FATHER (Please specify below if known): [DK = don't know] * 7. Ethnic/racial background of your biological MOTHER (Please specify below if known): [DK = don't know] * 8. Were you born in the United States of America? No (specify country of birth below) Your Country of Birth * 9. Was your biological father born in the United States of America? No (please specify country of birth below) Don't Know Biological Father's Country of Birth

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity * 10. Was your biological mother born in the United States of America? No (please specify country of birth below) Don't Know Biological Mother's Country of Birth * 11. Which generation best describes you? 1st = You were born in a country outside of the USA. 2nd = You were born in the USA; either parent born outside the USA. 3rd = You were born in the USA, both parents were born in the USA, and all grandparents born in a country outside the USA. 4th = You and your parents were born in the USA, and at least one grandparent was born in a country outside of the USA. 5th = You, your parents, and all grandparents born in the USA. I do not have enough information about my biological parents and/or grandparents to answer this question * 12. Is English your first language? () Yes No (Please specify which language below) Your First Language * 13. Your Current Marital Status: Single Cohabiting with partner Married Divorced Widowed * 14. Your approximate yearly income: Less than \$20,000 \$20,000-\$50,000 \$50,000-\$100,000 More than \$100,000

Exp	ploring the Impact of Mindfulness and Self-Compassion on Ethnic Ident	tity
*	k 15. Which category best describes your religious preference?	
	Agnostic	
	Buddhism	
	Christianity (Specify Denomination below)	
	Hinduism	
	Islam	
	Judaism	
	Other (Specify below)	
	None	
	Specify Christian Denomination OR Other Religion	
*	k 16. How often do you attend religious services?	
	More than once per week	
	About once per week	
	About once per month	
	About twice a year	
	Seldom (about once a year)	
	Never	

you.	1- Never true	2- Rarely true	3- Sometimes true	4- Often true	5- Very often or alway
I notice changes in my body, such as whether my breathing slows down or speeds up.	0	0	0	0	true
2. I'm good at finding words	0	0	0	0	0
to describe my feelings. 3. When I do things, my mind wanders off and I'm easily distracted.	0	0	0	0	0
4. I criticize myself for having irrational or inappropriate emotions.	\circ	0	0	\circ	\circ
5. I pay attention to whether my muscles are tense or relaxed.	0	0	0	0	0
I can easily put my beliefs, opinions, and expectations into words.	\circ	0	0	0	0
7. When I'm doing something, I'm only focused on what I'm doing, nothing else.	0	0	0	0	0
8. I tend to evaluate whether my perceptions are right or wrong.	\circ	\circ	0	0	\circ
9. When I'm walking, I deliberately notice the sensations of my body moving.	0	0	0	0	0
10. I'm good at thinking of words to express my perceptions, such as how things taste, smell, or sound.	0		0	0	0

ou.	1- Never true	2 Paralyters	3- Sometimes true	4- Often true	5- Very often or alway
11. I drive on "automatic	1- Never true	2- Rarely true	3- Sometimes true	4- Often true	true
attention to what I'm doing. 12. I tell myself that I shouldn't be feeling the way I'm feeling.	\circ	0	0	0	0
3. When I take a shower or bath, I stay alert to the sensations of water on my	0	0	0	0	0
ody. 4. It's hard for me to find he words to describe what 'm thinking.	0	0	\circ	\circ	0
15. When I'm reading, I ocus all my attention on what I'm reading.	0	0	0	0	0
6. I believe some of my houghts are abnormal or bad and I shouldn't think hat way.	0	\circ	0	0	0
17. I notice how foods and drinks affect my thoughts, podily sensations, and emotions.	0	0	0	0	0
18. I have trouble thinking of the right words to express now I feel about things.	0	0	\circ	0	0
19. When I do things, I get otally wrapped up in them and don't think about anything else.	0	0	0	0	0
20. I make judgments about whether my thoughts are good or bad.	0	0	0	0	0

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity * 19. Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you. 5- Very often or always 1- Never true 2- Rarely true 3- Sometimes true 4- Often true true 21. I pay attention to sensations, such as the wind in my hair or sun on my face. 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words. 23. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted. 24. I tend to make judgments about how worthwhile or worthless my experiences are. 25. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing. 26. Even when I'm feeling terribly upset, I can find a way to put it into words. 27. When I'm doing chores, such as cleaning or laundry, I tend to daydream or think of other things. 28. I tell myself that I shouldn't be thinking the way I'm thinking. 29. I notice the smells and aromas of things. 30. I intentionally stay aware of my feelings.

