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Family Oriented Values, Emerging Adulthood, And Tobacco Use Among Hispanic Emerging Adults

Melek Yildiz Spinel
University of South Carolina

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FAMILY ORIENTED VALUES, EMERGING ADULthood, AND TOBACCO USE
AMONG HISPANIC EMERGING ADULTS

by

Melek Yildiz Spinel

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Accepted by:

Elma Lorenzo-Blanco, Director of Thesis

Suzanne C. Swan, Reader

Cheryl L. Addy, Vice Provost and Dean of the Graduate School

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ABSTRACT

Theory and research on emerging adulthood (ages 18 to 25) have increased in the past two decades. However, few studies have assessed how different cultural values and experiences influence the experiences of ethnic minority emerging adults. The first objective of the current study was to expand the field of emerging adulthood research by exploring how familism, the belief that family is central to a person's life, related to their experience of emerging adulthood. Specifically, the study assessed how familism related to Arnett's proposed experiences of emerging adulthood (identity exploration, self focused, other-focused, feeling in between, the age of instability/negativity, and age full of possibilities for experimentation). Additionally, studies have found that some of the Arnett's proposed experiences of emerging adulthood were linked to substance use during this developmental period. Therefore, the second purpose of the study was to assess whether and how the experiences of emerging adulthood related to cigarette smoking, hookah use, and e-cigarette use. Participants (N=952) completed surveys for Project RED, a longitudinal study of substance use among Hispanics in Southern California. Hispanic emerging adults who had higher levels of familism experienced emerging adulthood less as a time of instability and negativity than participants who had lower levels of familism. Additionally, participants who perceived that emerging adulthood was a time full of possibilities for experimentation had lower rates of pastmonth smoking. Lastly, participants who experienced emerging adulthood as a time

to focus on themselves reported more past-month smoking. Results were discussed regarding current theories.

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CHAPTER 1

INTRODUCTION

Becoming an adult is an important developmental process in every individual's life. However, defining adulthood can be challenging because it involves biological (e.g., brain development) and social processes (e.g., cultural norms) that can vary by culture and are context-dependent (Arnett, 1998; Noam and Triggs, 2016). As such, definitions and markers of adulthood have changed throughout history and across cultures (Shanahan, 2000).

In the last two decades, researchers across disciplines have focused on studying the transition between adolescence and adulthood, especially how this developmental period has changed in the context of Western societies as a result of modernization¹ (for a review see Swanson, 2016). Researchers studying the experience of young adults have proposed that the time between 18 and 25 years of age is now a new developmental stage, and have called it emerging adulthood (Arnett, 2000).

According to Arnett's theory of emerging adulthood, this developmental period is a transitional time, in which individuals have more freedom than during childhood and adolescence to focus on exploring their interests and life goals before making long-lasting commitments more standard for full adults (Arnett, 2000). However, Arnett's theory of

¹ "Modernization" in this article refers to the constellation of societal changes that marked a shift from previous forms of social organization, including rapid "technological changes, the emergence of market economies, urbanization, industrialization, the decline of agricultural life, secularization, broad-based political participation, the use of currency, and the spread of science" (pg. 667, Shanahan, 2000).

emerging adulthood has been criticized because it was developed based on the experience of mostly White college students, and therefore might not capture the experience of ethnic minority and non-college attending emerging adults (Schwartz, 2016; Cote, 2014).

Theorists have pointed out that some of Arnett's proposed characteristics of emerging adulthood are very individualistic, and might not be experienced as strongly by individuals who endorse more collectivistic values (Schwartz, 2016; Cote, 2014). In fact, Hispanics and other ethnic minorities in the U.S. often endorse more collectivistic values than White Americans, which could lead them to experience emerging adulthood differently than their White peers (Schwartz, 2016; Cote, 2014).

The present study will contribute to our understanding of the experience of emerging adulthood among Hispanics by assessing the potential connection between more collectivistic values, specifically family-oriented values, and the experience of emerging adulthood in a sample of Hispanic emerging adults. To my knowledge, this is the first study to directly assess the association between family-oriented values and Arnett's theory of emerging adulthood, which would provide a more nuanced understanding of the role of family-oriented values in this developmental period among Hispanics.

Understanding the experience of emerging adulthood has become important in the field of psychology because this time has been identified as one of high risk for use and misuse of substances, including tobacco (Stone, Becker, Huber, and Catalano, 2012). Arnett proposed that the unique experiences of emerging adulthood could help account for the increased use of substances during this developmental period (Arnett, 2005). Specifically, the combination of stressful experiences linked with multiple transitions

characteristic of emerging adulthood, and the increased sense of freedom and opportunities to try new things can increase the risk of substance use among emerging adults (Arnett, 2005). Researchers have attempted to empirically assess the connection between Arnett's proposed features of emerging adulthood and substance use (e.g., Allem & Unger, 2016; Allem, Forster, Neiberger, & Unger, 2015), and they have found some support for the association between emerging adulthood experiences and substance use. However, there are only a few existing studies, and findings have been mixed. Additionally, only one study has focused on Hispanic emerging adults. The current study will test Arnett's proposed association between emerging adulthood and substance use, specifically use of cigarettes, hookah (water pipe), and electronic cigarettes (e-cigarettes) among Hispanic emerging adults (see Figure 2.1). Moreover, the present study will assess whether family-oriented values are linked to the experience of emerging adulthood (see Figure 2.1).

From Adulthood to Emerging Adulthood Theory

In the U.S., during the first part of the 20th-century, marriage was a marker of adulthood, with men required to provide financially for the family, and women required to take care of the household and children (Arnett, 1998). Similarly, cross-cultural research on adulthood shows that non-industrialized societies (e.g., rural Morocco, Inuit in the Canadian Arctic) also focus on marriage and having children as necessary rites of passage for adulthood (Arnett, 1998). Adulthood has been marked by particular events, including marriage and childrearing; additionally, adulthood has entailed having certain moral qualities that accompany being an adult. For example, a man has to be reliable to be able to provide for his household, and a woman has to be caring to be able to take care

of children. Therefore, before modernization in the U.S., and in contemporary nonindustrialized societies, the criteria for reaching adulthood have revolved around having a family, and have entailed particular gendered qualities for men and women (Arnett, 1998).

In the last five decades, the process of modernization has led to social and demographic changes in the U.S., which, in turn, have altered the lifestyle of young adults, aged 18 to 25. Social and demographic changes include an increase in the number of people pursuing a post-secondary education, increased acceptance of cohabitation and premarital sex, frequent job switching, and a delay of marriage and child-rearing (Arnett, 2000). These social and demographic changes (e.g., more access to post-secondary education) have modified how young adults view the process of becoming an adult. For example, in a survey conducted in the 1990s, young adults (aged 18 to 23) in the U.S. did not endorse marriage as a factor defining adulthood. Additionally, respondents did not endorse specific gendered criteria for adulthood; participants reported that learning to provide for and protect a family, care for children, and run a household were important criteria for adulthood for men and women equally (Arnett 1998; Arnett, 2000).

Additionally, young adults reported that the most defining aspects of adulthood involve individualistic character qualities including accepting responsibility for one's self, making independent decisions and becoming financially independent. These new notions of adulthood are different from those of previous generations in the U.S. when there was an emphasis on forming a family or gendered qualities (Arnett, 2000). Arnett proposed that demographic and social changes have resulted in a transitional period in which people gradually acquire adulthood qualities, and he has labeled this transitional period

“emerging adulthood.” He proposed that this transitional life period is a new developmental stage between adolescence and full adulthood that encompasses the ages between 18 and 25 years (Arnett 1998; 2000).

Emerging Adulthood Theory

After studying the experiences of emerging adults in the U.S., Arnett (2000) proposed that the period of emerging adulthood entails specific psychological experiences unique to that life period. Arnett postulated that emerging adulthood is a period characterized as a time of identity exploration, negativity or instability, self-focus, feeling in-between adolescence and adulthood, experimentation, and full of possibilities in different life domains (Arnett, 2005). I now describe each of these psychological experiences.

Identity Exploration. According to Arnett, during emerging adulthood, individuals explore and define their identity before making long-lasting decisions. Emerging adults tend to explore and have different romantic partners and jobs, which allows them to learn about their skills, strengths, values, and beliefs (Arnett, 2000). Engaging in identity exploration facilitates learning about the self before choosing long lasting commitments to a job and a romantic partner (Arnett, 2000). Although previous theories have proposed that identity development takes place in adolescence (Erikson, 1968), there is evidence that this process extends to the emerging adulthood years (Cote, 2006).

