THE RELATIONSHIPS BETWEEN ETHNIC IDENTITY, SOCIAL CONTEXT, AND

DEPRESSIVE SYMPTOMS IN ADOLESCENTS

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE GRADUATE SCHOOL OF APPLIED AND PROFESSIONAL PSYCHOLOGY

OF

RUTGERS,

THE STATE UNIVERSITY OF NEW JERSEY

BY

MICHELLE MILLER, PSY.M.

IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

NEW BRUNSWICK, NEW JERSEY               OCTOBER 2013

APPROVED:        _____
                   Jami Young, PhD

                  _____
                   Shalonda Kelly, PhD

DEAN:           _____
                   Stanley Messer, PsyD

ABSTRACT

Ethnic identity is a construct that has been studied for decades in the field of psychology.

Much of this literature has focused on contextual factors that may contribute to the

development of ethnic identity, as well as how ethnic identity impacts mental health.  The

purpose of this study was to better understand ethnic identity across different racial and

ethnic groups, which social factors are related to ethnic identity in adolescents, and the

relationship between ethnic identity and adolescent depression.  In a sample of 186

adolescents, ethnic identity was higher in Hispanic youth than Black, Non-Hispanic or

White, Non-Hispanic youth.  Greater parental support and feelings of school

connectedness were predictive of concurrent ethnic identity; parental conflict was not

significantly associated with ethnic identity.  Ethnic identity did not significantly predict

concurrent depressive symptoms.  This study highlights the importance of positive social

relationships in the development of adolescent ethnic identity.  Future research should

incorporate general measures of well-being to better understand the relationship between

ethnic identity and mental health during adolescence.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

LIST OF TABLES

**Introduction**

Ethnic identity is a complex construct that had been approached from

sociological, anthropological, and developmental perspectives with little agreement on its

definition (Phinney, 1990). Ethnic identity has no precise definition, but has been

described in the psychological literature as one's sense of belonging to their cultural

background, attitudes towards their cultural background, social participation with others

who are from the same cultural background, and engagement in cultural practices. It is

often confused with ethnicity and race; however, these are different constructs. Ethnicity

refers to a group of people who identify themselves, or have been identified by others, as

having a common history and ancestry, as well as shared practices, values, and beliefs

that may stem from their regional, tribal, or national roots (Cokely, 2007; Utsey, Chae,

Brown, & Kelly, 2002). In contrast, race refers to the classification of people based on

what are believed to be shared physical characteristics, such facial features and skin

color.

A common approach to ethnic identity in psychological literature has been to

view it as a developmental process in an individual's life that is influenced by the

surrounding social context (Phinney & Ong, 2007; Roberts et al., 1999). This process

begins with a lack of clarity about one's ethnic identity and over time develops towards

ethnic identity achievement and commitment through exploration. Ethnic identity is

believed to initially emerge in a primitive form during early childhood and undergo large

changes during adolescence as youth begin to increasingly explore their identity within

their social environment (Phinney, 1992; Quintana, 1994; Quintana 1998). During

adolescence, youth are exposed to more information about their culture. They become

more aware of the role that their ethnicity plays within their social environment, which may cause their own ethnic identity to become more visible and internalized (Phinney, 1990). As individuals of a minority ethnicity and race stand out more than those of the ethnic and racial majority group and may experience differential treatment, their ethnic identity is more salient (Phinney, Lochner, Murphy, 1990). Research on ethnic identity has predominantly found that both ethnic and racial minority youth report higher levels of ethnic identity (Fuligni, Witkow, & Garcia, 2005; Grieg; 2003; Phinney & Alipuria, 1990; Roberts et al., 1999). Thus, ethnic identity may vary across human development and the environment.

Developing a measure that encompasses the complexity of ethnic identity has proven to be a challenging task (Cokely, 2007). Although a variety of measures of ethnic identity have been created, many are for specific ethnicities. In contrast, Phinney has approached ethnic identity as a more universal experience (Phinney, 1992). She created a single brief measure, called the Multigroup Ethnic Identity Measure (MEIM), to assess the construct in all ethnicities. This measure has been widely used since it was first published two decades ago (Phinney & Ong, 2007).

The MEIM was originally created as a 14-item measure assessing three components of ethnic identity that included a sense of belonging to one's ethnic group, ethnic identity achievement, and engagement in cultural practices (Phinney, 1992). A later study suggested that two of the items on the MEIM did not fit with the rest of the measure, transforming it into a 12-item measure (Roberts, et al., 1999). The 12-item MEIM appeared in that study to be broken down into two factors. One factor was affirmation, belonging, and commitment, and the second factor was exploration. Further

research has not found consistent results of a two factor structure, thus the MEIM has primarily been used as a single factor measure (Phinney & Ong, 2007). In 2007, Phinney and Ong shortened the measure to only six items, but there has been limited research using this new version. Additional research is necessary to determine if it as reliable and valid as the 12-item version.

Research on ethnic identity has often focused on the adolescent population as this is a significant period of general identity development in the human lifespan (Phinney, 1992). Within this literature, there have been two separate, but related areas that have been of great interest. The first area of concern has been what contextual factors may contribute to the development of ethnic identity. The second area has been how ethnic identity impacts individuals, particularly with regard to general well-being and mental health. These two lines of research will be discussed below.

**Social Environment and Ethnic Identity**

Ethnic identity is not a static variable, but one that changes across time and place (Phinney & Ong, 2007). Research has begun to explore how the immediate social environment may affect adolescent's ethnic identity (Bennet, 2006; Fuligni, Witkow, & Garcia, 2005). Family and school are key support systems that can foster or hinder many aspects of child and adolescent development, including ethnic identity (Quintana, 1998; Quintana et al., 2006). In a study focused on a sample of African American youth, racial socialization provided by caregivers was associated with a stronger ethnic identity (Bennet, 2006). Based on those results, the development of ethnic identity may be enhanced through caregivers that give support specifically in relation to their children's

ethnic background.  However, they did not address the role of more general parental support with regard to ethnic identity.  Since the sample only included African American youth in the city of Cleveland, Ohio, it cannot be assumed that the finding would be the same for adolescents in different locations, or of other ethnicities.  In addition, the measure used in this study was a combination of items from the MEIM and a scale that was created solely for this study.  Therefore, it may measure ethnic identity differently than the MEIM.

