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The impact of ethnicity and acculturation on identity formation

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THE IMPACT OF
ETHNICITY AND ACCULTURATION
ON IDENTITY FORMATION

A Thesis

Presented to

The Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts

by

Christina K. Edmondson

December 2006

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ABSTRACT

THE IMPACT OF ETHNICITY AND ACCULTURATION ON IDENTITY FORMATION

by Christina K. Edmondson

The purpose of the present study is to examine identity formation (i.e., identity exploration and commitment processes) as a function of specific aspect of one's cultural context (i.e., ethnicity and acculturation as reflected by immigrant generation level). Identity formation was measured using the Ego Identity Process Questionnaire completed by 196 White, Asian, and Hispanic college students. The research hypothesized that ethnic minorities would engage in less exploration of alternative identities and commit more resources in their chosen identities as compared to Whites. The research hypotheses were partially supported. While Whites engaged in more identity exploration than Asians and Hispanics, differences in identity commitment across ethnic groups were not statistically significant. This study also addressed questions relating to the role of ethnicity and immigrant generation level on identity formation across the interpersonal and ideological identity domains; however, no statistically significant results were found regarding the role of these variables.

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I dedicate this work in memory of my father, for his passion for learning.

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INTRODUCTION

The number of immigrant families residing in the United States has increased steadily in recent years (U.S. Census Bureau, 2002). One of many challenges that immigrant families face is acculturation: the process of adapting to a mainstream culture that is often very distinct from their culture of origin (Gibson, 2001). The task of establishing one's way of life in a bi-cultural or multi-cultural environment is particularly difficult for immigrant adolescents as they undergo the transition to adulthood. The purpose of the present study is to examine identity formation in relation to cultural context.

According to Erikson (1968), the major developmental task adolescents face is the formation of an ego identity that consolidates their views of self with their perceptions of others' views of them. Erikson postulated that adolescents achieve an identity when they resolve conflicting identities experienced and form a new identity that is not only compatible with their childhood identifications, but also prepares them for adulthood. Over the years since Erikson proposed his theory, the transition to adulthood has been prolonged as increasing numbers of adolescents attend college (U.S. Census Bureau, 2003). As a result, the process of identity formation has been lengthened beyond adolescence and has extended into emerging adulthood (which ranges roughly from the ages of 18 to 25) (Arnett, 2000). For immigrant emerging adults, identity formation can be a particularly complex task, as their identities as perceived by others may vary drastically depending on the communities in which they live. For instance, immigrant

emerging adults may be expected to hold one value system at home (e.g., interdependence) and another (e.g., independence) at school.

The present study examines the identity formation of immigrant emerging adults in relation to their cultural context. Cultural context in the present study is defined as ethnicity and acculturation as indicated by immigrant generation level (i.e., the number of generations the immigrant family has lived in the United States). The present study is based on two frameworks widely adopted in identity research: Erikson's theory of identity and Marcia's identity status paradigm. The key concepts of Erikson's theory of identity and Marcia's identity status paradigm are summarized below.

Erikson's Theory of Identity

Erikson (1968) viewed development over a lifespan as a continuous process that can be divided into eight stages. According to Erikson, individuals encounter specific challenges, or crises, at each developmental stage. Moreover, the psychological well being of individuals is tied to the outcome of each crisis; successful resolution of the crisis at one stage is crucial for the successful resolution of the crisis at the next stage.

Erickson (1968) believed identity formation is the developmental task that characterizes adolescence. Erikson defined identity formation as a continuous process in which individuals explore and integrate selected early identifications into their identities. Adolescents are expected to experience conflicting identities, or identity crises, as they transition from childhood to adulthood. According to Erikson, failure to resolve the identity crisis results in identity confusion. Individuals suffering from identity confusion are unable to decide on their desired identities and yet have doubts concerning the

identities prescribed to them by others. Conversely, adolescents who succeed in resolving their identity crises form identities appropriate for their new adult role by incorporating previous childhood identifications, which allows them to restore their sense of self continuity (Erikson, 1968).

Because successful resolution of identity crises is crucial to psychological functioning, Erikson advocated that individuals should explore many different roles before committing to an identity (Erikson, 1968). For instance, according to Erikson, it is desirable for high school graduates to attend college instead of entering directly into the workforce because college prolongs the transition period from childhood to adulthood, allowing individuals to explore different roles. Erikson, refers to the period during which individuals delay entering adulthood by experimenting with different roles as “psychosocial moratorium” (Erikson, 1968, p.156).

Although Erikson laid the theoretical foundation of identity formation, many concepts in his theory of identity are very broad and are not easily assessed in research (Berzonsky & Adams, 1999). To address this issue, Marcia (1966) developed an identity status paradigm to operationalize the concept of identity formation based on Erikson’s theory of identity. Marcia’s identity status paradigm has been used widely in identity research.

Marcia’s Identity Status Paradigm

Marcia, in his original work published in 1966, viewed the identity formation process described by Erikson along a continuum. According to Marcia, there are four concentration points on the continuum, which represent four identity statuses that can be

characterized by two continuous dimensions: crisis and commitment. “Crisis,” or identity exploration, describes the period of mindfully searching alternative identities, and “commitment” refers to the levels of resources individuals invest in their chosen identity (Marcia, 1966, p. 551). The four statuses that can be identified along the two dimensions are identity achievement, moratorium, foreclosure, and diffusion (see Table 1).

Identity achievement is characterized by high levels of exploration and high levels of commitment in identity formation (Marcia, 1966). In other words, identity-achieved individuals have carefully evaluated alternative identities and have chosen identities by their own free will. Identity-achieved individuals often display healthy development in other psychological areas, such as high levels of self-esteem (e.g., Cramer, 1997).

Individuals in moratorium identity status display high levels of identity exploration and low levels of identity commitment (Marcia, 1966). These individuals are actively searching for their identities, but have not yet invested in any particular identities. Low self-esteem (e.g., Cramer, 1997), low endorsement of authoritarian values (such as obedience and respect for authority) (Marcia, 1966, 1970), and high anxiety (Marcia, 1967) have been associated with this identity status.

Identity-foreclosed individuals are characterized by low levels of identity exploration and high levels of identity commitment (Marcia, 1966). In other words, these individuals heavily invest on identities that they have not seriously explored. According to Marcia, individuals who are at foreclosure identity status often adopt identities of significant persons (e.g., parents) in their lives. Identity-foreclosed individuals are found

• Table 1

Marcia's Identity Status Summary

Identity status	Identity formation	
	Exploration	Commitment
Diffusion	Lacking	Lacking
Foreclosure	Low	High
Identity achievement	High	High
Moratorium	High	Low

Note. This table is based on Marcia's identity status paradigm (1966).

to have high self-esteem (e.g., Cramer, 1997), high endorsement of authoritarian values, and low anxiety (Marcia, 1966, 1970).

Individuals at diffusion identity status lack identity exploration and commitment (Marcia, 1966). Identity diffused adolescents are often associated with negative psychological functioning, such as low self-esteem (e.g., Cramer, 1997), high anxiety (Marcia, 1970), and high risk of substance use and abuse (Jones & Hartmann, 1988).

To assess individuals' identity status, Marcia further developed an identity status interview to examine individuals' levels of exploration and commitment in the occupation domain, as well as in the religion and politics (ideology) domains. By operationalizing Erikson's theory of identity using these four identity statuses, Marcia has provided a useful framework that allows assessment of identity formation. As researchers applied the work of Erikson and Marcia on identity formation across various cultures, identity formation patterns were found to differ in some cultures. For instance, while identity exploration in identity formation is valued in Western culture, it might not be valued in other cultures. Instead, following paths that fit the cultural norms or that are desired by authority figures, such as parents, might be the acceptable identity development paths in non-Western cultures (Spencer & Markstrom-Adams, 1990). In other words, cultural context, including factors such as ethnicity and acculturation, is an important variable that influences individuals' identity formation.

Ethnicity and Identity Formation

Most studies, with few exceptions (e.g., Branch, Tayal, & Triplett, 2000), have concluded that identity formation varies as a function of ethnicity when differences in

identity formation are compared across individuals of various ethnic backgrounds in the United States (Streitmatter, 1988; Lewis, 2003). However, these studies (Streitmatter, 1988; Lewis, 2003) have not shown consistent patterns of differences in identity formation when individuals of different ethnic groups are compared. The findings of research investigating the role of ethnicity in identity formation are summarized below.

Streitmatter (1988) assessed the identity status of seventh and eighth graders using the Extended Objective Measure of Ego Identity Status (EOM-EIS), developed by Grotevant and Adams (1984). The EOM-EIS is a self-report questionnaire derived from Marcia's identity status interview (1966). Based on the individual's responses on the EOM-EIS, their relative positions with respect to each of the four identity statuses, described by Marcia, are measured along the interpersonal and ideological domains (extending from the occupation, religion, and politics domains in Marcia's original identity status interview). The ideological domain consists of occupation, politics, religion, and philosophical life styles, while the interpersonal domain consists of friendship, dating, sex roles, and recreation (Grotevant & Adams, 1984).

In examining the relationship between ethnicity and identity formation, Streitmatter (1988) concluded that non-Whites (Hispanics, Blacks, Native Americans/American Indians, Asians and others) were significantly more foreclosed in both the ideological and interpersonal domains than Whites. No significant differences were found between non-Whites and Whites in the other three identity statuses for either the ideological or interpersonal domains.

Steitmatter (1988) suggested that the high levels of identity foreclosure in ethnic minorities might be due to their feelings of discomfort in their environment. According to Steitmatter, the discomfort experienced by minorities may prompt them to conform to others' expectations rather than exploring alternatives in identity formation. It is worth noting that in contrast to other research summarized in this section addressing ethnicity, Streitmatter (1988) collapsed all minority groups in her study as one category (non-White) in the analysis instead of conducting separate analyses for each ethnic minority group.