Instability and Negativity. Arnett proposed that changes and transitions in romantic life and work during emerging adulthood can create a sense of instability making this life period negative for some emerging adults (Arnett, 2000). According to

Arnett, exploration in love and work can entail frequent changes of residence. For example, many emerging adults move out of their parents' home to attend college, they might move for work after college graduation, they may move with a romantic partner, and may also move back home with their parents (Arnett, 2000). Thus, emerging adulthood offers an opportunity for exploration in different life domains, which may lead to a feeling of instability and potentially negativity.

Self-focus. Moreover, Arnett's theory postulates that emerging adults can make independent decisions without having to get permission or having to consider other people's opinions as when they were adolescents (e.g., permission from parents), or later when they have long-term commitments (e.g., considering a spouse's opinion). Many U.S. American emerging adults leave home when they are 18 years old, and many postpone marriage and having children until after 25 (Arnett 2000; 2007). Thus, emerging adults may have the freedom to make important life decisions, such as changing jobs or moving, without necessarily having to consult with others in their lives (e.g., parents or spouse). Because of the new freedom experience in emerging adulthood, Arnett proposed that emerging adulthood is a period that allows for self-focus on life projects that the individual wishes to pursue (Arnett, 2007).

Feeling in between Adolescence and Adulthood. In addition to instability and negativity and self-focus, Arnett proposes that emerging adulthood is a period in which individuals are no longer adolescents, and they have not yet reached adulthood. For example, when U.S. American emerging adults were asked whether they considered themselves as adults, the majority answered that in some ways, they did, but in other

ways, they did not. Thus, for emerging adults, reaching adulthood can be a gradual process (Arnett, 2000; 2007).

Possibilities. Lastly, Arnett's theory of emerging adulthood postulates that emerging adulthood is a time that is perceived as full of possibilities for experimentation. Arnett proposes that emerging adults may not have made long-lasting commitments in many domains in life, which gives them the freedom to experiment and explore different options in many life domains (e.g., career, hobbies, and travel). This desire to explore different options in life is linked to emerging adults' self-reported high hopes and optimism about their future, with many reporting being confident that they will reach their life goals (Arnett, 2005; 2007; Arnett & Schwab, 2012).

In summary, according to Arnett, emerging adulthood is a transition period between adolescence and adulthood in which many individuals experience the psychological features of identity exploration, instability, self-focus, feeling in-between, and having many possibilities for experimentation. However, the proposed features are not universally present for every single person. There are individual differences in how a person experiences the dimensions of emerging adulthood, with some individuals endorsing all of the psychological features or just a few (Schwartz, 2016; Swanson, 2016). Additionally, depending on how a person experiences emerging adulthood, this period can be positive, negative, and even a combination of both (Schwartz, 2016). For example, for a person who had a difficult childhood, emerging adulthood can provide new opportunities and possibilities to build a better life. On the other hand, someone who had a good childhood could perceive the instability of emerging adulthood as

overwhelming and negative (Schwartz, 2016). Therefore, all emerging adults do not necessarily experience the proposed features of emerging adulthood equally.

Criticism of Emerging Adulthood Theory

Does socioeconomic status influence emerging experiences?

Sociologists and developmental psychologists have accepted that emerging adulthood can be considered a new transition period for many individuals in modern societies (Swanson, 2016). However, as a new field of research, there are still questions about potential factors influencing the experience of emerging adulthood. Scholars have questioned whether socioeconomic background would affect the extent to which a person experiences Arnett's features of emerging adulthood (Cote, 2014). As such, critics of Arnett's theory have pointed out that the studies that provide support for his theory have included mostly White U.S. American, full-time college students (Cote, 2014). Full-time college students tend to come from middle and upper-class families, and only represent around 50% of the population of emerging adults (Cohen, Kasen, Chen, Hartmark, and Gordon, 2003). The "forgotten half" of emerging adults not attending college is disproportionately poor and comprised of ethnic minorities (Maggs, Jager, Patrick, Schulenberg, 2012; Schwartz, 2016). The extent to which members of different socioeconomic brackets experience some of Arnett's features might vary as result of the opportunities they have, such as pursuing post-secondary education (Cohen, Kasen, Chen, Hartmark, and Gordon, 2003). The research on the role of socioeconomic status on the experience of emerging adulthood suggests that those from underprivileged backgrounds experience this life period differently than their middle-class peers. For example, in a qualitative study of low-income Hispanic emerging adults, interviewees

reported a focus on their responsibilities and others in their lives (mostly family and their communities) (Sanchez, Esparza, Colón, & Davis 2010). Similarly, in a qualitative study on low-income community college students, those who worked full-time and had no support from parents reported that they felt pushed toward adulthood and saw themselves as full adults (Katsiaficas, Suárez-Orozco, & Dias, 2015). Lastly, a quantitative study found that low-income non-college attending emerging adults were more likely to report that emerging adulthood was a time for identity exploration and focus on others compared to their college-attending counterparts. Similarly, participants were less likely to report that emerging adulthood was a time for experimentation/possibilities, of negativity/instability, and feeling in-between compared to college-attending emerging adults (Smith, Sensoy Bahar, Cleeland, and Davis, 2014). Therefore, the limited research with low-income emerging adults suggests that many of these emerging adults may feel pushed into adulthood, and they may focus on their responsibilities to others (e.g., family) rather than on themselves (Smith, Sensoy Bahar, Cleeland, and Davis, 2014; Katsiaficas, Suárez-Orozco, & Dias, 2015; Sanchez, Esparza, Colón, & Davis 2010). Therefore, scholars have proposed that Arnett's emerging adulthood theory should be assessed with emerging adults from different socioeconomic backgrounds (Schwartz, 2016).

Does culture influence emerging adulthood experiences?

Researchers studying emerging adulthood have pointed out that there are many cultures that tend to value group and other-oriented goals over individual goals. Therefore, these cultures tend to be more collectivistic than mainstream U.S. American society, which has been defined as an individualistic society (Triandis, 1995 as cited in

Badger, Nelson, and McNamara Barry, 2006). Individualism is a cultural value that emphasizes prioritizing the individual over the group (Hofstede, 1980 as cited in Schwartz, Zamboanga, Rodriguez, & Wang 2007); whereas collectivism is value in which there is “interdependen[ce] within in-groups . . . giv[ing] priority to the goals of the in-group, shap[ing] behavior primarily on the basis of in-group norms, and behav[ing] in a communal way” (Triandis, 2001, p. 909, as cited in Schwartz, Zamboanga, Rodriguez, & Wang 2007). Collectivism emphasizes individuals’ responsibilities and obligations to the family as a core value in society. Hispanics living in the U.S. often endorse more collectivistic values, such as family obligation, familism, and respeto, compared to White Americans (Fuligni, Tseng, & Lam, 1993). Scholars have suggested that the strong emphasis on family and communal goals may influence how Hispanics experience emerging adulthood (Schwartz, 2016). In fact, researchers have found that Hispanics experience emerging adulthood differently than White emerging adults. Particularly, many Hispanic emerging adults report that emerging adulthood is a time to focus on others (e.g., family and community), and endorse interdependent goals as important markers of adulthood (Arnett, 2003; Sanchez, Esparza, Colón, & Davis 2010; Katsiaficas, Suárez-Orozco, & Dias, 2015). Therefore, there is evidence that Hispanic emerging adults report emerging adulthood goals and experiences that are in line with collectivistic values.

Hispanic family-oriented values and emerging adulthood experiences.

Researchers interested in understanding the role that family plays in Hispanic culture have developed measures to study different family values such as familism, family obligation, and respeto (respect). Respeto is a Hispanic family value that

emphasizes hierarchical social order, including young people obeying individuals in a position of authority (Garcia, 1996 as cited in Unger et al., 2006). Familism (or familismo) is broadly defined as the belief that family is central to a person's life. Familism includes the belief that the family comes before the individual (i.e., sacrifice of own desire if in conflict with family's views); the belief of familial interconnectedness (i.e., the belief that a person needs to keep strong emotional and physical attachment to family); familial reciprocity in times of need; and family honor (i.e., protect the family name and honor) (Lugo Steidel and Contreras, 2003). Lastly, family obligation includes the belief in responsibility to help the family in the present (e.g., taking care of siblings); the belief in showing respect and following family members' advice (e.g., following family's advice about life decisions); and the belief in the obligation to assist the family in the future (e.g., helping parents financially). Overall, these different family values emphasize the idea that family is central to a person's life, which can entail sacrificing one's desires for the well-being of the family, as well as current and future behaviors to assist the family.