Pellebon (2000) examined the role of the school environment and ethnic identity among 252 primarily European American and African American adolescents from different high schools in Wisconsin.  The results indicated that being a member of an ethnic minority group, as well as believing that one can work with other ethnic groups in schools towards a shared goal, was associated with a stronger ethnic identity.  These results did not vary by whether any particular ethnic group had a majority presence in the school.  Ethnic identity and adolescents' school setting were also investigated by Fuligni et al. (2005) in a diverse sample of 589 ninth-grade youth in three public Los Angeles high schools.  The high schools varied in whether they were populated predominantly by Mexican American, European American, or Chinese American students.  The investigators found that adolescents with a stronger ethnic identity were more positive about their overall education, viewed school as more useful and valuable, and believed that their schools valued and respected them.  This finding was consistent among all ethnicities, but Mexican and Chinese American adolescents had a greater relationship between ethnic identity and positive school attitude than European American adolescents.  Those results suggest that having a stronger ethnic identity can improve adolescent's

motivation for school and/or a more supportive school environment can strengthen adolescents' ethnic identity, particularly in adolescents from ethnic minority groups. Although this sample was diverse, it is important to note that all youth were from one particular city. In addition, only two subscales of a modified version of the Multidimensional Inventory of Black Identity (Sellers et al., 1997) were used to assess ethnic identity.

**Ethnic Identity and Depression**

The relationship between ethnic identity and psychological adjustment has received increasing attention over the last few decades. A recent meta-analysis found a consistent positive relationship between well-being and ethnic identity in both adolescents and adults, but ethnic identity accounted for only a small proportion of variance for well-being (Smith & Silva, 2011). In addition, larger effect sizes were found for the associations between ethnic identity and measures of general well-being ($r = .24$) and self-esteem ($r = .23$) than the associations between ethnic identity and measures of mental health problems ($r = .04$), including depressive symptoms ($r = 0.10$). Overall, effect sizes were also found to be greater in studies with younger participants than those whose average participant was 40 years or older. These results suggest that the relationship between ethnic identity and psychological adjustment may be strongest in adolescents and young adults. Given the potentially stronger link between ethnic identity and psychological adjustment in adolescents, a number of studies have focused specifically on this population, in particular to determine whether ethnic identity is associated with specific aspects of mental health. Depression has been the focus of many

of these studies as it is a significant problem for youth, affecting approximately 15% of the adolescent population (Kessler & Walters, 1998).

Much of the research examining the relationship between ethnic identity and depressive symptoms in adolescents has focused on African American youth (Greig, 2003; Phinney, 1990). Many of those studies, including more recent ones, have found a negative association between ethnic identity and depression (Gaylord-Harden, Ragsdale, Mandara, Richards, & Peterson, 2007; Street, Harris-Britt, & Walker-Barnes, 2009). For example, Street et al. (2009) found that higher levels of ethnic identity predicted fewer depressive symptoms in a sample of 61 African American adolescents.

Some recent studies suggest that the negative relationship between ethnic identity and depressive symptoms may generalize to Asian American youth. In one study, a sample of 215 Korean American adolescents from high schools in Los Angeles were administered the MEIM and the Youth Self Report form (YSR) of the Child Behavioral Checklist (Achenbach, 1991). The results of that study indicated that having a stronger affiliation with the Korean culture was associated with fewer internalizing symptoms for Korean American adolescents (Shrake & Rhee, 2004). Williams et al. (2005) examined ethnic identity and depressive symptoms in 140 seniors from two high schools in Hawaii who were of partial or full Japanese descent. Ethnic identity was measured using the Ethnic Identity Scale adjusted for the Japanese culture, while depressive symptoms were assessed using the CES-D. The researchers of this study found that for only adolescents who identified primarily with the Japanese culture rather than the American culture, engaging in more cultural behaviors predicted fewer depressive symptoms. For Japanese youth who were more acculturated with the American culture, ethnic identity variables

were not predictive of depressive symptoms. The relationship between ethnic identity and depressive symptoms has also been examined in adolescents from Chinese immigrant families in Canada (Costigan, Koryzma, Hua, & Chance, 2010). The sample consisted of 94 youth who were administered the MEIM and CES-D. The results of that study suggested that a stronger ethnic identity is associated with fewer depressive symptoms in Chinese youth.

Research on the relationship between ethnic identity and depression in Hispanic adolescents has received limited attention (Greig, 2003). Umaña-Taylor and Updegraff (2007) examined depressive symptoms, self-esteem, and ethnic identity in a sample of 273 Hispanic adolescents from a high school in the Midwest. The majority of adolescents were Mexican American. To measure ethnicity, two subscales (exploration and resolution) from the Ethnic Identity Scale were used. The CES-D was administered to measure depressive symptoms. No significant association was found between depressive symptoms and ethnic identity. The different results in this study from others could reflect the use of only two subscales from a measurement of ethnic identity rather than the whole measure. It is also possible that ethnic identity plays a different role for Hispanic youth than other ethnicities, considering issues such as the variety of racial backgrounds and acculturation difficulties that are more unique to this population (Quintana & Scull, 2009).

Recently, Rogers-Sirin and Grupta (2012) examined the relationship between ethnic identity and depressive symptoms in 171 Asian and Hispanic adolescents over a two-year period. Unlike many other studies, they used the Collective Self-Esteem Scale-Race (Luhtanen & Crocker, 1992). The YSR was used to assess depressive symptoms.

They found that for both Asian and Hispanic youth, increases in the level of ethnic identity were associated with decreases in depressive symptoms over the course of two years for both Hispanic and Asian youth.  These results provide additional support for an association between ethnic identity and depressive symptoms.