you.	1- Never true	2- Rarely true	3- Sometimes true	4- Often true	5- Very often or alway
31. I tend to do several things at once rather than focusing on one thing at a time.	0	0	0	0	true
32. I think some of my emotions are bad or inappropriate and I shouldn't feel them.	0	0	0	0	0
33. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.	0	0	0	0	0
34. My natural tendency is to put my experiences into words.	0	\circ	0	0	\circ
35. When I'm working on something, part of my mind is occupied with other topics, such as what I'll be doing later, or things I'd rather be doing.	0	0	0	0	0
36. I disapprove of myself when I have irrational ideas.	0	0	0	0	0
37. I pay attention to how my emotions affect my thoughts and behavior.	0	0	0	0	0
38. I get completely absorbed in what I'm doing, so that all my attention is focused on it.	0	0	0	0	0
39. I notice when my moods begin to change.	\circ	0	0	\circ	0

normy me	Impact of Mindfulness and Self-Compassion on Ethnic Iden
backgrounds or ethni American, Asian Ame Every person is born	e come from many different countries and cultures, and there are many different words to describe the different c groups that people come from. Some examples of the names of ethnic groups are Hispanic or Latino, Black or African erican, Chinese, Filipino, American Indian, Mexican American, Caucasian or White, Italian American, and many others. into an ethnic group, or sometimes two groups, but people differ on how important their ethnicity is to them, how they fe ir behavior is affected by it. These questions are about your ethnicity or your ethnic group and how you feel about it or
21. In terms	of my ethnic group, I consider myself to be: (please fill in space below)

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity * 22. Use the numbers given below to indicate how much you agree or disagree with each statement. 4- Strongly Agree 3- Somewhat Agree 2- Somewhat Disagree 1- Strongly Disagree 1. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs. 2. I am active in organizations or social groups that include mostly members of my own ethnic group. 3. I have a clear sense of my ethnic background and what it means for me. 4. I like meeting and getting to know people from ethnic groups other than my own. 5. I think a lot about how my life will be affected by my ethnic group membership. 6. I am happy that I am a member of the group that I belong to. 7. I sometimes feel it would be better if different ethnic groups didn't try to mix together. 8. I am not very clear about the role of my ethnicity in my life. 9. I often spend time with people from ethnic groups other than my own. 10. I really have not spent much time trying to learn more about the culture and history of my ethnic group.

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity *23. Use the numbers given below to indicate how much you agree or disagree with each statement. 4- Strongly Agree 3- Somewhat Agree 2- Somewhat Disagree 1- Strongly Disagree 11. I have a strong sense of belonging to my own ethnic group. 12. I understand pretty well what my ethnic group membership means to me, in terms of how to relate to my own group and other groups. 13. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group. 14. I have a lot of pride in my ethnic group and its accomplishments. 15. I don't try to become friends with people from other ethnic groups. 16. I participate in cultural practices of my own group, such as special food, music, or customs. 17. I am involved in activities with people from other ethnic groups. 18. I feel a strong attachment towards my own ethnic group. I enjoy being around people from ethnic groups other than my own. 19. I feel good about my cultural or ethnic background.

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity
* 24. My ethnicity is:
Asian/Pacific Islander
Black/African American
Hispanic/Latino
Middle Eastern/Arab
Native American
White/Caucasian
Biracial, (please specify below)
Other, (please specify below)
Please specify if you chose Biracial OR Other
* 25. My father's ethnicity is: (choose from options above)
* 26. My mother's ethnicity is: (choose from options above)

	1- Almost Never	tne stated m	anner, using ti	he scale given	below. 5- Almost Always
I'm disapproving and judgmental about my own flaws and inadequacies.	0	Ö	Ŏ	Ö	O
2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.	0	\circ	0	0	0
3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.	0	0	0	0	0
4. When I think about my nadequacies, it tends to make me feel more separate and cut off from the rest of the world.	0	0	0	0	0
5. I try to be loving towards myself when I'm feeling emotional pain.	0	0	0	0	0
6. When I fail at something important to me I become consumed by feelings of nadequacy.	0	0	0	0	0
7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.	0	0	0	0	0

Exploring the Impact of Mindfulness and Self-Compassion on Ethnic Identity * 28. HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES Please read each statement carefully before answering. To the right of each item, indicate how often you behave in the stated manner, using the scale given below. 1- Almost Never 5- Almost Always 8. When times are really difficult, I tend to be tough on myself. 9. When something upsets me I try to keep my emotions in balance. 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people. 11. I'm intolerant and impatient towards those aspects of my personality I don't like. 12. When I'm going through a very hard time, I give myself the caring and tenderness I need. 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am. 14. When something painful happens I try to take a balanced view of the situation.