Currently, few studies have directly assessed the role of Hispanic family-oriented values on Arnett's features of emerging adulthood (Schwartz, 2016). As such, to the best of my knowledge, the current study is one of the first to assess Arnett's features of emerging adulthood using Arnett's Inventory of Dimensions of Emerging Adulthood (Reifman, Arnett, & Colwell, 2007) among Hispanics. It is also the first study to investigate how family oriented values relate to Arnett's emerging adulthood features (e.g., identity exploration) among Hispanic emerging adults.

Research using different approaches to the study of emerging adulthood suggest that Hispanic emerging adults may experience emerging adulthood differently than White Americans. For example, in a study with about 600 emerging adults from diverse ethnic backgrounds (i.e, 43% Asian Americans, 21% African American, 19% White, and 17% Hispanic), Hispanic emerging adults were more likely to endorse markers of adulthood that were in line with collectivistic values (e.g., being able to have a family as a marker of adulthood) compared to their White counterparts (Arnett, 2003). Arnett proposed that the differences might be due to Hispanic respondents having different family values than White participants. Unfortunately, Arnett did not directly assess Hispanic family values, and this explanation could not be tested. Similarly, qualitative studies have found that Hispanic emerging adults report that individual responsibility is a marker of adulthood, but this responsibility is focused both on their own goals and those of their family as well as community (Sanchez, Esparza, Colón, & Davis 2010; Katsiaficas, Suárez-Orozco, & Dias, 2015). Therefore, research shows that individualistic and collectivist markers of adulthood are not necessarily mutually exclusive; rather, gaining individual responsibility includes becoming independent and responsible in personal matters such as school and work, as well as becoming responsible towards their family and community. Thus, although I could not identify any studies that have used Arnett's Inventory of Dimensions of Emerging Adulthood (Reifman, Arnett, & Colwell, 2007) with Hispanic samples, prior scholarship suggests that Hispanic family-oriented values may affect how Hispanic emerging adults experience emerging adulthood as theorized by Arnett (Katsiaficas, Suárez-Orozco, & Dias, 2015; Arnett, 2003; Sanchez, Esparza, Colón, & Davis 2010; Syed and Mitchell, 2013; Schwartz, 2016). As such and informed by existing scholarship

discussed above, I propose the following hypotheses of how family oriented values may influence each of Arnett's features of emerging adulthood (see Figure 2.1).

Identity exploration. Regarding family-oriented values, there is not a clear pattern on how family oriented values would increase or decrease identity exploration. In fact, scholars have pointed out that there is a paucity of research on the process of identity development for racial and ethnic minorities (Syed and Mitchell, 2013). Most of the research on identity formation among ethnic minorities has focused on ethnic identity, which has been defined as the degree to which a person identifies with their ethnic group (Phinney, 1992 as cited in Syed and Mitchell, 2013). Research has found that ethnic identity exploration increases for ethnic minorities during emerging adulthood, with emerging adults exploring to what extent they identify with mainstream American culture, their ethnic culture, or both (Syed and Azmitia, 2008). These results suggest that ethnic minority emerging adults are engaging in ethnic identity exploration, which is consistent with Arnett's idea that emerging adulthood is a time for identity exploration in general. However, there is almost no research on identity exploration in other life domains among ethnic minorities or how family oriented values might influence this process (Syed and Mitchell, 2013). Some research has shown that ethnic minority college students in the U.S. who endorse family-oriented values such as familism, also report strong identification with their ethnic culture, which shows a link between family oriented values and ethnic identity for ethnic minorities (Schwartz, Zamboanga, Rodriguez, and Wang, 2007). However, it is not clear if endorsing family-oriented values is linked to less or more exploration of ethnic identity during emerging adulthood, or if it would affect the process of identity exploration in other life domains. Therefore, there is

a need to assess whether family-oriented values influence identity exploration among Hispanic emerging adults. Given the scarcity of research indicating a specific direction in which family-oriented values may influence Hispanics' identity exploration in emerging adulthood, I am not proposing a specific hypothesis. Instead, I propose the following research question (Research Question 1): How do family oriented values influence identity exploration among Hispanic emerging adults?

Instability and negativity. The second dimension of emerging adulthood states that for some emerging adults, this life period is unstable and potentially negative (Arnett, 2000). There is no research suggesting that the feeling of instability or negativity would be associated with family-oriented values. There has been some research suggesting that when there are cultural differences between parents and children, there is an increase in family conflict, which could lead to instability; however, this research has been done mostly with adolescents (Syed and Mitchell, 2013). Hypothetically, emerging adults who endorse high family-oriented values would have a similar view to their parents', leading to lower family conflict (e.g., Céspedes and Huey 2008; Lugo Steidel and Contreras 2003), and more family cohesion (Miranda, Estrada, & Firpo-Jimenez, 2000). Lower levels of family conflict and higher levels of family cohesion would potentially be associated with a higher sense of stability for Hispanic emerging adults. Furthermore, the emphasis on family interconnectedness in family-oriented values would suggest that many Hispanic emerging adults would live with their parents or close to them. This pattern of residence would be different from that of many White Americans who might move often and perceive emerging adulthood as unstable (Arnett, 2006; Fuligni and Pedersen, 2002). Therefore, it is possible that higher levels of family-oriented

values might be associated with a lower sense of instability and negativity for Hispanic emerging adults, which might result from lower family conflict, higher family cohesion, and more stability in residence patterns. As such I hypothesize (Hypothesis 1) that family-oriented values will be negatively associated with the experience that emerging adulthood is a time of instability/negativity.

Feeling in between adolescence and adulthood. Another tenet of Arnett's theory of emerging adulthood is that many emerging adults feel in-between adolescence and adulthood. A study found that Hispanic emerging adults were more likely to report that they had reached adulthood than their White peers; however, this difference was accounted for by Hispanic participants' lower SES and their greater likelihood of being parents themselves (Arnett, 2003). There is not enough evidence to suggest that family oriented values would influence whether a person feels like a full adult or not. However, endorsing family-oriented values might drive Hispanic emerging adults to assume adult roles when they feel responsible for helping their relatives or to become parents themselves, which, in turn, might lead Hispanic emerging adults to feel that they have become adults sooner than their White counterparts. Given that no prior study has investigated how family oriented values might influence Hispanic emerging adults' sense of feeling in between adolescence and adulthood, I do not propose a specific hypothesis. Instead, in this study I address the following research question (Research Question 2): Do higher family-oriented values predict Hispanic emerging adults' tendency to feel in between adolescence and adulthood?

Possibilities. Another aspect of Arnett's theory is that emerging adulthood is a period full of possibilities and a time for exploration (Arnett, 2000). Qualitative studies

show that low-SES Hispanic emerging adults report that they do not feel that they have many possibilities in their lives (Sanchez, Esparza, Colón, & Davis 2010; Katsiaficas Suárez-Orozco, & Dias, 2015). Therefore, it seems that perceiving emerging adulthood as a time of possibilities is linked to financial privilege, and it may not be part of the experience of those with fewer economic means. To the best of my knowledge, there is no study to date assessing the role of family-oriented values and perceiving emerging adulthood as a time of possibilities and experimentation. However, if exploring and experimenting in different life domains requires financial security and is viewed as negatively affecting the family, then, this aspect of emerging adulthood might not be endorsed by ethnic minorities who are often of low SES and high on family-oriented values. For example, a person might perceive that switching jobs frequently to explore career options can jeopardize their income and their ability to support their families financially; therefore, they might be less inclined to explore different jobs to keep a steady income. Similarly, if a person perceives that casual dating takes time away from work or time spent with their family or forming their own family, Hispanic emerging adults might not engage in exploration in dating as much as their White peers. The idea that exploring and experimenting in emerging adulthood requires financial means and could be contrary to some family-oriented values is tentative and needs to be tested empirically. Therefore, I propose the following research question (Research Question 3): How do family oriented values influence Hispanic emerging adults' perception that emerging adulthood is full of possibilities?