Markstrom-Adams and Adams (1995) reached similar conclusions in exploring identity formation in 10th through 12th grade adolescents. These researchers used the EOM-EIS (Grotevant & Adams, 1984) to assess the identity formation of Mexican American, African American, American Indian, and White adolescents. Among other findings, the study's results partially supported the conclusion of Streitmatter (1988) and showed that ethnic minorities were significantly more identity-foreclosed than Whites in the ideological domain. However, similar relationships were not found in the interpersonal domain.

Markstrom-Adams and Adams (1995) proposed cultural differences as a possible explanation for the higher ideological foreclosure found in ethnic minorities as compared to Whites. The researchers postulated that ethnic minorities tend to value family connectedness and promote individuals to accept prescribed expectations, while Whites tend to value individuality and promote individuals to actively explore identity options. Since ethnic minorities were not found to differ from Whites in interpersonal identity,

Markstrom-Adams and Adams speculated that family connectedness (which was hypothesized to associate with high interpersonal identity) might be the dominant element in identity formation of ethnic minorities. Markstrom-Adams and Adams recommended future studies to further investigate this issue. The applications of the findings of Markstrom-Adams and Adams are limited since Asian groups were not represented in their study.

Lewis (2003) also concluded that ethnicity is a variable that influences identity development in college students (ages 18 to 41 years and above). To assess identity status, Lewis adopted a revised version of the EOM-EIS (Grotevant & Adams, 1984), the EOMEIS-2 (Bennion & Adams, 1986), which improved the items pertaining to the interpersonal domain from the EOM-EIS to better assess the identity status in the interpersonal domain.

Among other findings, the study conducted by Lewis (2003) indicated that Hispanics were significantly more foreclosed, diffused, and less achieved in identity formation as compared to Whites. Asians displayed significantly higher identity foreclosure and moratorium as compared to Whites and Hispanics. Like Hispanics, Asians were more diffused, and less achieved in their identity status as compared to Whites.

Lewis (2003) suggested that difficulties in integrating the host culture and the culture of origin might explain the high levels of identity diffusion found in Asians and Hispanics relative to the levels of identity diffusion found in Whites. In addition, like Markstrom-Adams and Adams (1995), Lewis proposed that the high levels of identity

foreclosure experienced by Asians could be attributed to their strong group-oriented culture (e.g., emphasizing interdependence and respect for others). Lewis also attributed the unexpected finding that Asians displayed higher identity moratorium as compared to Whites and Hispanics to the distinctiveness of Asian culture. Lewis speculated that, as compared to other ethnic groups in the study, more effort (and consequently, higher levels of identity exploration) may be required in order for Asians to be successful at integrating into the mainstream culture as compared to other ethnic groups in the study.

Contrary to the findings of other research (Streitmatter, 1988; Markstrom-Adams & Adams, 1995; Lewis, 2003), Branch, Tayal, and Triplett (2000) did not find identity formation to vary as a function of ethnicity. As a part of their study, Branch et al. assessed identity formation in 13- to 26-year-old students using the EOMEIS-2 (Bennion & Adams, 1986) and did not find significant differences across African American, Asian American, White, Hispanic, and other ethnic groups. Branch and his colleagues did not elaborate on the factors that might have contributed to these unexpected findings.

In general, previous research examining the role of ethnicity on identity formation has suggested that individuals tend to differ in identity formation based on their ethnicity. However, previous research has shown inconsistent findings in identifying the pattern of differences in identity formation when comparing individuals of different ethnic groups. Even when patterns of differences in identity formation between ethnic groups were found in some studies, the nature of such patterns were inconclusive. Specifically, in the United States, both Hispanics (Markstrom-Adams & Adams, 1995) and Asians were more foreclosed (less exploration, firmer commitment) in their identity formation as

compared to Whites (Streitmatter, 1988; Lewis, 2003). However, it is not clear whether such differences are likely to occur in the ideological domain (Markstrom-Adams & Adams, 1995), the interpersonal domain, or both (Streitmatter, 1988).

Acculturation and Identity Formation

In addition to ethnicity, acculturation (i.e., the process of adjusting to a mainstream culture) constitutes another important aspect of the cultural context that affects identity formation. Research examining the parent-adolescent relationship in immigrant families has found that adolescents of different immigrant generations share different values in interacting with their parents (Fuligni, 1998). Specifically, adolescent immigrants (foreign born) expect later autonomy and are less willing to contradict their parents as compared to those adolescents of later immigrant generations (i.e., U.S. born adolescents with foreign born or U.S. born parents).

Moreover, immigrant parents tend to exert strong control over their children (Rosenthal, 1989). The tendency for high parental control in immigrant families might stem from parents' attempts to cope with the uncertainty of living in a host culture, parents' high expectations for their children's academic performance, parents' desire to maintain their culture of origin, and so on (Rosenthal, 1989). Strong parental controls often present adolescents with additional challenges in identity formation as they attempt to form cohesive identities while being exposed to different cultures.

Few studies have examined the relationship between acculturation and identity formation. As a part of their exploratory study, Schwartz and Montgomery (2002) assessed the effect of acculturation on identity formation by using a population of U. S.

college students from various immigrant generations. The majority (90%) of the participants in the study ranged 18 to 26 years of age. Schwartz and Montgomery assessed identity formation using several measures, including the EOMEIS-2, revised by Bennion and Adams (1986), and the Ego Identity Process Questionnaire (EIPQ), constructed by Balisteri, Busch-Rossnagel, and Geisinger (1995). The EIPQ measures levels of exploration and commitment for both the ideological (i.e., occupation, religion, politics, values) and the interpersonal (i.e., family, friendship, dating, and sex roles) domains.

The results of the study (Schwartz & Montgomery, 2002) indicated that second generation immigrants (U.S. born with foreign born parents) were more identity-foreclosed as compared to first (foreign born) or third (U.S. born with U.S. born parents) generation immigrants. Second generation immigrants were also less committed to their identities in the interpersonal domain than first generation immigrants. Moreover, third generation immigrants had the highest levels of identity exploration in the ideological domain as compared to second and first generation immigrants. Based on these findings, Schwartz and Montgomery concluded that identity processes (identity exploration and commitment) and outcomes (identity status) are affected by acculturation. However, possibly due to the exploratory nature of their study, Schwartz and Montgomery did not further interpret the results of the post hoc analyses addressing the identity formation differences across immigrant generations.

As pointed out by Schwartz and Montgomery (2002), one of the limitations of their study was the overrepresentation of Hispanic participants (57.4%), with Asian

participants representing only a small percentage (3.4%) of the total number of participants. As a result, the application of the research findings to individuals from other ethnic groups is limited. Schwartz and Montgomery recommend future research to include individuals from more diverse ethnic backgrounds, as well as to investigate the interactions between ethnicity and acculturation on identity formation.

Summary

Identity research has been heavily influenced by the work of Erikson and Marcia. Erikson provided the theoretical framework of identity formation, while Marcia (1966) developed the identity status paradigm to operationalize the concept of identity formation described by Erikson. Based on the work of Erikson and Marcia, researchers have examined the role of ethnicity on identity formation and concluded that identity formation varies with ethnic background (Markstrom-Adams & Adams, 1995; Streitmatter, 1988; Lewis, 2003). For instance, Asians (Markstrom-Adams & Adams, 1995) and Hispanics are more likely to adopt identity foreclosure rather than identity achievement as a culturally adaptive healthy end-point of identity formation (Streitmatter, 1988; Lewis, 2003).

Only recently have researchers begun to examine acculturation as another aspect of cultural context in identity research. Researchers (Schwartz & Montgomery, 2002) have found that identity formation is associated with levels of acculturation; for instance, first generation immigrants have been found to have higher identity commitment than second generation immigrants in the interpersonal domain.

Although some research has investigated the impact of cultural context (i.e., ethnicity and acculturation) on identity formation, this area is still under-studied. There are two main gaps in the existing literature on the subject of cultural context and identity formation. First, most of the present identity literature investigating the role of cultural context on identity formation has focused on ethnic background alone and few have focused on the issue of acculturation. The one study that examined the role of acculturation (measured by immigrant generation level) on identity formation concluded that acculturation affects identity formation in that identity formation differs across immigrant generations (Schwartz & Montgomery, 2002). However, researchers in that study did not assess the impact of both ethnic background and acculturation on identity formation. Thus far, the interaction effect between ethnic background and acculturation on identity formation has not been explored.

Second, the nature of identity formation differences that can be attributed to ethnic background is unclear. Although previous studies report that ethnic minorities are generally more identity-foreclosed than Whites, the findings have been inconsistent as to the role of identity domains (i.e., the interpersonal and ideological domains) in accounting for the differences in identity formation found among individuals of various ethnic groups (Markstrom-Adams & Adams, 1995; Streitmatter, 1988; Lewis, 2003).

One possible explanation for these inconsistent findings might lie in the inherent risk of overgeneralization when categorizing individuals solely based on their ethnic backgrounds. In other words, not all individuals belonging to one ethnic group act alike. Another possible explanation might be the cultural differences within ethnic minority

groups. For instance, researchers have suggested that although ethnic minorities tend to be more group-oriented and less individualistic than Whites, differences can be found within ethnic minorities along several dimensions, including levels of assertiveness in obtaining personal goals and emotional expressiveness. For instance, as compared to Hispanics, Asians tend to be more assertive in obtaining personal goals and less emotionally expressive (Rotheram-Borus & Wyche, 1994). It is not known whether such cultural differences within ethnic minority groups translate to different identity formation patterns across identity domains.