Please read each statement carefully before answering. To the right of each item, indicate how often you behave in the stated manner, using the scale given below. 1- Airost Never 2 3 4 5- Airost Alver as part of the human as part of the human separate to the human separate to the human separate to the condition. 15. When I see aspects of proper to the condition of the conditi	loring the Impa	ct of Mindfu	lness and	Self-Compa	assion on E	thnic Ident
Indicate how often you behave in the stated manner, using the scale given below. 1- Almost Never 2 3 4 5- Almost Alw 1- Almost Never 2 3 4 5- Almost Alw 2 3 4 5- Almost Alw 3- Almost Alw 3- Almost Alw 4- Almo	9. HOW I TYPICAL	LY ACT TOW	ARDS MYSEL	F IN DIFFICUL	T TIMES	
1- Almost Never 2 3 4 5- Almost Alw 15. I try to see my failings as part of the human condition. 16. When I see aspects of	lease read each st	tatement care	fully before a	nswering. To t	he right of eac	h item,
15. I try to see my failings as part of the human condition. 16. When I see aspects of approach it like, I get down on myself. 17. When I fail at aspending important to me try to keep things in perspective. 18. When I'm really arranged it is a specific or a specifi	ndicate how often	you behave in	the stated m	anner, using t	he scale given	below.
as part of the human condition. 16. When I see aspects of phyself that I don't like, I get down on myself. 17. When I fail at per try to keep things in perspective. 18. When I'm really perspective. 18. When I'm really perspective. 19. I'm kind to myself when perspection perspection perspective. 19. I'm kind to myself when perspection perspective. 19. I'm kind to myself when perspection perspective. 10. When something upsets perspection perspective. 11. I can be a bit cold-perspection perspection. 12. I can be a bit cold-perspection.		1- Almost Never	2	3	4	5- Almost Always
myself that I don't like, I get down on myself. 17. When I fail at comething important to me try to keep things in perspective. 18. When I'm really ctruggling, I tend to feel dike other people must be having an easier time of it. 19. I'm kind to myself when I'm experiencing suffering. 20. When something upsets me I get carried away with my feelings. 21. I can be a bit cold- mearted towards myself when I'm experiencing	as part of the human	0	0	0	0	0
77. When I fail at	nyself that I don't like, I get	0	0	\circ	\circ	0
truggling, I tend to feel tike other people must be traveling an easier time of it. 9. I'm kind to myself when the experiencing suffering. 10. When something upsets the I get carried away with they feelings. 11. I can be a bit cold- treated towards myself when I'm experiencing	7. When I fail at comething important to me try to keep things in	0	0	0	0	0
19. I'm kind to myself when I'm experiencing suffering. 20. When something upsets In I get carried away with In I get carried away with In I can be a bit cold- I can be a	struggling, I tend to feel ike other people must be	0	0	0	0	0
20. When something upsets one I get carried away with only feelings. 21. I can be a bit colderearted towards myself when I'm experiencing	9. I'm kind to myself when		0			
21. I can be a bit cold- earted towards myself when I'm experiencing	0. When something upsets ne I get carried away with	0	0	0	0	0
	21. I can be a bit cold- nearted towards myself when I'm experiencing	0	0	0	0	0
	unering.					

try to approach my feelings with curiosity and openness. 23. I'm tolerant of my own	loring the Impa	ct of Mindfu	lness and	Self-Comp	assion on E	thnic Identi
Indicate how often you behave in the stated manner, using the scale given below. I - Almost Never 2 3 4 5 - Almost Always 22. When I'm feeling down try to approach my elelings with curiosity and elements. 23. I'm tolerant of my own laws and inadequacies. 24. When something order to be a long the incident out of proportion. 25. When I fail at order to feel alone in my failure. 26. I try to be understanding and patient owards those aspects of my	0. HOW I TYPICA	LLY ACT TOW	ARDS MYSEL	F IN DIFFICUL	T TIMES	
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		9. I certainly feel useless at imes.	0	\circ	\circ	0
		10. At times I think I am no good at all.	0	0	0	0

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