Self-focus. Lastly, Arnett proposed that emerging adulthood is a time to focus on the self. Initially, Arnett had conceptualized focusing on the self as a process contrary to

focusing on others; however, after conducting different studies, it became evident that these two processes were not mutually exclusive (Reifman, Arnett, & Colwell, 2007). In fact, the last revision of the Inventory of Dimensions of Emerging Adulthood has divided the subscale of “self-focus” into “self-focus” and “focus on others” as a result of the research showing that emerging adults can score high on both aspects. Qualitative and quantitative research with Hispanics shows that they endorse individualistic aspects at the same rates as their White peers; however, they also report focusing on family and their community as important aspects of adulthood, which their White peers did not endorse. Therefore, it seems that higher endorsement of family-oriented values would be associated with focusing on others as an aspect of emerging adulthood for Hispanics; however, it is not clear whether endorsing family-oriented values influences how Hispanic emerging adults perceive emerging adulthood as a time to focus on themselves. A goal of this study is to examine the following research question (Research Question 4): How do family oriented values influence Hispanic emerging adults’ view that emerging adulthood is a time to focus on the self? Additionally, based on the previous research with Hispanic emerging adults, I hypothesize (Hypothesis 2) that family-oriented values will be positively associated with the experience that emerging adulthood is a time to focus on others.

Emerging Adulthood and Substance Use

As stated in the introduction, one of the reasons for the increased interest by psychologists in the study of emerging adulthood is driven by the fact that this developmental period has been identified as a period of high vulnerability to developing substance use problems (Stone, Becker, Huber, and Catalano, 2012). For example, the

lifetime prevalence of substance use and misuse appears to peak in emerging adulthood (Stone, Becker, Huber, and Catalano, 2012). For example, emerging adults report the highest use of illegal drugs and alcohol compared to any other age group (Center for Behavioral Health Statistics and Quality, 2015), as well as tobacco products such as e-cigarettes and hookah (Smith et al., 2011). Furthermore, emerging adults, compared to adolescents and adults, have the poorest outcomes when receiving interventions for substance use (Satre, Mertens, Arean, & Weisner, 2003; Smith, Godley, Godley, & Dennis, 2011), further increasing their substance use risk of relapse. Thus, there is a need to better understand risk and protective factors for substance use during emerging adulthood (Stone, Becker, Huber, and Catalano, 2012; Arnett, 2014).

Arnett (2005) has proposed that the psychological features of his theory of emerging adulthood may account for the high rate of substance use and misuse during emerging adulthood. Initially, Arnett postulated theoretical explanations of how the experiences of emerging adulthood may explain an increase in substance use during this life period (Arnett, 2005). During the past decade, researchers have started to assess Arnett's proposed theoretical explanations with mixed results, helping further develop an understanding of how experiences of emerging adulthood account for substance use in different populations. Below is a review of Arnett's (2005; 2014) proposed explanations of how emerging adulthood can lead to higher rates of substance use, as well as a review of results of studies that have tested Arnett's hypotheses.

First, Arnett suggested that emerging adulthood is a time of identity exploration, predominantly in love and work. This process entails gaining an understanding of oneself, what one values, and what type of person and job the person wants to pursue in

the future. There are two ways in which this feature can be linked to substance use: if the individual is still exploring their identity, they might view trying drugs or other substances as part of the process of getting to know him/herself (Arnett, 2005). On the other hand, experiencing identity confusion and difficulty in establishing a stable identity can be a stressful experience, which can lead to engaging in substance use as a form of self-medication (Arnett, 2005).

Second, Arnett has proposed that emerging adulthood can be a period of negativity and instability because it involves many transitions, including frequent changes of residency and jobs. The constant changes and transitions of this time could lead to an increase in mood disruptions (e.g., increased anxiety, depression), which can result in use of substances as a form of self-medication (Arnett, 2005).

Third, Arnett postulated that emerging adulthood is a time in which a person can focus on the self and their personal development because there is less control imposed by others (e.g., parents, romantic partner). Thus, the more freedom and decreased social control experienced during emerging adulthood could make it easier to access and use substances than in other life periods (Arnett, 2005).

Fourth, Arnett has pointed out that emerging adults often report feeling in-between adolescence and adulthood. Research shows that the majority of emerging adults think that to become an adult it is important to “avoid driving drunk.” Additionally, a smaller proportion of participants reported that to be an adult it is necessary to “avoid illegal drugs” and to “avoid getting drunk” (Arnett, 2000). Therefore, it is possible that those who do not see themselves as full adults could view substance use as a normative

and acceptable behavior during emerging adulthood that they will eventually have to give up when they become full adults (Arnett, 2005).

Lastly, Arnett has postulated that emerging adulthood is perceived as a period of experimentation and full of possibilities; this is a time when individuals can make significant changes in their lives, many leave home for college or move out to live independently, and thus, they can choose new environments (Arnett, 2005). Second, many report very high levels of optimism and state that they feel that life will work out for them in the long run (Arnett, 2005). Thus, due to an optimistic bias, emerging adults might underestimate the negative impact of substance use in their lives (Arnett, 2005). Additionally, the idea that emerging adulthood is a time for experimenting with new options can entail experimenting with different substances.

Researchers have started testing Arnett's theoretical hypotheses using different samples and different types of substances as outcomes (e.g., alcohol, e-cigarette, hookah). Results thus far suggest that some of the experiences of emerging adulthood are associated with higher substance use; however, the few studies have found different patterns of results. First, in a diverse sample of college students, those who endorsed that emerging adulthood was a time for experimentation and full of possibilities were more likely to have tried hookah and to report past-month and lifetime e-cigarette than those who did not endorse that subscale (Allem & Unger, 2016; Allem, Forster, Neiberger, & Unger, 2015). Additionally, with the same sample of college students, but using a shortened version of the Inventory of Dimensions of Emerging Adulthood, researchers found that the feature of identity exploration was associated with lower likelihood of reporting marijuana use, while possibilities/experimentation, and self-focus were

positively associated with more marijuana use and binge drinking (Allem, Sussman, and Unger, 2016). Second, in a diverse sample (53.3% were Caucasian, 45.7% African American, 10.4% Native American, and 4.7% Hispanic) of low income, non-college attending emerging adults, those who reported that they felt in between adolescence and adulthood were more likely to report experiencing problems due to substance use. Lastly, a study with a sample of Hispanic emerging adults found that those who reported that emerging adulthood was a time to focus on others were less likely to report marijuana use and binge drinking than their peers (Allem, Lisha, Soto, Baezconde-Garbanat, & Unger, 2013).

The results of the extant studies on the experience of emerging adulthood and substance use provide support for the link between these experiences and an increased risk of substance use. However, the patterns of results are not clear, which can be due to the use of different samples (e.g., college students vs. low-income non-college students), as well as various measures of substance (e.g., alcohol, e-cigarette, hookah, consequences of substance use). Nonetheless, it seems that emerging adults who report that emerging adulthood is a time for experimentation and full of possibilities are more likely to report trying and using different substances, including e-cigarettes, hookah, marijuana, and engaging in binge drinking. Therefore, it seems that viewing emerging adulthood as a time for experimentation puts emerging adults at risk of using and abusing different substances. Additionally, it is noteworthy that the study with a sample of Hispanic emerging adults found that those who reported that emerging adulthood is a time to focus on others were less likely to have used marijuana and engaged in binge drinking than

their peers. Therefore, there seems to be evidence that certain emerging adulthood themes are linked to less use of substances for Hispanic participants.

CHAPTER 2

THE CURRENT STUDY

Informed by scholarship and theory on family oriented values, emerging adulthood, and substance use, the present study will examine how family oriented values influence emerging adulthood experiences and how emerging adulthood experiences, in turn, influence the use of traditional cigarettes and other tobacco products (OTPs) among Hispanic emerging adults (see Figures 1). I am focusing on traditional cigarettes because although cigarette smoking has declined in the last 10 years, it remains as the leading cause of preventable disease and death in the U.S. (U.S. Department of Health and Human Services, 2016). Presently, 13.0% of emerging adults (aged 18-24) report that they currently smoke (have smoked more than 100 cigarettes, and smoke at least every other day) (CDC, 2016). Among Hispanic adults, more than 10% report that they currently smoke (CDC, 2016). Hispanic adults report lower smoking rates than White adults; however, Hispanics also have lower health insurance access than Whites, which decreases their access to cessation treatments and makes it less likely that they will receive information about the negative effects of tobacco use (CDC, 2016). Nonetheless, culturally appropriate anti-smoking mass media and health campaigns can help reduce tobacco use among Hispanics (CDC, 2017; Woodruff, Talavera, & Elder, 2002). Therefore, gaining an understanding of how Hispanics' experience of emerging adulthood functions as risk and/or protective factors could inform prevention efforts in public health campaigns to help address smoking in this population.