Research Hypotheses

The purpose of the present study is to address some of the gaps in the existing identity literature by examining the role of cultural context on the identity formation of a diverse sample of college students of emerging adult years, where identity formation for most individuals occurs (Arnett, 2000). The present study hypothesizes that individuals of different ethnic backgrounds will exhibit different patterns in identity formation, measured by levels of identity exploration and identity commitment. Specifically, the first research hypothesis predicts that Whites will have higher levels of identity exploration as compared to ethnic minorities. The second research hypothesis predicts that ethnic minorities will display higher levels of identity commitment as compared to Whites. These research hypotheses are based on previous research suggesting that ethnic minorities tend to display more identity foreclosure (i.e., lower exploration and higher commitment) than Whites (Streitmatter, 1988).

Research Questions

In addition to testing the research hypotheses, the present study also aims to address five research questions regarding the role of ethnicity, immigrant generation level, and identity domain (i.e., the interpersonal and ideological domains) on identity formation.

The first research question asks how immigrant generation level affects identity formation. While previous studies have suggested individuals of different immigrant generation levels vary in their identity formation (Fuligni, 1998; Schwartz & Montgomery, 2002), the specific role of immigrant generation level in identity formation is uncertain. For instance, one study suggested that first generation immigrants are more likely to conform to their parents' expectations as compared to later generations of immigrants (Fuligni, 1998). Another study concluded that, as compared to first and third generation immigrants, second generation immigrants were more identity-foreclosed (i.e. had higher levels of commitment and lower levels of exploration) (Schwartz & Montgomery, 2002). This research question attempts to explore the uncertainty revealed by these studies.

The second research question is whether there is an interaction effect of ethnicity and immigrant generation level on identity formation. There has been a lack of research in examining the impact of both ethnicity and immigrant generation level on identity formation. As suggested by Schwartz and Montgomery (2002), an examination of the interaction effect of immigrant generation level and ethnicity on identity formation could provide a better understanding of the role of cultural context on identity formation.

The third research question asks whether the identity formation pattern displayed by individuals of different ethnic backgrounds vary across identity domains. Researchers have drawn different conclusions based on their studies in addressing this particular issue. For instance, Markstrom-Adams and Adams (1995) found that ethnic minorities are significantly more identity-foreclosed than Whites in the ideological, but not the interpersonal, domain. Contrary to the findings of Markstrom-Adams and Adams, Steitmatter (1998) found that non-Whites were more foreclosed in both the ideological and interpersonal domains than Whites.

The fourth research question is whether the impact of immigrant generation level on identity formation is domain-specific. One study, conducted by Schwartz and Montgomery (2002), has examined the role of immigrant generation level in identity formation. Among other findings, the results of their study indicated that first generation immigrants have higher levels of commitment in the interpersonal domain as compared to second generation immigrants. First generation immigrants also displayed lower exploration levels in the ideological domain as compared to third generation immigrants. Due to a lack of research in examining the role of immigrant generation level in identity formation, the present study explores the role of immigrant generation level in identity formation across identity domains without making specific predictions.

Lastly, the fifth research question asks whether the impact of both ethnicity and immigrant generation level on identity formation vary according to identity domain (i.e., the interpersonal and ideological domains). In other words, the present study examines

the interaction effect of ethnicity and immigrant generation level on identity formation across identity domains.

METHOD

Participants

There were 196 participants in this study. Participants were student volunteers attending a university located in a metropolitan area. The majority of the student volunteers participated in this experiment to satisfy a requirement for introductory psychology courses. The remainder of the student volunteers, all of whom were White, first generation immigrants, were recruited campus wide.

There were 58 (29.6%) male and 138 (70.4%) female participants in this study. The female participants were overrepresented in this study partly because the percentages of female populations at the university were slightly greater (54.2%) than the percentage of males. Most of the participants were single (85%). The majority of the participants were freshmen, followed by sophomore, junior, senior and graduate students. The ages of the participants ranged from 18 to 28, with the mean age being 19.44 ($sd = 1.95$). In contrast to the average age for university students overall (26.1 years old), the participants in this study were younger on average. The fact that the typical participants in this study were younger and more likely to be freshmen than the average university student reflected that the majority of the participants were recruited from introductory psychology courses.

The parents of the participants in the study tended to have high levels of education. There were 80.1% of the participants in the study who reported that their fathers had completed at least high school, and 80.5% of the participants in the study reported their mothers to have completed at least high school. In addition, 10.7% of these

participants reported their fathers to hold graduate degrees, and 14.3% of these participants reported their mothers to have graduate degrees.

The ethnic backgrounds of the participants in this study were diverse. The majority of the participants in this study (93 individuals, or 47.4% of the 196 participants) were Asian. Among these Asian participants, 30 were first generation immigrants (32.3%) and 63 were second generation immigrants and beyond (67.7%). Filipino Americans were the largest Asian group (41.9%), followed by Vietnamese Americans (23.7%), Chinese Americans (21.5%), and others.

There were 63 White, non-Hispanic participants (which consisted of 32.1% of the total participants). Of these 63 individuals, 13 were first generation immigrants (20.6%), and 50 were immigrants of later generations (79.4%). One of the 13 first generation White immigrants was born in Brazil (7.7%), and the rest were born in various locations throughout Europe (92.3%). Interestingly, the first generation White immigrants were the most recent immigrants, residing in the U.S. an average of 5.23 years ($sd = 4.76$) as compared to first generation Asian immigrants who averaged 11.53 years ($sd = 5.10$) and Hispanic immigrants who averaged 15.63 years ($sd = 2.70$).

The Hispanic participants consisted of 20.4% of the total participants. Among the 40 Hispanic participants, 15 were first generation immigrants (37.5%) and 25 were second generation immigrants and beyond (62.5%). The majority of Hispanic participants were Mexican Americans, which comprised 85% of the Hispanic group. The demographic information listed by ethnicity and immigrant generation level is provided in Table 2 through Table 9.

Table 2

Participants' Gender and Marital Status

		Asians			Hispanics			Whites		
		First	Later	All	First	Later	All	First	Later	All
Demographics		(<i>n</i> = 30)	(<i>n</i> = 63)	(<i>n</i> = 93)	(<i>n</i> = 15)	(<i>n</i> = 25)	(<i>n</i> = 40)	(<i>n</i> = 13)	(<i>n</i> = 50)	(<i>n</i> = 63)
Gender										
Male	30.0%	33.3%	32.3%	33.3%	52.0%	45.0%	30.8%	48.0%	44.4%	
Female	70.0%	66.7%	67.7%	66.7%	48.0%	55.0%	69.2%	52.0%	55.6%	
Marital status										
Single	96.7%	87.3%	90.3%	92.9% ^a	88.0%	89.7% ^b	61.5%	82.0%	77.8%	
Married	0.0%	1.6%	1.1%	0.0% ^a	4.0%	2.6% ^b	30.8%	0.0%	6.3%	
Other	3.3%	11.1%	8.6%	7.1% ^a	8.0%	7.7% ^b	7.7%	18.0%	15.9%	

^a One participant did not provide a response (*n* = 14). ^b *n* = 39.

Table 3

Age (Means and Standard Deviations) and College Status of Participants

	Asians			Hispanics			Whites		
	First (<i>n</i> = 30)	Later (<i>n</i> = 63)	All (<i>n</i> = 93)	First (<i>n</i> = 15)	Later (<i>n</i> = 25)	All (<i>n</i> = 40)	First (<i>n</i> = 13)	Later (<i>n</i> = 50)	All (<i>n</i> = 63)
Demographics									
Age	19.80	19.03	19.28	19.13	18.96	19.03	23.23	19.08	19.94
(<i>SD</i>)	(2.22)	(1.58)	(1.83)	(.99)	(1.02)	(1.00)	(3.19)	(1.18)	(2.44)
College status									
Freshman	63.3%	65.1%	64.5%	73.3%	68.0%	70.0%	23.1%	66.0%	57.1%
Sophomore	13.3%	27.0%	22.6%	20.0%	20.0%	20.0%	15.4%	22.0%	20.6%
Junior	16.7%	7.9%	10.8%	6.7%	4.0%	5.0%	30.8%	8.0%	12.7%
Senior	6.7%	0.0%	2.2%	0.0%	8.0%	5.0%	15.4%	4.0%	6.3%
Graduate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.4%	0.0%	3.2%

Table 4

Living Arrangements of Participants

	Asians			Hispanics			Whites		
	First	later	All	First	Later	All	First	Later	All
Living arrangements	(<i>n</i> = 30)	(<i>n</i> = 63)	(<i>n</i> = 93)	(<i>n</i> = 15)	(<i>n</i> = 25)	(<i>n</i> = 40)	(<i>n</i> = 13)	(<i>n</i> = 50)	(<i>n</i> = 63)
Home	66.7%	54.0%	58.1%	80.0%	44.0%	57.5%	23.1%	54.0%	47.6%
Dorm	6.7%	17.5%	14.0%	0.0%	28.0%	17.5%	7.7%	30.0%	25.4%
Apartment	20.0%	23.8%	22.6%	20.0%	16.0%	17.5%	38.5%	12.0%	17.5%
Other	6.7%	4.8%	5.4%	0.0%	12.0%	7.5%	30.8%	4.0%	9.5%

Table 5

Participants' Fathers' Education Levels

	Asians			Hispanics			Whites		
	First	later	All	First	Later	All	First	Later	All
Education	(<i>n</i> = 30)	(<i>n</i> = 63)	(<i>n</i> = 93)	(<i>n</i> = 15)	(<i>n</i> = 25)	(<i>n</i> = 40)	(<i>n</i> = 13)	(<i>n</i> = 50)	(<i>n</i> = 63)
High school or less	30.0%	15.9%	20.4%	86.7%	64.0%	72.5%	7.7%	20.0%	17.5%
College	50.0%	66.7%	61.3%	6.7%	28.0%	20.0%	46.2%	72.0%	66.7%
Beyond college	20.0%	11.1%	14.0%	6.7%	0.0%	2.5%	38.5%	4.0%	11.1%
Other	0.0%	6.3%	4.3%	0.0%	8.0%	5.0%	7.7%	4.0%	4.8%