Not only have youth from ethnic minority groups been examined, but also youth of ethnic majority groups.  Yasui, Dorham, and Dishion (2004) explored ethnic identity and depressive symptoms in 159 sixth-grade European American and African American adolescents across different middle schools in Portland, Oregon.  The youth were administered the MEIM and the CDI.  Although a stronger ethnic identity predicted less depressive symptoms in both ethnic groups, it was far more pronounced in the African American adolescents than the European American adolescents.  This finding is consistent with the concept that ethnic identity is more salient for ethnic minorities than for youth from a majority ethnic group (Phinney, 1990).  The study also highlights the importance of comparing the relationship between ethnic identity and depressive among different racial and ethnic groups

Roberts et al. (1999) investigated ethnic identity and depression across a diverse sample of 5,423 adolescents from five middle schools in the metropolitan Houston area, including African American, Central American, Chinese American, European American, Indian American, Mexican American, and Vietnamese American youth.  All youth were administered the MEIM and a measure of depressive symptoms created specifically for the study.  The mean ethnic identity score was lowest for European American youth which is consistent with the literature.  Ethnic identity was negatively associated with depressive symptoms for the sample as a whole.  That provides evidence that for many

adolescents across diverse ethnicities, a stronger ethnic identity is associated with less depressive symptoms. However, when this was examined among the individual ethnic groups of the sample, not all the relationships were found to be significant. Within the three largest ethnic groups, the negative association between ethnic identity and depressive symptoms was significant for European American and African American youth, but not for Mexican American youth. This is a similar finding to that of Umaña-Taylor and Updegraff's 2007 study. It may be the case that for Mexican American youth, ethnic identity does not have the same effect on depressive symptoms as it does for other ethnicities.

Considering the variations by race and ethnicity in the relationships between ethnic identity, social environment, and depressive symptoms across these studies, it is important for future studies to examine whether youths' race and ethnicity impacts the association between ethnic identity and depressive symptoms.

**Ethnic Identity, Social Environment, and Depression**

Only a limited number of studies have explored the relationships between adolescents' social environment, ethnic identity, and depressive symptoms. Street et al. (2009) investigated the relationship between family factors, ethnic identity, and depressive symptoms in 61 African American adolescents. Ethnic identity was measured using the MEIM. Adolescents with a stronger ethnic identity experienced greater family cohesion and less family conflict. Furthermore, both greater ethnic identity and family cohesion predicted fewer depressive symptoms. These results provide further evidence

that positive family relationships, as well as ethnic identity, may be involved with depressive symptoms in adolescents.

Gaylord-Harden, et al. (2007) examined the role of ethnic identity in the relationship between perceived social support and depressive symptoms among 227 African American youth in Chicago middle schools. Ethnic identity was measured using the MEIM. Perceived peer and family support predicted less depressive symptoms even when ethnic identity was accounted for, but ethnic identity served as a mediator in the relationship between perceived support and depressive symptoms in adolescent males. Specifically, perceiving that one has greater social support predicted fewer depressive symptoms only through a higher level of ethnic identity. It appears that for African American males, ethnic identity may be one way that social support protects against depression. Further research with other ethnicities is necessary to see if this finding applies to all adolescents, and also whether this relationship differs by gender as it did in this study.

McHale et al. (2006) also focused on the interaction between ethnic identity, depressive symptoms, parental relationships, and racial socialization among 162 African American adolescents and their families. Racial socialization referred to parents providing their children with information and experiences related to their cultural background. As in most studies of ethnic identity, the MEIM was used to assess ethnic identity. Paternal and maternal warmth were both associated with greater racial socialization, but neither predicted ethnic identity or depressive symptoms. The investigators did not investigate the relationship between depressive symptoms and ethnic identity in this study. Although those results do not support the role of parental support

in adolescent ethnic identity or depressive symptoms, the sample was limited to African American youth with two parent families in only two east coast urban areas, making it difficult to generalize the results.

While youth spend a large portion of their time in school, no study to date has investigated the role of the school environment in the relationship between ethnic identity and depressive symptoms. Although the studies above have explored the role of the family environment with ethnic identity and depressive symptoms, and found associations between these variables, their influence on one another is still not well understood and requires further investigation. Furthermore, no study has examined the associations between the family environment, ethnic identity, and depressive symptoms in adolescent youth in a sample of adolescents from more than one ethnic or racial group.

**Current Study**

The goal of the current study is threefold: 1) to examine levels of ethnic identity in this sample of adolescents, 2) to better understand which social factors are related to ethnic identity in adolescents, and 3) to examine the relationship between ethnic identity and adolescent depression in a sample of youth from different racial and ethnic backgrounds. Specifically, it is hypothesized that:

1. Levels of ethnic identity will differ across racial and ethnic groups; minority adolescents will have higher levels of ethnic identity than White, non-Hispanic adolescents.

2. Feeling more connected to the school setting and having more positive relationships with family members will predict higher levels of ethnic identity across different racial and ethnic groups.

3. A stronger ethnic identity will predict fewer depressive symptoms across different racial and ethnic groups.

**Methods**

*Participants*

Participants in the current study are part of a larger, longitudinal project assessing the effectiveness of a school-based group intervention designed to prevent depression in adolescents. Participants were recruited from seven different New Jersey school districts, including four high schools and six middle schools. The school districts varied in racial and ethnic composition. The total sample in our study is comprised of 186 adolescents in grades 7 through 10, with 67% being female (N= 125) and 33% being male (N= 61). Youth ranged in age from 12- to 16- years-old. The racial composition of the sample included 126 White adolescents, 37 Black adolescents, 8 Asian adolescents, 1 American Indian adolescent, and 14 adolescents who identified with more than one race. Regarding ethnicity, 71 adolescents identified as Hispanic. Within our sample of Hispanic adolescents, 55 identified their race as White, 11 identified their race as Black, and 5 identified as more than one race.