Additionally, I am focusing on OTPs because in the last decade there has been an increase in the use of these products, such as electronic cigarettes (e-cigarettes) and hookah (also called water pipe), particularly among emerging adults. The prevalence of ever use of e-cigarettes among emerging adults increased from 6.9% in 2011 to 14.3% in 2014, and the prevalence of hookah use increased 40% from 2005 to 2008 (Smith et al., 2011). Emerging adults report the highest rate of e-cigarette and hookah use of all adult groups, with more than one third reporting lifetime e-cigarette use and 13.6% reporting past-month use (U.S. Department of Health and Human Services, 2016); additionally, 31% report lifetime hookah use (Cavazos-Rehg, Krauss, Kim, & Emery, 2015). Currently, e-cigarettes are the tobacco product most consumed among emerging adults, surpassing conventional cigarettes in 2014. Presently, the CDC has labeled the use of e-cigarettes among emerging adults as a public health concern (U.S. Department of Health and Human Services, 2016). Additionally, cigarette use is lower among Hispanic adults compared to White adults (Jamal, 2016), but e-cigarette use is comparable between these two ethnic groups and higher than for African Americans (Jamal, 2016). Moreover, Hispanics also report the highest rate of hookah use compared to any other ethnic/racial group (Cavazos-Rehg, Krauss, Kim, & Emery, 2015; Barnett, et al., 2013). The popularity of e-cigarettes and hookah use among Hispanic emerging adults, and the increase in popularity of these products among emerging adults make it imperative to understand how emerging adulthood experiences influence OTP use among Hispanic emerging adults, which can inform the development of OTP prevention and treatment interventions.

The increased popularity of OTPs has driven researchers of nicotine use to start focusing on the risk and protective factors of OTPs use (Fagerstrom, Etter, and Unger, 2015). However, this research is relatively recent, with most of it being conducted in the past decade (Fagerstrom, Etter, and Unger, 2015). At this point, there is not a clear understanding on whether the same risks and processes related to traditional cigarette use influence OTPs use or if they differ. For example, there are scholars in the field of nicotine research who see e-cigarettes as an alternative to traditional cigarettes, which could help with smoking cessation (Fagerstrom, Etter, and Unger, 2015). On the other hand, researchers have found that e-cigarette use can function as a gateway for use of traditional cigarettes and potentially other drugs such as marijuana (Unger, Soto, & Leventhal, 2016; Fagerstrom, Etter, and Unger, 2015). Although there is not enough longitudinal data to support any hypothesis at this moment (i.e., e-cigarettes as helpful for cessation or as a risk factor for use of traditional cigarettes and other products), concurrent use of e-cigarettes and other combustible tobacco products such as traditional cigarettes and hookah is very common among emerging adults (U.S. Department of Health and Human Services, 2016). Therefore, for the current study, I will take a parsimonious approach and will generate hypotheses regarding potential risk factors for e-cigarette and hookah use as functioning similarly to risk factors for traditional cigarette smoking.

In regards to emerging adulthood themes, as reviewed earlier, researchers have found that college students who endorse that emerging adulthood is a time for experimentation and full of possibilities might be more likely to report hookah and e-cigarette use (Allem & Unger, 2016; Allem, Forster, Neiberger, & Unger, 2015).

Therefore, I hypothesize that participants who endorse that emerging adulthood is a time for experimentation will be more likely to report cigarette use, e-cigarette, and hookah use. Additionally, there is initial evidence that for Hispanic emerging adults, focusing on others is associated with less substance use; therefore, I hypothesize that participants who score high on the subscale of other-focused will be less likely to report cigarette, e-cigarette and hookah use (Figure 2.1). Moreover, the existing studies have found limited support for the hypothesized links between the other features of emerging adulthood (identity exploration, instability/negativity, self-focus, and feeling in-between) and substance use. Therefore, the current study will examine whether there is a connection between those features of emerging adulthood and cigarette, e-cigarette and hookah use.

Hypotheses and Research Questions

Based on the empirical and theoretical literature reviewed on family oriented values, Arnett's theory of emerging adulthood, and use of other tobacco products, I have developed the conceptual model depicted in Figure 2.1 and propose the following hypotheses and research questions:

Hypothesis 1: Family oriented values will be negatively associated with the experience that emerging adulthood is a time of instability/negativity.

Hypothesis 2: Family oriented values will be positively associated with the experience that emerging adulthood is a time to focus on others.

Research question 1: How do family oriented values influence identity exploration among Hispanic emerging adults?

Research question 2: How do family oriented values influence Hispanic emerging adults' view that emerging adulthood is a time to focus on the self?

Research question 3: How do family oriented values influence Hispanic emerging adults' tendency to feel in between adolescence and adulthood?

Research question 4: How do family oriented values influence Hispanic emerging adults' perception that emerging adulthood is full of possibilities?

Hypothesis 3: Perceiving emerging adulthood as a time to focus on others will be negatively associated with e-cigarettes, hookah, and cigarette use.

Hypothesis 4: Perceiving emerging adulthood as a time full of possibilities and for experimentation will be positively associated with e-cigarettes, hookah use, and cigarette use.

Research question 5: Does the process of identity exploration during emerging adulthood influence the use of e-cigarettes, hookah, and cigarettes?

Research question 6: Does perceiving emerging adulthood as a time of instability influence the use of e-cigarettes, hookah, and cigarettes?

Research question 7: Does perceiving emerging adulthood as a time to focus on oneself influence the use of e-cigarettes, hookah and cigarettes?

Research question 8: Does feeling that emerging adulthood is a time between adolescence and adulthood influence the use of e-cigarettes, hookah, and cigarettes?



Figure 2.1 Model integrating family-oriented values, emerging adulthood experience, and OTPs use. This figure illustrate the study hypotheses and research questions; lines with signs indicate hypothesized associations and lines without signs represent research questions.

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CHAPTER 3

METHOD

Procedure

The data for the current study comes from Project RED (Reteniendo y Entendiendo Diversidad para Salud), a longitudinal study of sociocultural experiences and substance use among Hispanic emerging adults in Southern California (Unger, 2014). Participants were originally enrolled as adolescents when they were in 9th grade attending seven high schools in Los Angeles. Participants were followed annually until 2015 (Unger, Soto, and Leventhal, 2016). In 2011-2012 participants from the original study were invited to participate in the Emerging Adulthood (Project Red EA) study (Unger, 2014). Participants were contacted with letters sent to their last known address inviting them to visit a website or call a toll-free phone number to continue participating in the study. Participants provided verbal consent over the phone or online. Of those who consented to participate, 73% took the survey online, and 23% completed the survey over the phone. When participants were not reached using the information they provided in high school, staff members used publicly available search engines, and social networking sites to search for participants to invite them to continue in the study (Allem, Soto, Baezconde-Garbanati, Sussman, & Unger, 2015). Participants were paid \$20 for completing the survey, and \$3 for updating their contact information for future surveys. Project Red Emerging Adulthood (Project Red EA) participants were surveyed annually three times (2011-2012, 2012-2013, 2013-2014). The sample included a total of 952

Hispanic participants at the first timepoint (2011-2012), 986 Hispanic participants at the second timepoint (2012-2013), and 961 (2013-2014) at the third timepoint. The university's institutional review board approved all study procedures (Unger, Soto, and Leventhal, 2016).

Participants

In 2011-2012 a total of 2,151 participants had valid contact information. A total of 1,390 (65%) emerging adults consented and participated in the survey, comprising the Year 1 cohort of emerging adulthood. In terms of Hispanic participants, a total of 952 were surveyed in 2011-2012, 986 in 2012-2013, and 961 in 2013-2014 (Unger, Soto, and Leventhal, 2016). For the current study all participants included are Hispanic.

Measures

Demographics. Participants answered questions about gender and their date of birth. Age was calculated by computing the difference between birthdate and date the participant ended the survey.

Familism. was assessed at timepoint 1 with four items (e.g., “If anyone in my family needed help, we would all be there to help”); response options ranged from 1 (“definitely no”) to 4 (“definitely yes”). The measure of familism had acceptable reliability when measured in adolescence (Cronbach's $\alpha = .77$) (Lorenzo-Blanco, Unger, Ritt-Olson, Soto, and Baezconde-Garbanati, 2013). The scale showed appropriate reliability with the current sample (Cronbach's $\alpha = .72$). We calculated mean scores of the items to use in all analyses.

Emerging Adulthood Dimensions. The Inventory of the Dimensions of Emerging Adulthood (IDEA) (Reifman, Arnett, & Colwell, 2007) was used to assess the six

dimensions of emerging adulthood at timepoint 2 (Arnett, 2000). Participants rated different statements regarding how they perceive the current time in their life (e.g., is this time in your life a...time of exploration?). Response options included 1 (“strongly disagree”) 2 (“somewhat disagree”), 3 (“agree”), and 4 (“strongly agree”). The different dimensions of emerging adulthood were assessed with the following subscales: Identity Exploration (e.g., “time of finding out who you are?”), Experimentation/Possibilities (e.g., “time of many possibilities?”) Negativity/Instability (e.g., “time of confusion?”), Other-Focused (e.g., “time of responsibility for others?”), Self-Focused (e.g., “time of personal freedom?”), and Feeling “In-Between” (e.g., “time of feeling adult in some ways but not others?”). The subscales show appropriate reliability for the current sample.