Table 6

Participant's Mothers' Education Levels

	Asians			Hispanics			Whites		
	First	later	All	First	Later	All	First	Later	All
Education	(<i>n</i> = 30)	(<i>n</i> = 63)	(<i>n</i> = 93)	(<i>n</i> = 15)	(<i>n</i> = 25)	(<i>n</i> = 40)	(<i>n</i> = 13)	(<i>n</i> = 50)	(<i>n</i> = 63)
High school or less	53.3%	23.8%	33.3%	86.7%	64.0%	72.5%	23.1%	18.0%	19.0%
College	30.0%	58.7%	49.5%	0.0%	28.0%	17.5%	46.2%	58.0%	55.6%
Beyond college	16.7%	11.1%	12.9%	6.7%	0.0%	2.5%	30.8%	22.0%	23.8%
Other	0.0%	6.3%	4.3%	6.7%	8.0%	7.5%	0.0%	2.0%	1.6%

Table 7

Participants' Time Spent Working per Week

Time spent	Asians			Hispanics			Whites		
	First (<i>n</i> = 30)	Later (<i>n</i> = 62) ^a	All (<i>n</i> = 92) ^b	First (<i>n</i> = 15)	Later (<i>n</i> = 25)	All (<i>n</i> = 40)	First (<i>n</i> = 13)	Later (<i>n</i> = 50)	All (<i>n</i> = 63)
None	33.3%	41.9%	39.1%	40.0%	32.0%	35.0%	23.1%	36.0%	33.3%
20 hours or less	46.7%	40.3%	42.4%	33.3%	40.0%	37.5%	38.5%	50.0%	47.6%
Between 20 to 40 hours	20.0%	14.5%	16.3%	26.7%	28.0%	27.5%	30.8%	12.0%	15.9%
Above 40 hours	0.0%	3.2%	2.2%	0.0%	0.0%	0.0%	7.7%	2.0%	3.2%

^a One participant (out of 63 participants) did not provide a response. ^b One participant (out of 93 participants) did not provide a response.

Table 8

Participants' Time Spent Communicating With Parents per Week

Time spent	Asians			Hispanics			Whites		
	First (<i>n</i> = 30)	Later (<i>n</i> = 62) ^a	All (<i>n</i> = 92) ^b	First (<i>n</i> = 15)	Later (<i>n</i> = 25)	All (<i>n</i> = 40)	First (<i>n</i> = 13)	Later (<i>n</i> = 50)	All (<i>n</i> = 63)
None	3.3%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	2.0%	1.6%
20 hours or less	86.7%	80.6%	82.6%	66.7%	68.0%	67.5%	92.3%	82.0%	84.1%
Between 20 to 40 hours	6.7%	6.5%	6.5%	26.7%	20.0%	22.5%	0.0%	14.0%	11.1%
Above 40 hours	3.3%	12.9%	9.8%	6.7%	12.0%	10.0%	7.7%	2.0%	3.2%

^a One participant (out of 63 participants) did not provide a response. ^b One participant (out of 93 participants) did not provide a response.

Table 9

Participants' Time Allocations (Means and Standard Deviations) in an Average Month

	Asians			Hispanics			Whites		
	First (<i>n</i> = 30)	Later (<i>n</i> = 62) ^a	All (<i>n</i> = 92) ^b	First (<i>n</i> = 15)	Later (<i>n</i> = 25)	All (<i>n</i> = 40)	First (<i>n</i> = 13)	Later (<i>n</i> = 50)	All (<i>n</i> = 63)
% Time spent on									
Work	13.17	12.10	12.45	17.47	13.68	15.10	24.62	14.66	16.71
(<i>SD</i>)	(11.83)	(12.91)	(12.51)	(21.64)	(13.41)	(16.80)	(22.22)	(15.43)	(17.32)
Academic	33.93	31.82 ^c	32.52 ^d	37.73	37.48	37.58	28.46	32.24	31.46
(<i>SD</i>)	(12.92)	(15.68)	(14.79)	(23.64)	(15.28)	(18.55)	(18.30)	(13.55)	(14.57)
Family	20.93	17.15 ^c	18.40 ^d	19.53	16.60	17.70	13.08	14.96	14.57
(<i>SD</i>)	(11.40)	(11.08)	(11.27)	(16.56)	(10.94)	(13.20)	(16.35)	(11.74)	(12.70)

^a One participant (out of 63 participants) did not provide a response. ^b One participant (out of 93 participants) did not provide

a response. ^c Two participants (out of 63 participants) did not provide a response (*n* = 61). ^d *n* = 91.

Table 9

Participants' Time Allocations (Means and Standard Deviations) in an Average Month (cont'd)

	Asians			Hispanics			Whites		
	First (<i>n</i> = 30)	Later (<i>n</i> = 62) ^a	All (<i>n</i> = 92) ^b	First (<i>n</i> = 15)	Later (<i>n</i> = 25)	All (<i>n</i> = 40)	First (<i>n</i> = 13)	Later (<i>n</i> = 50)	All (<i>n</i> = 63)
% Time spent on									
Social	23.83	27.34 ^c	26.19 ^d	18.07	21.56	20.25	23.23	28.40	27.33
(SD)	(13.39)	(17.26)	(16.10)	(9.86)	(14.21)	(12.73)	(17.41)	(15.57)	(15.96)
Other	8.13	17.47 ^c	10.32 ^d	7.20	10.68	9.38	10.62	9.74	9.92
(SD)	(10.31)	(14.27)	(13.13)	(9.16)	(13.60)	(12.12)	(11.73)	(11.53)	(11.48)

^a One participant (out of 63 participants) did not provide a response. ^b One participant (out of 93 participants) did not provide

a response. ^c Two participants (out of 63 participants) did not provide a response (*n* = 61). ^d *n* = 91.

Notably, on Table 2, for the first generation immigrants, the male-to-female ratios of participants from all three ethnic backgrounds were close to 3:7. However, for the immigrants of later generations, while the male-to-female ratio remained close to 3:7 for Asians, the male-to-female ratios were close to 1:1 for Hispanics and Whites. As a result, more females than males were represented among Asian participants overall as compared to Hispanic and White participants.

It is also worth noting that as compared to the first generation Asian and Hispanic immigrants, the first generation White immigrants were older on average (see Table 3). These age differences were likely due to the fact that around half of the first generation White immigrants were recruited campus wide while all other participants were recruited from introductory psychology courses. Consequently, these White first generation immigrants were more likely to be studying at graduate levels as compared to their counterparts (see Table 3). The different recruitment strategies may have also contributed to the differences in living arrangements between Whites and other ethnic groups. While first generation Asian and Hispanic immigrants tended to be living at home while attending school as compared to their later generation counterparts, the reverse was true for Whites (see Table 4).

Ethnic differences were also found in parental education levels. The majority of Hispanic participants had parents who had completed high school, while the majority of Asian and White participants had parents who had completed college or advanced degree programs (see Tables 5 and 6). Across all three ethnic groups, parents of later immigrant generations tended to have higher education levels as compared to parents of first

generation immigrants – a point which suggests overall improvement of socioeconomic status of these immigrants over time.

Materials

A survey package was used in the study. The survey package consisted of a demographics survey (see Appendix A) and the Ego Identity Process Questionnaire (EIPQ), developed by Balisteri et al. (1995). The EIPQ is a self-report instrument designed to measure identity exploration and identity commitment dimensions in two domains: the ideological domain (i.e., occupation, religion, politics, and values), as well as the interpersonal domain (i.e., family, friendship, dating, and sex roles). The EIPQ consists of 32 6-point Likert scale items, with agreement-type response options ranging from 1: “strongly disagree”, 2: “disagree”, 3: “slightly disagree”, 4: “slightly agree”, 5: “agree”, and 6: “strongly agree”. There were 20 positively worded items and 12 negatively worded items in the EIPQ.

The EIPQ contains 16 items for the identity exploration dimension (8 items on the ideological domain and 8 items on the interpersonal domain), and 16 items for the identity commitment dimension (8 items on the ideological domain and 8 items on the interpersonal domain). For each dimension, the lowest possible overall score for EIPQ is 16, and the highest possible overall score is 96. Examples of the EIPQ items are “I have definitely decided the occupation I want to pursue” (commitment-occupation) and “I have considered different political views thoroughly” (exploration-politics) (Balisteri et al., 1995, p.192). Balisteri et al. (1995) reported the internal consistency for the

commitment dimension of the EIPQ is alpha coefficient .75; for the exploration dimension is alpha coefficient .76.

Procedure

Participants in this study were requested to sign a consent form informing them of their rights, as well as risks associated with the study (Appendices B and C). Then participants were instructed to complete the survey to the best of their knowledge. Participants were debriefed upon completion of the survey package.

The first set of data was collected from university students taking introductory psychology courses. The second set of data was collected from students of the same university campus wide in order to obtain sufficient numbers of White, first generation immigrants for the data analyses. There were originally 231 surveys collected in this study, and 35 non-qualifying surveys (e.g., incomplete surveys) were discarded. As a result, 196 surveys were entered for the analyses.

RESULTS

The present study hypothesized that individuals from different ethnic backgrounds would exhibit different patterns of identity formation – and specifically, that ethnic minorities would display higher levels of identity commitment and lower levels of identity exploration as compared to Whites. In addition, the present study posited five research questions to explore the role of ethnicity, immigrant generation level, and identity domain (i.e., the interpersonal and ideological domains) on identity formation. Four analyses of variance were conducted to test the research hypotheses and address the research questions.

Ethnicity, Immigrant Generation Level, and Identity Formation

In order to test the research hypotheses and address the first two research questions, the impact of ethnicity and immigrant generation level on identity formation (i.e., identity exploration and commitment) were examined by conducting two two-factor between-subject analyses of variance. Specifically, one analysis treated identity exploration as the dependent variable and another analysis treated identity commitment as the dependent variable. Both analyses used Ethnicity (Asian, Hispanic, White) and Immigrant Generation Level (First, Later) as independent variables. The results of these two analyses are summarized in this section. Table 10 lists means and standard derivations of identity exploration scores calculated across ethnic groups and immigrant generation levels. Table 11 depicts means and standard deviations of identity commitment scores across ethnic groups and immigrant generation levels.