To be eligible for enrollment, adolescents needed to first report a score of 16 or higher on the Center for Epidemiologic Studies - Depression Scale (CES-D) (Radloff, 1977) during a school wide screening. Those adolescents and their caregiver(s) were

then asked to participate in the school-based prevention study. If the adolescents and caregivers consented, the caregivers completed baseline measures. Within the next couple of weeks, adolescents met with a member of the research team and were administered the Schedule for Affective Disorders and Schizophrenia for School-Age Children (K-SADS-PL) (Kaufman, Birmaher, Brent, & Rao, 1997) to confirm their appropriateness for a preventive intervention. If they reported at least two subthreshold or threshold symptoms of depression, then they were eligible to participate in the study. Adolescents were excluded from the study if they had a suicide attempt in the past year, self-injurious behavior in the past 3 months, current active suicidal ideation, as well as current major depression, dysthymia, substance abuse, psychosis, conduct disorder, or bipolar disorder. Eligible adolescents met with the evaluator for a second assessment meeting to complete additional baseline measures (including those described below).

*Procedure*

Independent evaluators involved in the larger research study met with eligible participants and administered baseline measures. The participants obtained a $20 gift card for their involvement with the study. At the time of obtaining their consent, parents also met with research staff and completed baseline measures. This included a demographics form that provided information on the adolescents' age, gender, and racial and ethnic background. The parents received a $10 gift card for their participation.

The other variables assessed for this study were collected at the adolescent baseline assessment and included adolescent's depressive symptoms, measured through the Center for Epidemiological Studies-Depression Scale (CES-D) (Radloff, 1977),

ethnic identity, measured by the Multigroup Ethnic Identity Measure (MEIM) (Phinney,
1992), school context, measured by the Psychological Sense of School Membership Scale
(PSSM) (Goodenow, 1993), family context measured by the Network of Relationships
Inventory-Revised (NRI-R) (Furman & Buhrmester, 1985), and race and ethnicity
obtained through the demographics from.

The hypotheses for this study were examined by conducting analyses on the
sample as a whole, as well as comparing White, non-Hispanic youth with youth from all
minority groups combined.  Due to the limited number of Black youth, biracial youth,
American Indian, and Asian youth, these racial groups could not be examined
individually in a regression analyses.  Those groups of youth were instead combined with
Hispanic youth and then compared with White, non-Hispanic youth in a "White, non-
Hispanic vs. minority" variable to capture the theorized difference in racial and ethnicity
salience.  This variable was dummy-coded in order to be placed into the different
analyses.  To better understand the variation in level of ethnic identity between White,
non-Hispanic and other ethnic and racial groups, t-tests were conducted comparing
White, non-Hispanic youth to Black, non-Hispanic youth, and Hispanic youth (the two
largest minority groups in the sample).

*Measures*

Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992; Roberts et al., 1999) is a
widely used 12-item instrument assessing ethnic identity.  Each item is rated on a Likert
scale ranging from 1 (strongly disagree) to 5 (strongly agree).  It has been used across
different ethnic groups with both adults and adolescents.  The measure has been broken

down into two factors: the ethnic identity search/exploration factor and the affirmation, belonging, and commitment factor (Roberts et al., 1999). However, varying results from factor analyses have caused many researchers to recommend that the scale be assessed as a single factor (Umaña-Taylor, Vargas-Chanes, Garcia, & Gonzales-Blacken, 2008). Although, a new shortened measure has been created, it has not yet been widely used in research (Phinney & Ong, 2007). To be consistent with the current literature, the investigators of this study have chosen to use the 12-item measure as a single factor.

Psychological Sense of School Membership Scale (PSSM) (Goodenow, 1993) is an 18-item measure of school belonging. All responses are indicated on a Likert scale ranging from 1 (not at all true) to 5 (completely true). It includes statements such as "Other students like me the way I am," and "Most teachers in the school are interested in me." The PSSM is correlated significantly with grades and teacher-reported student effort (Goodenow, 1993) and demonstrates high reliability ranging from .78 to .95 (You, Ritchey, Furlong, Schochet, & Bowman, 2011).

Center for Epidemiological Studies-Depression Scale (CES-D) (Radloff, 1977) is a self-report measure that assesses the frequency of 20 depressive symptoms over the past week using a 4-point Likert scale ranging from 0 = rarely or none of the time (less than 1 day) to 3 = most or all of the time (5-7 days). Radloff reported good internal reliability for the measure, with Cronbach's alpha coefficients of .84-.85 in predominantly Caucasian community samples and .90 in clinical samples.

The Network of Relationships Inventory-Revised (NRI-R) (Furman & Buhrmester, 1985)
is a 19-item self-report measure that assesses adolescents' relationships with friends,
family, romantic partners, and siblings.  Adolescents are asked to name the significant
people in their lives and then respond to separate scales ranging from 1 (little or none) to
5 (the most) for each of the people they named.  The items look at both positive and
negative aspects of these relationships (e.g., "How much does this person really care
about you?" and "How much do you and this person argue with each other?").  The NRI-
R has good internal consistency, test-retest reliability, and predictive validity (Furman,
1996; Furman & Buhrmester, 1985).  For the purposes of this study, we will be focused
only on the conflict and support scales within parental relationships.  This is achieved
through first obtaining the sums for maternal and paternal support and conflict, and then
computing a mean parental conflict (average of maternal and paternal conflict) and mean
parental support score (average of maternal and paternal support).

**Results**

*Preliminary Analyses*

Mean scores and standard deviations for ethnic identity, depressive symptoms,
school connectedness, parental support, and parental conflict are presented in Table 1.
With regard to depressive symptoms, for the whole sample participants ranged in their
CES-D scores from 0 to 40 ($M = 15.27$; $SD = 8.54$).  Scores on the MEIM for the whole
sample ranged from 1.17 to 5 ($M = 3.39$; $SD = 0.71$).