Identity Exploration (Cronbach's $\alpha = .88$); Experimentation/Possibilities ($\alpha = .85$); Negativity/Instability ($\alpha = .85$); Other-Focus ($\alpha = .79$); Self-Focus ($\alpha = .84$); and Feeling “In-Between” ($\alpha = .71$) (Allem, Lisha, Soto, Baezconde-Garbanati, and Unger, 2013).

For each subscale, the mean was calculated and used for all statistical analyses.

Lifetime smoking. Participants answered one item assessing lifetime smoking at the third timepoint: “Have you ever tried cigarette smoking?” Responses were No (2) and Yes (1) and were recoded into (1) for Yes and (0) for No.

Past-30-day-smoking. Participants answered one item assessing smoking in the past 30 days at timepoint 3: “During the past 30 days, on how many days did you smoke cigarettes?” Responses were on a 7-point scale (1 = 0 days, 2 = 1 or 2 days, 3 = 3 to 5 days, 4 = 6 to 9 days, 5 = 10 to 19 days, 6 = 20 to 29 days, 7 = all 30 days). The distribution of the answers to this item was skewed; therefore, the variable was dichotomized based on whether participants reported past-month cigarette (“1” for yes

and “0” for no). Only those who had reported lifetime smoking (T3; N = 952; “Yes” n = 549) were asked how many cigarettes they had smoked in the past-month (T3; N = 549; “Yes” n = 169).

Other Tobacco Product Use. Use of other tobacco products in the past 30 days was assessed with the following question at timepoint 3: “In the past 30 days, have you used...? (You can CHOOSE ONE ANSWER or MORE THAN ONE ANSWER).” Participants were provided with a list of different tobacco products and could endorse past-month use of any of the products. The listed tobacco products included hookah (“Smoking tobacco from a hookah or a waterpipe”) and e-cigarettes (Electronic Cigarettes or E-cigarettes, such as Ruyan or NJOY). Answers were coded into (1) for Yes and (0) for No.

Statistical Analysis

Descriptive statistics (percent, mean, standard deviation) were calculated for all variables. To test the association between familism and the six features of emerging adulthood, we calculated six separate multivariate linear regressions; each regression had a different emerging adulthood theme as an outcome variable. For each regression, I first entered the control variables in step 1 (i.e., age and gender) before entering familism in step 2.

To assess the connection between emerging adulthood themes and tobacco use, 4 separate logistic regressions were conducted – one for each of the tobacco use variables (i.e., lifetime smoking, past-month smoking, hookah, and e-cigarette use). Each regression included the following two steps: 1) Control variables (i.e., gender and age) and 2) The six themes of emerging adulthood. These regressions assessed which themes

of emerging adulthood influence the use of e-cigarettes, hookah, and cigarettes. All statistical procedures were done in IBM SPSS version 21.0 (IBM Corp., 2012).

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CHAPTER 4

RESULTS

Descriptive Statistics

Table 1 displays descriptive statistics for all study variables. A total of 56.7 % of the participants were women, 41.0% were men, and 2.3% did not report their gender. The mean age at timepoint 1 was 20.46 years ($SD = 0.65$). Around half of the sample (58%) endorsed lifetime smoking (T3), about one fourth of the sample (18%) reported past-month smoking (T3), 5% reported past-month hookah use (T3), and 7 % reported past-month e-cigarette use (T3). For the family oriented values, participants reported a mean score for familism (T1) of 3.42 ($SD = 0.55$). For identity exploration (T2) the mean was 3.25 ($SD = 0.55$), for instability (T2) the mean was 2.63 ($SD = 0.68$), for other-focused (T2) the mean was 2.71 ($SD = 0.80$), for self-focused (T2) the mean was 3.19 ($SD = 0.61$), for feeling in-between (T2) the mean was 3.11 ($SD = .067$), and for possibilities/experimentation (T2) the mean was 3.16 ($SD = .66$).

Bivariate Correlations between Study Variables

Bivariate correlations among all study variables are shown in Table 2. Gender (T1) was correlated with all tobacco use measures (T3), with women being less likely to report lifetime smoking (T3) ($r = - 0.24, p < .01$), past-month smoking (T3) ($r = - 0.16, p < .01$), hookah use (T3) ($r = - 0.10, p < .01$), and e-cigarette use (T3) ($r = - 0.10, p < .01$). Higher familism (T1) was correlated with lower instability (T2) ($r = - 0.09, p < .05$). Age (T1) was positively correlated with the emerging adulthood theme of other-focused (T2)

($r = 0.07, p < .05$). Lifetime smoking (T3) was positively correlated with identity exploration (T2) ($r = .08, p < .05$), instability (T2) ($r = .09, p < .01$), self-focus (T2) ($r = .09, p < .01$), feeling in-between (T2) ($r = .11, p < .05$), and possibilities/exploration (T2) ($r = .08, p < .05$). Past-month smoking (T3) was positively correlated with self-focus (T2) ($r = .09, p < .05$). All the emerging adulthood themes were positively correlated with each other (See Table 2).

For dichotomous outcome variables (i.e., lifetime smoking (T3), past-month smoking (T3), hookah use (T3), and e-cigarette use (T3)), t-tests were conducted to assess mean group difference between users and non-users of each measure of tobacco (i.e., Lifetime smoking, past-month smoking, hookah, and e-cigarette use) on the continuous variables (i.e., familism (T1), identity exploration (T2), instability (T2), other-focused (T2), self-focused (T2), feeling in-between (T2), and possibilities/experimentation (T2)). Results of the t-test analyses are displayed in Tables 3 and 4. For lifetime smoking at T3 (Table 3), those who endorsed having smoked in their lifetime at timepoint 3 had higher scores on all the emerging adulthood themes at timepoint 2, except for the other-focused theme, in which there were no group differences. There were no differences between lifetime smokers and non-smokers (T3) in regards to their endorsement of familism (T1). In regards to past-month smoking (T3), emerging adults who reported cigarette smoking in the past month (T3) were more likely to focus on themselves (T2) compared to emerging adults who did not report past month cigarette smoking (T3). There were no differences between past-month smokers and nonsmokers in regards to the other emerging adulthood themes (T2) and familism (T1). For hookah (T3) and e-cigarette use (T3) (Table 4), there were no differences between

users and no-users in regard to emerging adulthood themes (T2) or familism (T1). (See Table 4).

Multivariate Hierarchical Regression Analyses: Associations of Familism with Emerging Adulthood Themes

Hypothesis 1 proposed that familism (T1) would be negatively associated with the experience of emerging adulthood as a time of instability/negativity (T2). A multivariate hierarchical regression using instability/negativity (T2) as the outcome variable was conducted. Control variables (gender and age (T1)) were entered in step 1, and familism (T1) was entered in step 2 (See Table 5). The ANOVA results for step 1 show that the F test was not significant, which means that the regression slope is not different from zero, showing that the variables entered do not account for variance of instability/negativity (step 1, $R^2 = .02$, $F(2,771) = 0.106$, $p = n.s.$); ANOVA results for step 2 are also not significant, and therefore the model in step 2 does not significantly account for variance of instability/negativity (step 2, $R^2 = .09$, $F(3,770) = 1.231$, $p = .08$). After controlling for age and gender, familism (T1) was negatively associated with instability/negativity ($\beta = -.09$, $p < .01$). R2 change for the second step was significant ($\Delta R^2 = .008$, $p < .01$), which means that even though the overall model including gender, age, and familism (T1) was not significant, familism (T1) was negatively associated with instability/negativity (See Table 5). In sum, hypothesis 1 was supported (see Figure 4.1).