Table 10

Means and Standard Deviations of Identity Exploration Scores as a Function of Ethnicity and Immigrant Generation Level

Ethnicity	Immigrant generation level								
	First			Later			Total		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
White	13	4.16	.64	50	4.05	.59	63	4.07	.59
Hispanic	15	3.82	.48	25	3.81	.51	40	3.81	.49
Asian	30	3.86	.41	63	3.90	.58	93	3.89	.53
Total	58	3.91	.49	138	3.94	.57	196	3.93	.55

Table 11

Means and Standard Deviations of Identity Commitment Scores as a Function of Ethnicity and Immigrant Generation Level

Ethnicity	Immigrant generation level								
	First			Later			Total		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
White	13	3.94	.73	50	3.77	.60	63	3.80	.63
Hispanic	15	4.08	.71	25	4.06	.59	40	4.07	.63
Asian	30	3.83	.45	63	3.92	.56	93	3.89	.52
Total	58	3.92	.59	138	3.89	.59	196	3.90	.59

Research Hypothesis #1. The first research hypothesis predicted that ethnic minorities (in this case, Asians and Hispanics) would display lower identity exploration as compared to Whites. In examining the impact of ethnicity on identity exploration, the results of this analysis revealed a significant main effect for ethnicity, $F(2, 190) = 3.37, p < .05$, implying that individuals differed significantly in levels of identity exploration based on their ethnic backgrounds. Further analyses were conducted to identify the source of the significant ethnicity main effect. As predicted by this research hypothesis, the results of the analytical comparisons showed that Whites ($M = 4.07$) had significantly higher identity exploration levels as compared to Hispanics ($M = 3.81$), $F(1, 190) = 5.69, p < .05$, and Asians ($M = 3.89$), $F(1, 190) = 4.30, p < .05$. As expected from this research hypothesis, no significant differences were found between Asians and Hispanics in their levels of identity exploration, $F(1, 190) = .58, n.s.$ (see Table 10).

Research Hypothesis #2. The second research hypothesis predicted that ethnic minorities would display higher identity commitment as compared to Whites. Contrary to this research hypothesis, however, the analyses of variance did not find a significant ethnicity main effect, $F(2, 190) = 1.75, n.s.$ (see Table 11). In other words, the results indicated that levels of identity commitment did not differ significantly across Asians ($M = 3.89$), Hispanics ($M = 4.07$), and Whites ($M = 3.80$). Although the results failed to support the second research hypothesis, the results were in the predicted direction as both ethnic minorities, Asians and Hispanics, had higher identity commitment scores as compared to Whites.

Research Question #1. The first research question, which asked how immigrant generation level affects identity formation, was addressed by examining the main effect of immigrant generation level. For identity exploration, the analysis indicated that the impact of immigrant generation level on identity exploration was nonsignificant, $F(1, 190) = .08$, n.s. (see Table 10). In other words, individuals of later immigrant generations were not significantly different in their levels of identity exploration ($M = 3.94$) as compared to first generation immigrants ($M = 3.91$). This finding was unexpected since this research question assumed individuals across immigrant generation levels would display different patterns of identity formation.

The results for the main effect of immigrant generation level on identity commitment were also unexpected. The main effect of immigrant generation level was nonsignificant, $F(1, 190) = .13$, n.s., suggesting that first generation immigrants ($M = 3.92$) were not significantly different from individuals of later immigrant generations ($M = 3.89$) in their levels of identity commitment (see Table 11).

Research Question #2. The second research question asked whether there is an interaction effect of ethnicity and immigrant generation level on identity formation. In terms of identity exploration, the analysis revealed that the Ethnicity x Immigrant Generation Level interaction effect was not significant, $F(2, 190) = .30$, n.s., suggesting that the impact of ethnicity on identity exploration was not dependent on immigrant generation level (see Table 10). For first generation immigrants, Whites had the highest identity exploration scores ($M = 4.16$), followed by Asians ($M = 3.86$) and Hispanics ($M = 3.82$). The same trend was found for later generation immigrants, as Whites had the

highest identity exploration scores ($M = 4.05$), followed by Asians ($M = 3.90$) and Hispanics ($M = 3.81$).

In terms of identity commitment, the interaction effect of ethnicity and immigrant generation level was also nonsignificant, $F(2, 190) = .66$, n.s., implying that the impact of ethnicity on identity commitment were not significantly different across immigrant generation levels. For first generation immigrants, Hispanics scored the highest in identity commitment ($M = 4.08$), followed by Whites ($M = 3.94$) and Asians ($M = 3.83$) (see Table 11). For later immigrant generations, Hispanics had the highest identity commitment scores ($M = 4.06$), followed by Asians ($M = 3.92$) and Whites ($M = 3.77$).

Identity Domain, Ethnicity, Immigrant Generation Level, and Identity Formation

To address the last three research questions, two three-factor mixed-subject analyses of variance were conducted to explore the role of identity domain (which consists of the interpersonal and ideological domains) in the impact of ethnicity and immigrant generation level on identity formation (i.e., identity exploration and commitment). One analysis was designed to examine identity exploration as the dependent variable, and another analysis was designed to examine identity commitment as the dependent variable. Both analyses employed three independent variables, Ethnicity (Asian, Hispanic, White) and Immigrant Generation Level (First, Later) as between-subjects variables, and Identity Domain (interpersonal, ideological) as the within-subject variable. The results pertaining to the role of identity domain in the impact of ethnicity and immigrant generation level on identity formation are summarized below.

Research Question #3. The third research question asked whether the identity formation patterns displayed by individuals of different ethnic backgrounds vary across identity domains. The interaction effect of ethnicity and identity domain on identity formation was examined to address this question. For identity exploration, the analysis revealed a nonsignificant Ethnicity x Identity Domain interaction effect, $F(2, 190) = 1.12$, n.s., indicating that the impact of ethnicity on identity exploration did not differ significantly across identity domains. Table 12 summarizes the means and standard deviations of identity exploration and commitment scores across ethnic groups and identity domains. In both interpersonal and ideological exploration, Whites had the highest scores ($M = 4.07$; $M = 4.08$), followed by Asians ($M = 3.97$; $M = 3.81$), and Hispanics ($M = 3.87$; $M = 3.75$). It is interesting to note that Whites had very similar scores for interpersonal exploration and ideological exploration; but the interpersonal exploration scores of both Asians and Hispanics were higher than their ideological exploration scores. As a result, the scores of Asians and Hispanics were closer to those of Whites in interpersonal exploration than in ideological exploration.

An analysis of identity commitment has shown a nonsignificant Ethnicity x Identity Domain interaction effect, $F(2, 190) = .54$, n.s. The nonsignificant interaction effect suggested that the impact of ethnicity on identity commitment was not dependent on identity domain. Comparisons of interpersonal and ideological commitment mean scores across ethnic groups (see Table 12) revealed that in interpersonal commitment, Hispanics scored the highest ($M = 4.08$), followed by Asians ($M = 3.98$) and Whites ($M = 3.80$); in ideological commitment, Hispanics again scored the highest ($M = 4.05$),

Table 12

Means and Standard Deviations of Identity Exploration and Commitment Scores Across Ethnic Groups and Identity Domains

Dimension	Ethnicity							
	White		Hispanic		Asian		Total	
	(n = 63)		(n = 40)		(n = 93)		(n = 196)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Exploration	4.07	.59	3.81	.49	3.89	.53	3.93	.55
Interpersonal	4.07	.63	3.87	.51	3.97	.64	3.98	.61
Ideological	4.08	.77	3.75	.56	3.81	.66	3.88	.69
Commitment	3.80	.63	4.07	.63	3.89	.52	3.90	.59
Interpersonal	3.80	.68	4.08	.77	3.98	.69	3.94	.71
Ideological	3.81	.74	4.05	.63	3.80	.56	3.85	.64

followed by Whites ($M = 3.81$) and Asians ($M = 3.80$). Interestingly, Asians had relatively large discrepancies between interpersonal and ideological commitment scores as compared to Whites and Hispanics.

Research Question #4. The fourth research question asked whether the impact of immigrant generation level on identity formation is domain-specific. To address this question, the interaction effect of immigrant generation level and identity domain on identity formation was examined. In terms of identity exploration, the interaction effect of Immigrant Generation Level x Identity Domain was not significant, $F(1, 190) = .41$, n.s. This result suggested that the impact of immigrant generation on identity exploration was not dependent on identity domain. Table 13 depicts means and standard deviations of identity exploration and commitment scores across immigrant generation levels and identity domains. Individuals of later immigrant generation displayed higher interpersonal exploration scores ($M = 3.99$), but similar ideological exploration scores ($M = 3.88$) as compared to first generation immigrants ($M = 3.94$, $M = 3.89$).

As in the case of identity exploration, the analysis of identity commitment did not reveal a significant interaction effect between immigrant generation level and identity domain, $F(1, 190) = .74$, n.s., indicating that the impact of immigrant generation level on identity commitment did not vary significantly across identity domains. A comparison of mean scores of identity commitment across immigrant generation levels (see Table 13) showed that the first generation immigrant had higher interpersonal scores ($M = 3.98$), but similar ideological scores ($M = 3.85$), as compared to individuals of later immigrant generations ($M = 3.92$, $M = 3.86$).