Table 1
*Means and Standard Deviations for Study Variables*

| | Total Sample | White, Non-Hispanic Youth | Minority Youth |
|---|---|---|---|
| Ethnic Identity | 3.39 (0.71) | 3.23 (0.73) | 3.49 (0.69) |
| Depressive Symptoms | 15.27 (8.54) | 13.62 (8.10) | 16.30 (8.68) |
| School connectedness | 3.28 (0.62) | 3.36 (0.65) | 3.23 (0.60) |
| Parental Support | 25.09 (5.71) | 26.41 (5.32) | 24.27 (5.82) |
| Parental Conflict | 13.08 (4.73) | 12.17 (12.47) | 16.03 (8.89) |

*Standard deviations are in parentheses

*Levels of Ethnic Identity*

A One-way ANOVA was conducted to compare ethnic identity for White, non-Hispanic youth vs. minority youth. There was a significant difference in the scores for ethnic identity between White, non- Hispanic (*M*=3.23, *SD* = 0.73) and minority youth (*M* =3.49, *SD* =0.69), $F(1,184) = 6.22$, $p = 0.01$. To further examine those differences in ethnic identity, a series of t-tests were conducted comparing Hispanic, White, non-Hispanic, and Black, non-Hispanic youth. Hispanic youth (*M*=3.62, *SD* = 0.62) had significantly higher levels of ethnic identity than White, non-Hispanic youth (*M*=3.23, *SD* = 0.73), $t(140) = -3.45$, $p = 0.00$, and Black, non-Hispanic youth (*M*=3.22, *SD* = 0.75), $t(95) = 2.65$, $p = 0.01$. There were no significant differences in the level of ethnic identity between Black, non-Hispanic and White, non-Hispanic youth, $t(95) = 0.04$, $p = 0.97$.

*Parental Relationships and School Connectedness with Ethnic Identity*

To test the second hypothesis, that feeling more connected to the school setting and having more positive relationships with family members would be related to stronger ethnic identity, bivariate correlations were conducted (see Table 2 for results). Having a stronger ethnic identity was significantly associated with feeling more connected to the school setting ($r = 0.21$, $p < 0.01$) and parental support ($r = =0.23$, $p < 0.01$). Greater conflict in parental relationships was not correlated with ethnic identity ($r = 0.08$, $p = 0.31$).

Table 2
*Intercorrelations Among Variables*

| Variable | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. Depressive Symp. | - | -.05 | -.32** | -.20** | .44** |
| 2. Ethnic Identity | - | - | .21** | .23** | .08 |
| 3. School Connectedness | - | - | - | .43** | -.27** |
| 4. Parental Support | - | - | - | - | -.40** |
| 5. Parental Conflict | - | - | - | - | - |

\* $p \leq .05$, \*\* $p \leq .01$.

To further understand the role of social support, as well as ethnic and racial groups, in ethnic identity, a regression analysis was conducted. The results are shown in Table 3. The model was significant ($R^2 = 0.12$, $F(3,182) = 8.31$, $p = 0.00$) with greater parental support ($\beta = 0.21$, $p = 0.01$) and being from a racial or ethnic minority group ($\beta = -0.23$, $p = 0.00$) significantly predicting ethnic identity.

Table 3

*Regression analysis examining school connectedness, parent support, and race and ethnicity as predictors for ethnic identity*

|  | B | SE | β | Sig | F | R² |
|---|---|---|---|---|---|---|
| Model | - | - | - | 0.00** | 8.31 | 0.12 |
| Parent Support | 0.27 | 0.01 | 0.21 | 0.01** |  |  |
| School Connectedness | 0.16 | 0.09 | 0.14 | 0.07 |  |  |
| White, non-Hispanic vs. minority youth | -0.34 | 0.10 | -0.23 | 0.00** |  |  |

* p ≤ .05, ** p ≤ .01.

*Ethnic Identity and Depressive Symptoms*

To examine our third hypothesis, bivariate correlations were conducted between ethnic identity and depressive symptoms (see Table 2 for results). Depressive symptoms were not correlated with ethnic identity. A regression analysis was then used to assess the role of ethnic identity and ethnicity and race in predicting depressive symptoms. The results are shown in Table 4. The model was not significant ($R^2 = 0.03$, $F (2,183) = 2.76$, $p = 0.07$). However, while ethnic identity did not significantly predict depressive symptoms, being from a racial or ethnic minority was a significant predictor of a higher level of depressive symptoms ($\beta = - 0.17$, $p = 0.03$).

Table 4

*Regression analysis examining ethnic identity and ethnicity and race as predictors for depressive symptoms*

|  | B | SE | β | Sig | F | R² |
|---|---|---|---|---|---|---|
| Model | - | - | - | 0.07 | 2.76 | 0.03 |
| Ethnic Identity | -0.94 | 0.89 | -0.08 | 0.29 |  |  |
| White, non-Hispanic vs. minority youth | -2.93 | 1.30 | -0.17 | 0.03* |  |  |

* $p \leq .05$,  ** $p \leq .01$.

**Discussion**

We found evidence to support our first hypothesis that ethnic identity would vary by race and ethnicity.  Specifically, being from a racial and/or ethnic minority group predicted higher levels of ethnic identity.   That fits with the theory that ethnic identity is more salient for ethnic and racial minorities.  We also found that Hispanic youth had significantly stronger ethnic identity than Black, non-Hispanic and White non-Hispanic youth.  It was surprising that Black, non-Hispanic youth did not significantly differ from White, non-Hispanic youth.  Prior research has found a greater discrepancy between these groups, which is perhaps because White, non-Hispanic youth in other studies had lower mean MEIM scores than in our study (Roberts et al., 1999; Swenson & Prelow, 2005).  In one study, the mean MEIM score for European American youth was 2.71 ($SD = 0.59$) (Roberts et al., 1999).

The demographics form in the current study asked individuals to identify their race and whether or not they were Hispanic. Thus, individuals who might otherwise identify as a specific ethnicity, such as Italian, Jamaican, or African, were placed into racial categories. This classification, which is inconsistent with the ethnic identity literature, may have masked variations in ethnic identity across ethnic groups.  In

addition, this may explain why the White, non-Hispanic youth reported higher levels of ethnic identity in this study than in other studies. Another possible explanation may be because this sample was obtained from suburban areas as many of the studies described in this paper examined ethnic identity in youth from urban areas.  Although cities are often diverse, individuals of ethnic and racial majority groups often live in neighborhoods with others who are primarily of the same ethnicity or race (Fisher, 2003).  White, non-Hispanic youth in urban areas may be more likely to also attend schools and socialize primarily with other youth from their ethnic and racial group than White, non-Hispanic youth in smaller ethnically diverse towns.  Our sample of White, non-Hispanic youth may have had more social experiences with minority youth than White, non-Hispanic youth in previously studied urban areas, and that may have made their ethnic identity more salient for them.  Future research on ethnic identity with adolescents should compare the levels of ethnic identity in urban, rural, and suburban areas.