Hypothesis two proposed that familism (T1) would be positively associated with the experience of emerging adulthood as a time to focus on others (T2). A multivariate hierarchical regression with other-focused (T2) as outcome variable was conducted. Age (T1) and gender (T1) were entered as controls, and familism (T1) was entered in the

second step (See Table 6). The ANOVA results from step 1 show that the control variables significantly account for variance of the emerging adulthood theme other-focused (Step 1, $R^2 = .02$, $F(2,769) = 6.76$, $p < .01$). Age was positively significantly associated with other-focused (T3) ($\beta = .09$, $p < .05$), and gender was also associated with other-focused, with women reporting that they focus on others more than men ($\beta = .10$, $p < .01$). Step 2 included familism; the results from the ANOVA show that the model including age, gender, and familism account for variance of other-focused (Step 2, $R^2 = .02$, $F(3,768) = 4.70$, $p < .01$); age (T1) and gender (T1) remained significantly associated with other-focused (T2), but familism (T1) was not associated with other-focused (T3) ($\beta = 0.03$, $p = \text{n.s.}$) (Table 6). Thus, hypothesis 2 was not supported (see Figure 4.1).

Research questions 1, 2, 3, and 4 asked whether and how familism (T1) would be associated with identity exploration (T2), self-focused (T2), feeling-in-between (T2), and possibilities/experimentation (T2). To assess these research questions, separate multivariate hierarchical linear regressions were conducted with each of the adulthood themes as a separate outcome variable. For each regression, step 1 included gender (T1) and age (T1), and step 2 included familism (T1). Table 7 summarizes the results for the regression having identity exploration (T2) as the outcome variable. Results from the ANOVA test show that neither step 1 nor step 2 were significant, indicating that the variables entered did not account for variance of identity exploration (T2) (Step 1, $R^2 = .01$, $F(2,772) = .50$, $p = \text{n.s.}$; Step 2, $R^2 = .01$, $F(3,771) = .50$, $p = \text{n.s.}$) None of the variables were associated with identity exploration (T2) (See Table 7 and Figure 4.1). Table 8 summarizes the results for the regression with self-focused (T2) as outcome

variable. Results from the ANOVA test show that neither Step 1 nor Step 2 were significant, indicating that the variables entered did not account for variance of self-focused (T2) (Step 1, $R^2 = .01$, $F(2,772) = 1.51$, $p = n.s.$; Step 2, $R^2 = .01$, $F(3,771) = 1.03$, $p = n.s.$). None of the variables entered were associated with self-focused (T2) (See Table 8 and Figure 4.1).

Table 9 summarizes the regression with feeling in-between (T2) as the outcome variable. Results from the ANOVA test show that neither step 1 nor step 2 were significant, indicating that the variables entered did not account for variance of feeling in-between (T2) (Step 1, $R^2 = .00$, $F(2,769) = .86$, $p = n.s.$; Step 2, $R^2 = .00$, $F(3,768) = .81$, $p = n.s.$). None of the predictor variables were associated with feeling in-between (T2; see Table 9 and Figure 4.1).

Table 10 summarizes the regression with possibilities/experimentation (T2) as the outcome variable. Results from the ANOVA test show that neither step 1 nor step 2 were significant, indicating that the variables entered did not account for variance of possibilities/experimentation (T2) (Step 1, $R^2 = .00$, $F(2,774) = .91$, $p = n.s.$ Step 2, $R^2 = .00$, $F(3,773) = 1.50$, $p = n.s.$). None of the predictor variables were associated with possibilities/experimentation (See Table 10). In sum, analyses to examine research questions 1-4 showed that familism (T1) was not associated with identity exploration (T2), self-focused (T2), feeling-in-between (T2), and possibilities/experimentation (T2) (See Figure 4.1).

Multivariate Logistic Regressions: Associations of Emerging Adulthood Themes with Tobacco Use

Hypothesis 3 stated that other-focused (T2) would be negatively associated with all the tobacco use measures (T3). Additionally, hypothesis 4 stated that possibilities/experimentation (T2) would be positively associated with tobacco use measures (T3). Lastly, research questions 5, 6, 7, and 8 asked whether the other emerging adulthood themes (T2) would be associated with the tobacco use measures (T3). To address these series of hypotheses and research questions, four different logistic regressions were conducted. Each regression had as the outcome variable one of the tobacco use measures (i.e., lifetime smoking (T3), past-month smoking (T3), hookah use (T3), and e-cigarette use (T3)). All the regressions included in the first step the control variables (i.e., gender (T1) and age (T1)). The second step included all the emerging adulthood themes (T2).

Table 11 shows the result of the logistic regression for lifetime smoking. The chisquare of Model 2 shows that the block in which emerging adulthood themes were entered accounts for a significant portion of the variance of lifetime smoking (T3) (Model 2 $\chi^2(8) = 52.43, p < 0.01$). Results show that gender is significantly associated with lifetime smoking, with women reporting lower likelihood of lifetime smoking ($B = 0.63, p < .01$). None of the emerging adulthood themes (T2) were significantly associated with lifetime smoking (T3). Therefore, these results fail to support hypothesis 3 and 4.

Table 12 illustrates the results of the regression with past-month smoking (T3) as the outcome variable. Results show that the model including the emerging adulthood themes is significant (Model 2 $\chi^2(8) = 25.28, p < .01$). Results show that gender is

significantly associated with past-month smoking, with women being less likely to report past month smoking ($B = -.63, p < .01$). Additionally, higher self-focus (T2) was associated with higher past-month smoking (T3) ($B = .95, p < .05$). Higher endorsement of possibilities/experimentation (T2) was associated with lower past-month smoking (T3) ($B = -.71, p < .05$). In sum, the results show partial support for hypothesis 3, but do not support hypotheses 4 (See Figure 4.1).

Table 13 summarizes the regression with hookah use as the outcome variable. Results show that model 1, which included the control variables, was significant (Model 1 $\chi^2 (2) = 6.20, p < .05$); however, model 2, which includes the emerging adulthood themes, was not significant (Model 2 $\chi^2 (8) = 9.77, p = n.s.$). Only gender was significantly associated with hookah use, with women being less likely to report past-month hookah use compared to men ($B = -.75, p < .05$). Thus, the results fail to support hypotheses 3 and 4.

Table 14 summarizes the regression with e-cigarette use as the outcome variable. Results show that the Model 1, which included the control variables was significant (Model 1 $\chi^2 (2) = 7.831, p < .05$); however, Model 2, which includes the emerging adulthood themes, was not significant (Model 2 $\chi^2 (8) = 10.85, p = n.s.$). Only gender was associated with the use of e-cigarettes in the past month, with women being less likely to have used e-cigarettes compared to men ($B = -.71, p < .05$). Thus, the results fail to support hypotheses 3 and 4.

In sum, analysis for hypothesis 3 partially supported the negative association between other-focused (T2) and tobacco use measures (T3). Additionally, analysis for hypothesis 4 did not show support for the positive association between

possibilities/experimentation (T2) and measures of smoking (T3). Lastly, analyses for research questions 5-8 found that the remaining emerging adulthood themes (T2) were not associated with any of the smoking measures (T3; See Figure 4.1)

Table 4.1 *Descriptive Statistics for All Study Variables*

Measure	<i>N</i> (Valid)	<i>Missing</i>	<i>M</i>	<i>SD</i>	n (%)
Age (T1)	920	32	20.46	0.65	-
Gender (T1) (W and M)					W: 540 (56.7) M: 390 (41.9)
Familism (T1)	920	32	3.42	0.55	-
Identity Exploration (T2)	827	125	3.25	0.62	-
Instability (T2)	828	124	2.63	0.68	-
Other-Focused (T2)	824	128	2.71	0.80	--
Self-Focused (T2)	827	126	3.19	0.61	--
In-Between (T2)	824	128	3.11	0.67	--
Possibilities/Experimentation (T2)	831	121	3.16	0.66	-
Lifetime Smoking (T3)	817	135	-	-	549(57.7)
Past-Month Smoking (T3)	550	402	-	-	169(30.7)
Hookah Use (T3)	828	124	-	-	53(5.6)
E-Cigarette Use (T3)	828	125	-	-	66(6.9)

Note: Total sample size $N = 952$. Higher scores represent greater endorsement of familism (T1), and emerging adulthood themes (T2). Gender (T1) was coded 1 for women and 0 for men. Tobacco use measures (T3) were coded 1 for “yes” and 0 for “no.”