Table 13

Means and Standard Deviations of Identity Exploration and Commitment Scores Across Immigrant Generation Levels and Identity Domains

Dimension	Immigrant generation level					
	First		Later		Total	
	(n = 58)		(n = 138)		(n = 196)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Exploration	3.91	.49	3.94	.57	3.93	.55
Interpersonal	3.94	.54	3.99	.64	3.98	.61
Ideological	3.89	.67	3.88	.70	3.88	.69
Commitment	3.92	.59	3.89	.59	3.90	.59
Interpersonal	3.98	.75	3.92	.69	3.94	.71
Ideological	3.85	.59	3.86	.66	3.85	.64

Research Question #5. The last research question asked whether the impact of both ethnicity and immigrant generation level on identity formation vary according to identity domain. The interaction effect of ethnicity and immigrant generation level on identity formation across identity domains was examined in order to address this question. The analysis indicated that, for identity exploration, the interaction effect of Ethnicity x Immigrant Generation Level x Identity Domain was not significant, $F(2, 190) = .25$, n.s. In other words, the interaction effect of ethnicity and immigrant generation level on identity exploration did not vary across identity domains. Table 14 and Table 15 summarize the means and standard deviations of interpersonal exploration and ideological exploration scores across ethnic groups and immigrant generation levels. Table 16 and Table 17 summarize the means and standard deviations of interpersonal commitment and ideological commitment scores across ethnic groups and immigrant generation levels.

First generation White immigrants displayed higher interpersonal exploration scores ($M = 4.10$) as compared to Asian immigrants ($M = 3.89$) and Hispanic immigrants ($M = 3.89$) (see Table 14). When examining individuals of later immigrant generations, it is interesting to note that while the interpersonal exploration scores of Asians increased as immigrant generation level increased, the reverse was true for Whites and Hispanics. Among the later generation immigrants, Whites ($M = 4.06$) had the highest interpersonal exploration scores, followed by Asians ($M = 4.00$) and Hispanics ($M = 3.86$) despite the increases of interpersonal exploration observed in Asians.

Table 14

Means and Standard Deviations of Interpersonal Exploration Scores Across Ethnic Groups and Immigrant Generation Levels

Ethnicity	Immigrant generation level								
	First			Later			Total		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
White	13	4.10	.66	50	4.06	.63	63	4.07	.63
Hispanic	15	3.89	.46	25	3.86	.54	40	3.87	.51
Asian	30	3.89	.52	63	4.00	.68	93	3.97	.64
Total	58	3.94	.54	138	3.99	.64	196	3.98	.61

Table 15

Means and Standard Deviations of Ideological Exploration Scores Across Ethnic Groups and Immigrant Generation Levels

Ethnicity	Immigrant generation level								
	First			Later			Total		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
White	13	4.23	.81	50	4.04	.76	63	4.08	.77
Hispanic	15	3.74	.60	25	3.76	.54	40	3.75	.56
Asian	30	3.82	.60	63	3.81	.68	93	3.81	.66
Total	58	3.89	.67	138	3.88	.70	196	3.88	.69

Table 16

Means and Standard Deviations of Interpersonal Commitment Scores Across Ethnic Groups and Immigrant Generation Levels

Ethnicity	Immigrant generation level								
	First			Later			Total		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
White	13	3.98	.81	50	3.75	.64	63	3.80	.68
Hispanic	15	4.18	.91	25	4.03	.68	40	4.08	.77
Asian	30	3.88	.63	63	4.02	.72	93	3.98	.69
Total	58	3.98	.75	138	3.92	.69	196	3.94	.71

Table 17

Means and Standard Deviations of Ideological Commitment Scores Across Ethnic Groups and Immigrant Generation Levels

Ethnicity	Immigrant generation level								
	First			Later			Total		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
White	13	3.89	.76	50	3.79	.74	63	3.81	.74
Hispanic	15	3.98	.67	25	4.09	.62	40	4.05	.63
Asian	30	3.78	.45	63	3.82	.61	93	3.80	.56
Total	58	3.85	.59	138	3.86	.66	196	3.85	.64

With regard to ideological exploration scores (see Table 15), first generation White immigrants had the highest scores ($M = 4.23$), followed by first generation Asian immigrants ($M = 3.82$), and first generation Hispanic immigrants ($M = 3.74$). A similar trend was apparent in later generation immigrants as Whites scored the highest in ideological exploration ($M = 4.04$), followed by Asians ($M = 3.81$) and Hispanics ($M = 3.76$). Notably, White first generation immigrants had higher ideological exploration scores as compared to Whites of later immigrant generations, while both Hispanic and Asian first generation immigrants had very close ideological exploration scores to their counterparts in later immigrant generations.

For identity commitment, the interaction of ethnicity, immigrant generation level, and identity domain was also nonsignificant, $F(2, 190) = .98$, n.s. This finding indicated that the interaction effect of ethnicity and immigrant generation level on identity commitment did not change significantly when varying the identity domain. When interpersonal commitment scores across ethnic groups and immigrant generation levels were compared (see Table 16), first generation Hispanic immigrants had the highest scores ($M = 4.18$), followed by Whites ($M = 3.98$) and Asians ($M = 3.88$). For later generation immigrants, Hispanics also scored the highest ($M = 4.03$), followed closely by Asians ($M = 4.02$) and Whites ($M = 3.75$). Interestingly, only Asians showed increases of interpersonal commitment scores as immigrant generation level increased. Both Whites and Hispanics showed decreases of interpersonal commitment scores as immigrant generation level increased.

When examining ideological commitment scores (see Table 17), patterns found were similar to those displayed by interpersonal commitment scores. First generation Hispanic immigrants scored the highest in ideological commitment ($M = 3.98$), followed by Whites ($M = 3.89$) and Asians ($M = 3.78$). When examining ideological commitment level of later generation immigrants, Hispanics had the highest scores ($M = 4.09$), followed by Asians ($M = 3.82$) and Whites ($M = 3.79$). Notably, ideological commitment scores for Whites decreased as immigrant generation level increased while the scores for Asians and Hispanics increased as immigrant generation level increased.

DISCUSSION

The present study examined the role of cultural context in identity formation among emerging adults by testing the research hypotheses and exploring several research questions. This study viewed identity formation as the processes of identity exploration and commitment, and defined cultural context as having two components: ethnicity and acculturation (as measured by immigrant generation level). The research hypotheses and research questions together investigated the role of ethnicity, immigrant generation level, and identity domain (which consists of the interpersonal and the ideological domains) in identity formation.

Summary of Analyses

The research hypotheses predicted that identity formation differed based on individuals' ethnic backgrounds. Specifically, the first research hypothesis posited that as compared to Whites, ethnic minorities would engage in less exploration of alternative identities. The second research hypothesis posited that ethnic minorities would commit (i.e., invest) more resources in their chosen identities as compared to Whites. The results of the study supported the first research hypothesis, but failed to support the second research hypothesis. As predicted, this study found Whites displayed higher levels of identity exploration as compared to Hispanics and Asians; Asians were not significantly different from Hispanics. This finding was consistent with previous studies which concluded that ethnic minorities were more identity foreclosed (i.e., had lower levels of identity exploration with higher levels of identity commitment) as compared to Whites (Streitmatter, 1988; Markstrom-Adams & Adams, 1995; Lewis, 2003).

However, in contrast to these previous studies, the present study failed to support the second research hypothesis, which predicted that Whites would have lower identity commitment levels as compared to Asians and Hispanics. Unexpectedly, the present study found that while Whites tended to commit less to their chosen identities as compared to Asians and Hispanics, the differences in identity commitment levels between Whites and these ethnic minorities were not significant. One possible explanation for this unexpected finding might lie in the fact that White participants were generally older as compared to Asians and Hispanics. A portion of White participants, namely, first generation White immigrants, were mostly recruited campus wide rather than from introductory psychology courses. Consequently, these White participants tended to be older than other participants; as a result, were more likely to have higher levels of identity commitment as compared to their younger peers (Pulkkinen & Kokko, 2000; Meeus, Iedema, Helsen, & Vollebergh, 1999). Therefore, it is likely that identity commitment levels for Whites were inflated due to this age factor, resulting in the nonsignificant identity commitment level differences found between Whites and other ethnic groups in the present study.

In addition to the research hypotheses, five research questions were proposed to better understand the impact of cultural context in identity formation. The first research question asked how immigrant generation level affects identity formation. On this question, the results of the present study suggested that individuals of first immigrant generation did not differ from individuals of later immigrant generations in their identity formation. This finding was unexpected, as the few studies that have examined this issue

have suggested identity formation differs across immigrant generations, despite inconsistencies of these studies in identifying the actual pattern of differences (Fuligni, 1998; Schwartz and Montgomery, 2002).

Although the present study did not find significant differences in identity formation across immigrant generations, individuals of later immigrant generations were slightly higher in their identity exploration and slightly lower in their identity commitment as compared to individuals of the first immigrant generation. In other words, the present study was in accordance with the direction suggested by Fuligni (1998), rather than with the findings of Schwartz and Montgomery (2002) on this point. However, caution needs to be taken when comparing the present study to this earlier research. First, Fuligni did not examine directly the role of immigrant generation level on identity formation, but instead, investigated in adolescent autonomy and parent-adolescent relationship across immigrant generations as a part of his study. Second, Schwartz and Montgomery examined identity formation for the first, second, and third immigrant generations separately, whereas the present study did not distinguish between the second and third immigrant generations.

The second research question asked whether there is an interaction effect of ethnicity and immigrant generation level on identity formation. The present study found that the impact of ethnicity on identity formation was not affected by immigrant generation level. One possible explanation for this finding might be the uneven distribution of the participants across immigrant generations for the three ethnic groups. Specifically, while later immigrant generation participants for Asians and Hispanics in

this study consisted of mostly second immigrant generation participants, the majority of White later immigrant generation participants fell in the third immigrant generation and beyond. It is possible that identity formation differences between second immigrant generation participants and those in the third immigrant generation and beyond might have contributed to the nonsignificant differences in identity formation of the three ethnic groups across immigrant generations.