Our second hypothesis, that feeling more connected to the school setting and having more positive parental relationships would be related to higher levels of ethnic identity, was also supported.  In the initial correlational analyses, a stronger ethnic identity was associated with receiving more parental support, as well as feeling more socially connected to the school environment.  However, in the regression analyses, only greater parental support predicted higher levels of ethnic identity in youth.  This contrasts with the study by McHale et al. (2006), in which there was no direct relationship found between parental warmth and ethnic identity.  This may be due to their use of a different measure of positive parental relationships.  While our measure looks as support, their measure was focused only warmth.   Other studies have not compared school and

parental relationship variables in predicting ethnic identity, making this an important and novel finding highlighting a potentially large role that positive family relationships play in adolescent ethnic identity. These results imply that beyond negative parent experiences and feeling support from the school social context, receiving support from a parent contributes to stronger ethnic identity development in youth. However, longitudinal research is necessary to determine whether it is parental support that predicts adolescent ethnic identity, or adolescent ethnic identity that predicts parental support.

It is also possible that there are other variables involved in the association between ethnic identity and social support that were not included in this study. Parental racial or ethnic socialization is one variable that has been linked with both ethnic identity and more parental support (Hughes et al., 2006; McHale et al., 2006). For example, mothers' racial socialization, reported by adolescent girls has predicted ethnic identity across different ethnic groups (Hughes, Hagelskamp, Way, & Foust, 2008). Quintana, Castaneda-English, and Ybrarra (1999) also found that parental ethnic socialization predicted ethnic identity development in Mexican American adolescents. Future research examining the association between ethnic identity and parental relationships should also assess for the role of racial and ethnic socialization.

We did not find evidence to support our third hypothesis, that ethnic identity would predict fewer depressive symptoms. These findings add to the inconsistency around ethnic identity and depressive symptoms in the literature. While a number of studies have found a significant relationship between depression symptoms and ethnic identity (Costigan et al., 2010; Gaylord-Harden et al., 2007; Rogers-Sirin & Gupta; 2012; Sellers et al., 2006; Shrake and Rhee, 2004; Yasui et al., 2004), many others have found

non-significant results for different ethnic and racial groups (Roberts et al., 1999; Swenson and Prelow, 2005; Umaña-Taylor & Updegraff, 2007; Williams et al., 2005). There have been non-significant findings for a relationship between depressive symptoms and ethnic identity in prior studies for European American and African American youth (Swenson & Prelow, 2005), Asian American youth (Williams et al., 2005), and Mexican American youth (Umaña-Taylor & Updegraff, 2007; Roberts et al.,1999). As previously mentioned, a meta-analysis of ethnic identity studies indicated that general measures of well-being are more consistently associated with ethnic identity then measures of depressive symptoms, with only small effects found for the association between ethnic identity and depressive symptoms ($r = .10$) (Smith & Silva, 2011). A number of studies which found no significant relationship between depressive symptoms and ethnic identity, found associations between ethnic identity and measures of well-being (Roberts et al., 1999; Smith & Silva, 2011; Swenson & Prelow, 2005; Umaña-Taylor & Updegraff, 2007). For example, Roberts et al. (1999) did not find a significant association between ethnic identity and depressive symptoms in Mexican American youth, but they did find positive associations between ethnic identity and self-esteem, optimism, mastery, and coping. Similarly, Swenson and Prelow (2005) did not find a significant relationship between ethnic identity and depressive symptoms in African American youth, but found positive associations between ethnic identity and self-esteem in addition to perceived efficacy. Our findings, taken in conjunction with these prior studies, suggest that the relationship between ethnic identity and global well-being may be stronger than the relationship between ethnic identify and depressive symptoms. Future studies should

include measures of depressive symptoms, well-being, and self-esteem to better understand how ethnic identity is uniquely related to each of these constructs.

In addition, variables such as generational status, discrimination, and acculturative stress may be useful to examine in future research in this area as they have been associated with ethnic identity and depressive symptoms in prior studies (Cokley, 2007; Smith & Silva, 2011). A number of studies have found associations between depressive symptoms and acculturative stress, as well as ethnic identity and acculturative stress (Hovey & King, 1996; Polanco-Roman & Miranda, 2013; Umana-Taylor, Updegraff, & Gonzales-Backen, 2011; Walker, Wingate, Obasi, & Joiner, 2008)   For example, Umana-Taylor et al. (2011) found associations between depressive symptoms and acculturative stress, and also associations between acculturative distress and ethnic identity affirmation in Mexican American adolescents.

We found that youth from minority groups had higher scores of depressive symptoms than White, non-Hispanic youth. It is important to also consider other studies that have found evidence that variables, such as SES, may account for a large portion of the differences in depressive symptoms across various ethnic and racial groups (Anderson & Mayes, 2010; Wight, Aneshensel, Botticello, & Sepulveda, 2005). For example, Wight et al. (2005) found that SES accounted for a moderate percentage of the association between ethnicity and race and depressive symptoms in youth. Future research should account for potentially influential variables, such as SES, when examining the relationship between ethnic and racial groups and depressive symptoms.

Based on our results and the prior literature, ethnic identity appears to vary by race and ethnicity, with minority youth reporting higher levels of ethnic identity than White,

non-Hispanic youth.  Social support, primarily from caregivers, appears to play an important role in ethnic identity, while conflict in parental relationships did not show any association with ethnic identity.  Furthermore, in our regression analysis, parental support was the only significant predictor of ethnic identity with regard to social context.  This suggests that positive family experiences may have a stronger influence than negative family experiences or receiving support from the school setting in the development of a strong ethnic identity.  However, longitudinal research is necessary to determine the directionality of this relationship.  The relationship between ethnic identity and depressive symptoms was not significant, which adds to the inconsistent findings in the literature.  Future research should examine the relationship between ethnic identity and depressive symptoms in addition to other closely related variables, such as well-being and acculturative stress, to better understand the relationship between ethnic identity and mental health.

While our findings provide important implications for future studies, it is important to also note our study limitations.  First, the demographics form used in the study asked participants to categorize themselves along various racial categories used by the census and to identify their ethnicity as Hispanic or not.  As such, the study utilized broad racial and ethnic categories to examine differences in ethnic identity, rather than looking specifically at different ethnic groups. As ethnicity is a label that one attaches to oneself, it would be ideal for future research to assess this variable using an open ended question asking individuals to report what they believe to be their ethnicity.  Another limitation of our study was that the sample size for most minority groups was small.  This further hindered the exploration of how various racial and ethnic minority groups differed with

regard to ethnic identity, depressive symptoms and social context. Also, the selection of our sample was not random. Only adolescents who, along with their caregivers, had consented to a brief screening for depression, followed by an in-depth interview for depressive symptoms and participation in a school-based group depression prevention program, completed the measures involved in the current study. In addition to giving their consent to multiple levels of research involvement, the adolescents had to have an elevated depressive symptom score in the initial screening and later report at least two depressive symptoms without meeting criteria for Major Depressive Disorder or Dysthymia. In addition, the data was cross-sectional, so no conclusions about a temporal relationship between variables can be made. To better understand the relationships between ethnic identity, depressive symptoms, and the social environment, a study with a larger and ethnically diverse group of adolescents is necessary. Additionally, studies with a longitudinal design are important to learning more about any predictive relationships.

**References**

Abrams, K., Theberge, S. K., & Karan, O.V. (2005). Children and adolescents who are depressed: An ecological approach. *Professional School Counseling, 8*, 284-292.

Achenbach, T.M. (1991). *Integrative Guide to the 1991 CBCL/4-18, YSR, and TRF Profiles*. Burlington, VT: University of Vermont, Department of Psychology.

Anderson, E.R. & Mayes, L.C. (2010). Race/ethnicity and internalizing disorders in youth: A review. *Clinical Psychology Review, 30,* 338-348.

Bennett, M.D. (2006). Culture and context: A study of neighborhood effects on racial socialization and ethnic identity content in a sample of African American adolescents. *Journal of Black Psychology, 32,* 479-500.

Cicchetti, D., & Toth, S.L. (1998). The development of depression in children and adolescents. *American Psychologist, 53,* 221–241.

Cokley, K. (2005). Racial(ized) identity, ethnic identity, and Afrocentric values: Conceptual and methodological challenges in understanding African American Identity. *Journal of Counseling Psychology, 52,* 517-526.

Cokely, K. (2007). Critical issues in the measurement of ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology, 54,* 224-234.

Costigan, C.L., Koryzma, C.M., Hua, J.M., & Chance, L.J. (2010). Ethnic identity, achievement, and psychological adjustment: Examining risk and resilience among youth from immigrant Chinese families in Canada. *Cultural Diversity and Ethnic Minority Psychology,16,* 264-273.

Fisher, M.J. (2003). The relative importance of race and income in determining residential outcomes in the US urban areas, 1970-2000. *Urban Affairs Review, 38,* 669-696.

Fuligni, A.J., Witkow, M., and Garcia, C. (2005). Ethnic identity and the academic adjustment of adolescents from Mexican, Chinese, and European backgrounds. *Developmental Psychology, 41,* 799-811.

Furman, F. (1996). The measurement of friendship perceptions: Conceptual and

    Methodological issues.  In W.M. Bukowski, A.F. Newcomb, & W.W. Hartup

    (Eds.), *The company they keep: Friendship in childhood and adolescents. (*pp. 41-

    65). Cambridge, UK: Cambridge University Press.

Furman, W. & Buhrmester, D. (1985). Children's perceptions of the personal

    relationships in their social networks. *Developmental Psychology, 21*, 1016–1024.

Gaylord-Harden, N.K., Ragsdale, B.L., Mandara, J., Richards, M.H., & Petersen, A.C.

    (2007). Perceived Support and Internalizing Symptoms in African American

    Adolescents: Self-Esteem and Ethnic Identity as Mediators. *Journal of Youth and*

    *Adolescence, 36,* 77-88.

Goodenow, C. (1993). The psychological sense of school membership among

    adolescents: Scale development and educational correlates. *Psychology in the*

    *Schools, 30*, 79-90.

Grant, B.F., Stinson, F.S., Hasin, D.S., Dawson, D.A., Chou, S.P., Ruan, W.J.,

    Huang, B.  (2005). Prevalence, correlates, and comorbidity of Bipolar I Disorder

    and Axis I and II disorders: Results from the National Epidemiologic Survey on

    alcohol and related conditions. *Journal of Clinical Psychiatry, 66,* 1205-1215.

Greig, R. (2003) Ethnic identity development: Implications for mental health in African-

    American and Hispanic adolescents. *Issues in Mental Health Nursing, 24,* 317-

    331.

Hankin, B.L., Abramson, L.Y., Moffitt, T. E., Silva, P.A., McGee, R., Angell, K.E. (1998). Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology,107*,128-140.

Kaufmanm, J., Birmaher, B., Brent, D., Rao, U., & Ryan, N. (1996). *The Schedule for Affective Disorders and Schizophrenia for School-Age Children*. Pittsburgh, PA: University of Pittsburgh Medical Center.

Kessler, R.C. & Walters, E.E. (1998) Epidemiology of DSM-III-R major depression and minor depression among adolescents and young adults in the National Comorbidity Survey. *Depression and Anxiety, 7,* 3–14.

La Greca, A.M. & Harrison, H.W. (2005). Adolescent peer relations, Friendships and Romantic relationships: Do they predict social anxiety and depression? *Journal of Clinical Child and Adolescent Psychology, 34,* 49-61.

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 59,* 302-318.

Mandara, J., Gaylord-Harden, N.K., Richards, M.H., & Ragsdale, B.L. (2007). The effects of changes in racial identity and self-esteem on changes in African American adolescents' mental health. *Child Development, 80,* 1660-1675.

McHale, S.M., Crouter, A.C., Kim, J.Y., Burton, L.M., Davis, K.A, Dotterer, A., & Swanson, D.P. (2006). Mothers' and fathers' racial socialization in African American families: Implications for youth. *Child Development, 77,* 1387-1402.