It is interesting to note that while the rank of identity exploration levels remained the same (White being the highest, Hispanics being the lowest) across immigrant generations, the rank of identity commitment levels changed for Asians and Whites (Hispanics remained the highest) across immigrant generations. Specifically, first generation White immigrants had higher identity commitment than first generation Asian immigrants, but Asians of later immigrant generations had higher identity commitment than Whites of later immigrant generations. The changes in the ranking of identity commitment levels across immigrant generations were attributed to decreases in identity commitment levels for Whites and increases in identity commitment levels for Asians as their immigrant generation level increased. The levels of identity commitment for Hispanics were relatively stable across immigrant generations. This trend suggests that identity commitment levels across immigrant generations were affected differently for different ethnic groups. Because of a lack of research in this area, replications of the present studies are needed to explore this issue. In addition, future studies should investigate factors such as socioeconomic status that may mediate the identity commitment differences across ethnic groups and immigrant generation levels.

The third, fourth, and fifth research questions compared the impact of ethnicity and immigrant generation level on the interpersonal and ideological domains of identity formation to better understand the role of identity domains in identity formation. The third research question asked whether the identity formation pattern displayed by individuals of different ethnic backgrounds vary across identity domains. The present study found that individuals of different ethnic backgrounds did not display different identity formation patterns in their interpersonal domain as compared to their ideological domain. The results of this study were consistent with the findings of Streimatter (1988), which state that the differences in identity formation between non-Whites and Whites persist across identity domains (i.e., non-Whites were found to more identity foreclosed regardless of identity domain in Streimatter's study).

Further examination of the data in the present study revealed that while Whites had similar levels of identity exploration and commitment for both identity domains, Asians and Hispanics explored and committed more in their interpersonal identities as compared to their ideological identities. The trend that Asians and Hispanics explored and committed more in the interpersonal domain as compared to the ideological domain suggests that ethnic minorities adopt different approaches in forming their interpersonal identity and their ideological identity. The findings of Markstrom-Adams and Adams (1995) also implied this possibility. Their study indicated that, as compared to Whites, ethnic minorities were more foreclosed (i.e., lower exploration, higher commitment) in the ideological, but not in the interpersonal domain of identity formation. Markstrom-Adams and Adams attributed these differences to the family-oriented perspectives

commonly found in ethnic minority cultures and suggested that family connectedness played a central role in the identity formation of ethnic minorities.

While family connectedness is likely to play a major role in the identity formation of ethnic minorities, the specific impact of family connectedness on the identity formation of ethnic minorities is unclear. In other words, it is unclear whether ethnic minorities actually place interpersonal identity above ideological identity, or whether they simply resolve their interpersonal identities first before focusing on their ideological identities. More studies exploring interpersonal and ideological identity formation in different ethnic groups over time are needed to better understand the patterns of identity formation in ethnicity minorities across the identity domains.

The fourth research question asked whether the impact of immigrant generation level on identity formation is domain-specific. The present study found individuals of different immigrant generation levels did not display different identity formation patterns regardless of identity domain. For the interpersonal domain, although the differences in identity formation were not significant across immigrant generation levels, individuals of later immigrant generations explored more and committed less than did first generation immigrants in their interpersonal identity domain. The lower interpersonal commitment experienced by individuals of later immigrant generations were consistent with the findings of Schwartz and Montgomery (2002), which stated that second generation immigrants commit less in interpersonal identity as compared to first generation immigrants.

For the ideological identity domain, the present study found that first generation immigrants were similar to immigrants of later immigrant generations in their identity formation. This finding is in contrast to the finding of Schwartz and Montgomery (2002), which stated that third generation immigrants had the highest ideological identity exploration as compared to first generation immigrants (who had the lowest exploration) and second generation immigrants. As pointed out before, however, caution is needed when comparing the present study and the study conducted by Schwartz and Montgomery because of the differences in categorizations of immigrant generations. While the present study collapsed second and third immigrant generations into one category (i.e., later immigrant generations), Schwartz and Montgomery examined each immigrant generation separately (i.e., first, second, and third). As there is a lack of research in exploring the impact of immigrant generation level on identity formation across identity domains, more studies are needed in this area to better explore these issues.

The fifth research question asked whether the impact of both ethnicity and immigrant generation level on identity formation vary according to identity domain. The present study indicated that the impact of ethnicity and immigrant generation level on interpersonal identity formation was not significantly different from those on ideological identity formation. However, there are two interesting phenomena that need to be noted. First, Asians explored and committed more in interpersonal identity as immigrant generation level increased, while the reverse was true for Whites and Hispanics. This trend might suggest that interpersonal identity becomes more important for identity

formation in Asian later immigrant generations than in Asian first generation immigrants. On the contrary, interpersonal identity may play a less important role in identity formation for Hispanic and White later immigrant generations as compared to their first generation counterparts.

The second phenomenon concerned ideological identity. For ideological identity exploration, White first generation immigrants had higher ideological exploration levels than did their later generation counterparts, while the first and later immigrant generations Asians and Hispanics had similar ideological exploration levels. For ideological identity commitment, while Whites committed less in their ideological identity as immigrant generation level increased, the reverse was true for Asians and Hispanics. In combination, these observations suggested that, for Whites, ideological identity plays a less important role (i.e., lower levels of exploration and commitment) in identity formation as immigrant generation level increases. However, caution is needed when interpreting this finding since it is possible that the higher ideological exploration and commitment levels observed in White first generation immigrants as compared to White later immigrant generations was due to the unique characteristics of the White first generation immigrants participating in the present study. Aside from the previous observation that these participants tended to be older, the White first generation immigrants were mostly recent immigrants (averaged 5.23 years in the U.S.) as compared to Asian and Hispanics first generation immigrants (averaged 11.53 years in the U.S.). These White first generation immigrants also were more likely to be married, pursuing a graduate degree, and living outside of the home as compare to Asian and Hispanic first

generation immigrants. In other words, it is likely that most of the White first generation immigrants in the present study resided in the U.S. temporarily to pursue their degrees, while most of the Asian and Hispanic first generation immigrants permanently relocated with their families to the U.S. Therefore, these White first generation immigrants might have been more likely to have undergone the process of resolving ideological conflicts between two cultures recently, resulting in distinctively high ideological exploration and commitment levels.

Ideological identity formation patterns also changed across immigrant generations for Asians and Hispanics. As immigrant generation level increased, Asians and Hispanics displayed similar exploration levels, but higher levels of commitment in their ideological identity as immigrant generation level increased. Drawing from the observations that Asians and Hispanics tend to comply with expectations of family authority figures due to their family-oriented cultural perspectives (Markstrom-Adams & Adams, 1995), this finding could suggest that as immigrant generation level increased, Asians and Hispanics became more conforming with ideological expectations of family authority figures.

Additionally, as pointed out earlier, interpersonal identity formation played a less important role for Hispanics (who displayed lower commitment and exploration levels), but a more important role for Asians (who displayed higher commitment and exploration levels) as immigrant generation level increased. One possible interpretation of these findings suggests the following interpersonal and ideological identity formation patterns for Asians and Hispanics across immigrant generations: for Asians, the later immigrant

generations, as compared to the first generation immigrants, were more involved with the process of interpersonal identity formation and were more committed to expectations prescribed by their family authority figures. On the other hand, as compared to Hispanic first generation immigrants, Hispanics of later immigrant generations displayed higher ideological identity commitment levels despite their diminishing focus on interpersonal identity formation (as reflected by lower exploration and commitment levels). This implied that Hispanic later immigrant generations were more likely to internalize ideological expectations prescribed to them by their family authority figure as compared to Hispanic first generation immigrants.

More studies are needed to test these interpretations. It is important to identify specific areas in interpersonal identity domain (i.e., family, friendship, dating, and sex roles) and in ideological domain (i.e., occupation, religion, politics, and values) that have contributed to the changes in ideological and interpersonal identity formation found in Asians and Hispanics across immigrant generation levels. Moreover, future studies should identify factors that lead Asians to differ from Hispanics in their changes of interpersonal identity formation across immigrant generation levels to better understand the impact of ethnicity and immigrant generation level on identity formation across identity domain.

Limitations

There are three major limitations in the present study. The first major limitation is the broad categorization used in grouping ethnic groups by the present study. Because the participants of the present study came from very diverse ethnic backgrounds, this

study categorized the participants into three main ethnic groups (i.e., White, Asian, and Hispanic), instead of using the specific ethnic groups of the individuals. It is possible that identity formation differences exist among ethnic subgroups within the same ethnic category. For instance, it is possible that Chinese Americans have different identity formation patterns from Filipino Americans; however, they were both classified as Asians for the purpose of the present study.

The second major limitation in the present study is a lack of distinction between second and third immigrant generations. Because this study was unable to recruit sufficient numbers of Asian and Hispanic third immigrant generation participants, the second immigrant generation and beyond were combined into one category (i.e., later immigrant generations). Consequently, conclusions cannot be drawn from this study regarding whether the second generation immigrants differ from the third generation immigrants in their identity formation patterns. The interpretation of the present study is further complicated by the uneven distributions of later immigrant generations across ethnic groups. Specifically, later immigrant generation Asians and Hispanics consisted mostly of second immigrant generations while later immigrant generation Whites consisted mostly of third immigrant generations.

The third major limitation of the present study is its restricted generalizability. Because this study only examined identity formation of emerging adults attending college, the findings of the presents study might not apply to emerging adults who do not pursue a college education. Moreover, possibly because the college is located in an area with high cost of living, the participants of the presents study tended to come from

families of high socioeconomic status. In addition, since the present study recruited most of the participants from introductory psychology courses, males and older college students were under-represented in the present study. As a result, the applicability of the present study findings might be limited when addressing populations of different age and gender compositions, as well as different levels of education and socioeconomic status.