Pellebon, D. (2000). Influences of ethnicity, interracial climate, and racial majority in school on adolescent ethnic identity. *Children & Schools, 2*, 9-20.

Phinney, J. (1992). The Multi-group Ethnic Identity Measure: A new scale for use with adolescents and adults from diverse groups. *Journal of Adolescent Research, 7, 156-176.*

Phinney, J. (1990) Ethnic identity in adolescents and adults: A review of research. *Psychological Bulletin, 108, 499-514.*

Phinney, J., & Alipuria, L. (1990). Ethnic identity in college students from four ethnic groups. *Journal of Adolescence, 13,* 171–184.

Phinney, J.S., Lochner, B. & Murphy, R. (1990). "Ethnic identity development and psychological  adjustment in adolescence". In A. Stiffman & L. Davis (Eds.), *Ethnic Issues in Adolescent Mental Health*. Newbury Park, CA: Sage Publishing.

Phinney, J.S., & Ong, A.D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54,* 271–281.

Poznanski, E.O. & Mokros, H.B. (1996)*. Children's Depression Rating Scale-Revised, Manual.* Los Angeles, CA: Western Psychological Services.

Quintana, S. (1994). A model of ethnic perspective-taking applied to Mexican-American children and youth. *International Journal of Intercultural Relations, 18,* 419-448.

Quintana, S. (1998). Children's developmental understanding of ethnicity and race. *Applied & Preventative Psychology, 7,* 27-45.

Quintana, S. & Scull, N. (2009). Latino Ethnic Identity. In Villarruel, F., Carlo, G., Contreras  Grau, J., Azmitia, M., Cabrera, N., & Chahin, T. (Eds.),  *The Handbook of U.S. Latino Psychology: Developmental and Community-Based Approaches* (pp. 81-97). Thousand Oaks, CA; SAGE Publications, Inc.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the

    general population. *Applied Psychological Measurement, 1,* 385-401.

Roberts, R.E., Phinney, J. S., Masse, L. C., Chen, Y. R., Roberts, C. R., &

    Romero, A. (1999). The structure of ethnic identity of young adolescents from

    diverse ethnocultural groups. *Journal of Early Adolescence, 19,* 301–322.

Rogers-Sirin, L. & Gupta, T. (2012).  Cultural identity and mental health: Differing

    trajectories among Asian and Latino youth. *Journal of Counseling Psychology*,

    *59*, 555-566.

Saluja, G., Iachan, R., Schiedt, P.C.,Overpeck, M.D., Sun, W., & Giedd, J.N.

    (2004). Prevalence of and risk factors for depressive symptoms among young

    adolescents. *Archives of Pediatric & Adolescent Medicine, 158,* 760-765.

Sellers, R. M., Copeland-Linder, N., Martin, P. P., & Lewis, R. L. (2006). Racial identity

    matters: The relationship between racial discrimination and psychological

    functioning in African American adolescents.  *Journal of Research on*

    *Adolescence, 16*, 187–216.

Scottham, K. M., Sellers, R.M., & Nguyen, H.X. (2005). The MIBI-T. A new measure

    of racial identity for use with African American adolescents. Unpublished

    manuscript.

Sheeber, L.B., Davis, B., Leve, C., Hops, H., & Tildesley, E. (2007). Adolescent's

    relationships with their mothers and fathers: Associations with depressive

    disorder and subdiagnostic symptomatology. *Journal of Abnormal Psychology,*

    *116,* 144-154.

Shrake, E.K. & Rhee, S. (2004). Ethnic identity as a predictor of problem behaviors among Korean American adolescents. *Adolescence, 39,* 601-622.

Smith, T.B. & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology, 58*, 42-60.

Street, J., Harris-Britt, A., Walker-Barnes, C. (2009). Examining relationships between ethnic  identity, family environment, and psychological outcomes for African American adolescents. *Journal of Child and Family Studies, 18,* 412-420.

Suzuki, L.S., Alexander, M., Lin, P., & Duffy, K.M. (2006).  Psychopathology in the schools:  Multicultural factors that impact assessment and intervention. *Psychology in the Schools, 43*, 429-438.

Swenson, R.R. & Prelow, H.M. (2005). Ethnic identity, self-esteem, and perceived efficacy as mediators of the relation of supportive parenting to psychosocial outcomes among urban adolescents. *Journal of Adolescence, 28*, 465-477.

Umaña-Taylor, A.J. & Updegraff, K.A. (2007). Latino adolescents' mental health: Exploring the  interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and  depressive symptoms. *Journal of Adolescence, 30*, 549-567.

Umaña-Taylor, A. J., Vargas-Chanes, D., Garcia, C.D., & Gonzales-Backen*,* M. (2008). An examination of Latino adolescents' ethnic identity, coping with discrimination, and self-esteem. *Journal of Early Adolescence*, *28*, 16-50.

Utsey, S.O., Chae, M.H., Brown, C.F., & Kelly, D. (2002). Effects of ethnic group membership on ethnic identity, race related stress and quality of life. *Cultural Diversity and Ethnic Minority Psychology, 8*, 366-377.

Wight, R.G., Aneshensel, C.S., Botticello, A.L., Sepulveda, J.E. (2005). A multilevel analysis of ethnic variation in depressive symptoms among adolescents in the United States. *Social Science and Medicine*, *60*, 2073-2084.

Williams, J.K.Y., Else, I.R.N., Hishinuma, E.S., Goebert, D.A. Chang, J.Y. Andrade, N.N., Nishimura, S.T. (2005). A confirmatory model for depression among Japanese American and part-Japanese American Adolescents. *Cultural Diversity and Ethnic Minority Psychology,11*, 41-56.

Yasui, M., Dorham, C.L., & Dishion, T.J. (2004). Ethnic identity and psychological adjustment: A validity analysis for European American and African American adolescents. *Journal of Adolescent Research, 19,* 807-825.

Yip,T. & Fuligini, A.J. (2002). Daily variation in ethnic identity, ethnic behaviors, and psychological well-being among American adolescents of Chinese descent. *Child Development, 73*, 1557-1572.