Future studies investigating cultural context and identity formation should examine specific ethnic groups, rather than broad ethnic categories, to better predict identity formation using individuals' ethnic backgrounds. In addition, individuals from ethnic groups other than White, Asian, and Hispanic should be studied in order to expand the current understanding of the role of ethnicity in identity formation. More studies should also be conducted to examine the role of immigrant generation level on identity formation. Specifically, future studies need to evaluate identity formation for each immigrant generation level separately in order to reduce potential confounding factors, as well as to identify any unique identity formation patterns at each generation level. Moreover, future studies examining the role of cultural context in identity formation should address various demographics of the population.

Implications

Despite the limitations of the present study, its findings have practical implications in school counseling and intervention programs. First, because individuals of different ethnic groups tend to display different identity formation patterns, school counseling and intervention programs should take individuals' ethnic backgrounds into account. For instance, individuals displaying lower identity explorations might be

unusual for Whites, but not for Asians and Hispanics. As a result, the approaches adopted by counseling and intervention programs need to be sensitive to individuals' ethnic backgrounds. Second, ethnicity is a better indicator than immigrant generation level for evaluating identity formation of individuals from immigrant families since identity formation differences across immigrant generations were not found. Third, the present study indicated that Asians and Hispanics, whose cultures value family connectedness, tend to focus on interpersonal identity formation rather than ideological identity formation. Therefore, school counseling and intervention programs should focus on facilitating individuals' ideological identity formation when assisting ethnic minorities of family-oriented cultures.

In summary, the present study provided a better understanding of the role of ethnicity, immigrant generation level, and identity domain on identity formation. In turn, the findings of this study can be used to increase the efficiency and effectiveness of counseling and intervention programs for individuals undergoing identity formation.

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Appendix A

Demographics Survey

The data collected below are used for statistics purposes and for describing the overall demographic compositions of all participants in this study. Such information is crucial in assessing the validity of the study. Please complete the questions to the best of your ability.

1. Age _____
2. Gender (**circle one** that applies) (1) Male (2) Female
3. Marital status (**circle one** that applies)
 - (1) Single (2) Married (3) Divorced (4) Other (please specify): _____
4. Major _____
5. College status (**circle one** that applies)
 - (1) freshman (2) sophomore (3) junior (4) senior
6. Total semesters spent at SJSU: _____ (counting current semester)
7. Ethnicity (**circle one** that applies)

(1) American Indian or Alaskan Native	(7) Pacific Islander
(2) Black, non-Hispanic	(8) Vietnamese-American
(3) Chinese-American	(9) White, non-Hispanic
(4) Filipino/Filipina	(10) Other Hispanic
(5) Japanese-American	(11) Other (specify) _____
(6) Mexican-American, Chicano, Mexican	(12) Decline to state

Appendix A

Demographics Survey (cont'd)

8. Father's birth country _____
9. Mother's birth country _____
10. Your birth country _____
11. How many years have you lived in the U.S.? _____ years
12. Primary language spoken at parent's home _____
13. Father's education level (**circle the highest level reached**)
- (1) No formal schooling
 - (2) Elementary
 - (3) Middle School/Junior High
 - (4) High school
 - (5) 2-year college
 - (6) 4-year college
 - (7) Beyond 4-year college (Graduate School)
 - (8) Other (please specify)_____
14. Mother's education level (**circle the highest level reached**)
- (1) No formal schooling
 - (2) Elementary
 - (3) Middle School/Junior High
 - (4) High school
 - (5) 2-year college
 - (6) 4-year college
 - (7) Beyond 4-year college (Graduate School)
 - (8) Other (please specify)_____

Appendix A

Demographics Survey (cont'd)

15. Your living arrangements (**circle one** that applies)

- (1) Home with one or both parents
- (2) Dorm
- (3) Apartment
- (4) Other (please specify) _____

16. How many hours per week do you work (with pay) outside of school?

- (1) 0 hours
- (2) 0-20 hours
- (3) 21-40 hours
- (4) 41 hours and above

17. How many hours per week do you talk with your parents?

- (1) 0 hours
- (2) 0-20 hours
- (3) 21-40 hours
- (4) 41 hours and above

18. In an average month, how do you spend your time approximately?

- (1) Work _____%
- (2) Academic activities _____%
- (3) Family activity _____%
- (4) Social activity (Friend) _____%
- (5) Other activity (please specify) _____%

Appendix B

Consent Form for Psychology Students

San José State
UNIVERSITY

College of Social Sciences
Department of Psychology

One Washington Square
San Jose, CA 95192-0120
Voice: (408) 924-5600
Fax: (408) 924-5605
E-mail: psychology@sjsu.edu

Agreement to Participate in Research

Responsible Investigator: Christina Edmondson
Title of Protocol: Identity Formation

1. You have been asked to participate in a research study investigating identity formation in college students. **You must be at least 18 years old to participate in this study.**
 2. You will be asked to fill-out a survey package.
 3. There will be no reasonably foreseeable risks or discomforts associated with participation in this study. To the
 4. You may gain insights in your identity formation in completing the survey used in present study.
 5. Although the results of this study may be published, no information that could identify you will be included.
 6. You will receive course credit for participating in this study.
 7. Questions about this research may be addressed to Christina Edmondson at dale@TDL.com. Complaints about the research may be presented to Dr. Sheila Bienenfeld, Psychology Department Chair, (408) 924-5600. Questions about research participants' rights, or research-related injury may be presented to Pam Stacks, Interim Associate Vice President, Graduate Studies and Research, at (408) 924-2480.
 8. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose to "not participate" in the study.
 9. Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. If you decide to participate in the study, you are free to withdraw at any time without any negative effect on your relations with San Jose State University or with any other participating institutions or agencies.
 10. At the time that you sign this consent form, you will receive a copy of it for your records, signed and dated by the investigator.
- The signature of a participant on this document indicates agreement to participate in the study.
 - The signature of a researcher on this document indicates agreement to include the above named participant in the research and attestation that the participant has been fully informed of his or her rights.

Participant's Signature

Date

Investigator's Signature

Date

2/24/05

The California State University
Office of the Chancellor
Bismarck, California, 94501-1000
Kingsburg, California, 94949-1000
Fresno, California, 93741-1000
Hayward, California, 94542-1000
Merced, California, 95368-1000
Modesto, California, 95219-1000
San Bernardino, California, 92415-1000
San Diego, California, 92161-1000
San Francisco, California, 94132-1000
San Jose, California, 95192-1000
San Marcos, California, 92079-1000

Appendix C

Consent Form for Non-Psychology Students

San José State
UNIVERSITY

College of Social Sciences
Department of Psychology

One Washington Square
San José, CA 95192-0120
Voice: (408) 924-5600
Fax: (408) 924-5605
E-mail: psych@omni.sjsu.edu

Agreement to Participate in Research

Responsible Investigator: Christina Edmondson

Title of Protocol: Identity Formation

11. You have been asked to participate in a research study investigating identity formation in college students. **You must be at least 18 years old to participate in this study.**
 12. You will be asked to fill-out a survey package.
 13. There will be no reasonably foreseeable risks or discomforts associated with participation in this study.
 14. You may gain insights in your identity formation in completing the survey used in present study.
 15. Although the results of this study may be published, no information that could identify you will be included.
 16. You will not receive any compensation for participating in this study.
 17. Questions about this research may be addressed to Christina Edmondson at dale@TDL.com. Complaints about the research may be presented to Dr. Sheila Bienenfeld, Psychology Department Chair, (408) 924-5600. Questions about research participants' rights, or research-related injury may be presented to Pam Stacks, Interim Associate Vice President, Graduate Studies and Research, at (408) 924-2480.
 18. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose to "not participate" in the study.
 19. Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. If you decide to participate in the study, you are free to withdraw at any time without any negative effect on your relations with San Jose State University or with any other participating institutions or agencies.
 20. At the time that you sign this consent form, you will receive a copy of it for your records, signed and dated by the investigator.
- The signature of a participant on this document indicates agreement to participate in the study.
 - The signature of a researcher on this document indicates agreement to include the above named participant in the research and attestation that the participant has been fully informed of his or her rights.

Participant's Signature

Date

Investigator's Signature

5/15/05
Date

The California State University
Chancellor's Office
Bakersfield, Fresno, Hanford, Merced,
Fresno, Fullerton, Hayward, Modesto,
Long Beach, Los Angeles, Maritime Academy,
Maritime Bay, Northridge, Pomona,
Sacramento, San Bernardino, San Diego,
San Francisco, San Jose, San Luis Obispo,
San Marcos, Stanislaus, Stockton

Appendix D

EIPQ Permission-to-use Letter

Dear Colleague:

Thank you for your request for the Ego Identity Process Questionnaire (EIPQ). We want the EIPQ to be used as broadly as possible, and we want to be able to know as much as possible about the instrument by coordinating feedback from those who are using it. Thus, there needs to be some standardization across investigators. We have proposed some guidelines for use of the EIPQ, which we ask colleagues to follow.

- (1) You will not modify the EIPQ without written approval from the scale developers.
- (2) You will not distribute copies of the measure to others without written approval from the scale developers. We will be glad to grant requests made directly by them.
- (3) You may use the measure for one study or two years from the date that it is received by you. Renewed authorization for use may be obtained by written request to the scale developers. We will send you any revisions or updates.
- (4) You agree to report the results of your use of the EIPQ to the scale developers after each study or two years of use, whichever is sooner.
- (5) In some cases, we would like to pool raw data to obtain a larger or more diverse sample. We hope that in such cases you will share your EIPQ data with us.

In recognition of and agreement with the above conditions, we request that you sign the bottom of this form. Please make a copy for your records and send the original back to me. Thank you for your cooperation. As we continue to gather information on the EIPQ we shall, of course, share it with you.

Sincerely,

Nancy A. Busch-Rossnagel
Professor

Name (printed or typed): Christina Edmondson

Signature:

Organization: San Jose State University, Department of Psychology

Address: One Washington Square, San Jose, CA 95192-0120

Date: 9/24/04-----