Table 4.2. *Pearson Correlations between Familism (T1), Emerging Adulthood Themes (T2), and Tobacco Use Measures (T3)*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Gender	1	-.07*	0.02	-.02	.02	.10**	-.07	-0.01	-.02	-.24**	-.19**	-.10**	-.10**
2. Age (T1)		1.00	-.02	-.03	-.01	.07*	-.01	-.06	-.04	-.05	.05	.01	-.04
3. Familism (T1)			1.00	.04	-.09*	.03	.01	.05	.07	-.03	-.05	.03	.03
4. Identity Exploration (T2)				1.00	.48**	.29**	.79**	.60**	.68**	.08**	-.05	.03	.06
5. Instability (T2)					1.00	.21**	.45**	.46**	.42**	.09**	.04	-.02	.04
6. Other-Focused (T2)						1.00	.27**	.19**	.18**	-.04	-.04	-.01	-.03
7. Self-focused (T2)							1.00	.53**	.77**	.09*	.09*	.04	.05
8. In-Between (T2)								1.00	.48**	.11**	-.01	-.04	.01
9. Possibilities/Experimentation (T2)									1.00	.08*	-.02	-.02	.03
10. Lifetime Smoking (T3)										1.00	n/a	.12**	.17**
11. Past-Month Smoking (T3)											1.00	.30**	.27**
12. Hookah Use (T3)												1.00	.31**
13. E-Cigarette Use (T3)													1.00

Note. * $p < .05$, ** $p < .01$. Higher scores represent greater endorsement of familism (T1), and emerging adulthood themes. Gender was coded 1 for women and 0 for men. Tobacco use measures were coded “1” for yes and “0” for no. No correlation was calculated between lifetime smoking and past-month smoking because only those who reported lifetime smoking (Yes) were asked about past month-smoking.

Table 4.3. *Mean Differences of Continuous Variables between Smokers and non-Smokers (T3)*

Continous Variable	Lifetime Smoking (T3)				Past-Month Smoking (T3)			
	Use	N	<i>M</i> (<i>SD</i>)	<i>t</i>	Use	N	<i>M</i> (<i>SD</i>)	<i>t</i>
Identity Exploration (T2)	N	251	3.20(0.64)	-2.28*	N	361	3.29(0.58)	-.94
	Y	518	3.31(0.58)		Y	157	3.34(0.58)	
Instability (T2)	N	251	2.58(69)	-2.62**	N	360	2.69(0.65)	-.90
	Y	518	2.71(0.65)		Y	158	2.75(0.64)	
Other-Focused (T2)	N	250	2.75(0.76)	1.11	N	360	2.70(0.79)	1.00
	Y	516	2.68(0.81)		Y	156	2.63(0.83)	
Self-Focused (T2)	N	251	3.14(0.64)	-2.59**	N	362	3.23(0.56)	-2.08*
	Y	518	3.26(0.55)		Y	156	3.34(0.52)	
In-Between (T2)	N	250	3.03(0.74)	-3.13**	N	361	3.18(0.61)	-.22
	Y	517	3.19(.52)		Y	156	3.19(0.66)	
Possibilities/ Experimentation (T2)	N	252	3.12(0.70)	-2.20*	N	362	3.24(0.59)	.46
	Y	520	3.23(0.61)		Y	158	3.21(0.66)	
Familism (T1)	N	260	2.58(0.53)	.98	N	376	3.43(.55)	1.15
	Y	541	2.71(0.55)		Y	166	3.37(0.56)	

Note. * $p < .05$, ** $p < .01$ Higher scores represent greater endorsement of familism (T1), and emerging adulthood themes. Tobacco use measures were coded “1” for yes and “0” for no.

Table 4.4. *Mean Differences of Continuous Variables between Users and Non-Users for Hookah (T3) and E-Cigarettes (T3)*

Continous Variable	Hookah Use (T3)				E-cigarette Use (T3)			
	Use	N	<i>M(SD)</i>	<i>t</i>	Use	N	<i>M (SD)</i>	<i>t</i>
Identity Exploration (T2)	N	727	3.27(0.59)	-0.69	N	713	3.26(0.60)	-1.60
	Y	48	3.33(0.69)		Y	62	3.39(0.60)	
Instability (T2)	N	727	2.67(0.67)	0.54	N	713	2.66(0.67)	-1.17
	Y	48	2.62(0.69)		Y	62	2.76(0.65)	
Other-Focused (T2)	N	724	2.70(0.80)	0.05	N	710	2.71(0.80)	0.96
	Y	48	2.69(0.78)		Y	62	2.61(0.76)	
Self-Focused (T2)	N	727	3.22(0.58)	-0.96	N	713	3.21(0.59)	-1.39
	Y	48	3.30(0.62)		Y	62	3.32(0.51)	
In-Between (T2)	N	725	3.14(0.66)	1.22	N	711	3.13(0.67)	-0.14
	Y	48	3.02(0.72)		Y	62	3.15(0.59)	
Possibilities/ Experimentation (T2)	N	730	3.19(0.63)	-0.42	N	716	3.19(0.64)	-0.84
	Y	48	3.23(0.70)		Y	62	3.26(0.60)	
Familism (T1)	N	759	3.42(0.55)	-0.88	N	748	3.42(0.55)	-0.83
	Y	52	3.49(0.55)		Y	63	3.48(0.50)	

Note. * $p < .05$, ** $p < .01$ Higher scores represent greater endorsement of familism (T1), and emerging adulthood themes. Tobacco use measures were coded “1” for yes and “0” for no.

Table 4.5. *Regression Coefficients: Instability/Negativity (T2) Regressed on Familism (T1).*

Variable	Step 1			Step 2		
	β	<i>SE</i>	<i>t</i>	β	<i>SE</i>	<i>t</i>
Age (T1)	-.01	0.04	-0.26	-.01	0.04	-.32
Gender (T1)	.01	0.05	0.37	.01	0.05	0.35
Familism (T1)				-.09**	0.04	-2.55

Note. * $p < .05$, ** $p < .01$. $N = 773$. Step 1 included age and gender Step 1, $R^2 = .02$, $F(2,771) = 0.106$, $p = \text{n.s.}$ Step 2 included Familism. Step 2, $R^2 = .09$, $F(3,770) = 1.231$, $p = .08$. $\Delta R^2 = .008$, $p < .01$ Higher scores indicate stronger endorsement of familism and instability/negativity. Gender was coded 1 for women and 0 for men. β represents standardized beta coefficients.

Table 4.6. *Regression Coefficients: Other-Focused (T2) Regressed on Familism (T3).*

Variable	Step 1			Step 2		
	β	<i>SE</i>	<i>t</i>	β	<i>SE</i>	<i>t</i>
Age (T1)	.09*	0.04	2.39	.09*	0.04	2.40
Gender (T1)	.10**	0.06	2.91	.10**	0.06	2.92
Familism (T1)				.03	0.05	0.77

Note. * $p < .05$, ** $p < .01$. $N = 771$. Step 1 included age and gender. Step 1, $R^2 = .02$, $F(2,769) = 6.76$, $p < .01$. Step 2 included Familism. Step 2, $R^2 = .02$, $F(3,768) = 4.70$, $p < .01$. Higher scores indicate stronger endorsement of familism and other-focused. Gender was coded 1 for women and 0 for men. β represents standardized beta coefficients.

Table 4.7. *Regression Coefficients: Identity Exploration (T2) Regressed on Familism (T1).*

Variable	Step 1			Step 2		
	β	<i>SE</i>	<i>t</i>	β	<i>SE</i>	<i>t</i>
Age (T1)	-.03	0.03	-0.97	-.03	0.04	-0.95
Gender (T1)	-.01	0.04	-0.30	-.01	0.06	-0.30
Familism (T1)				.03	0.04	0.71

Note. * $p < .05$, ** $p < .01$. $N = 774$. Step 1 included age and gender. Step 1, $R^2 = .01$, $F(2,772) = .50$, $p = \text{n.s.}$ Step 2 included Familism. Step 2, $R^2 = .01$, $F(3,771) = .50$, $p = \text{n.s.}$ Higher scores indicate stronger endorsement of familism and identity exploration. Gender was coded 1 for women and 0 for men. β represents standardized beta coefficients.

Table 4.8. *Regression Coefficients: Self-Focused (T2) Regressed on Familism (T1).*

Variable	Step 1			Step 2		
	β	<i>SE</i>	<i>t</i>	β	<i>SE</i>	<i>t</i>
Age (T1)	-.01	0.03	-0.25	-.01	0.03	-0.26
Gender (T1)	-.06	0.04	-1.73	-.06	0.04	-1.73
Familism (T1)				-.01	0.04	-0.23

Note. * $p < .05$, ** $p < .01$. $N = 774$. Step 1 included age and gender. . Step 1, $R^2 = .01$, $F(2,772) = 1.51$, $p = \text{n.s.}$ Step 2 included Familism. Step 2, $R^2 = .01$, $F(3,771) = 1.03$, $p = \text{n.s.}$ Higher scores indicate stronger endorsement of familism and self-focused. Gender was coded 1 for women and 0 for men. β represents standardized beta coefficients.

Table 4.9. *Regression Coefficients: Feeling-in-Between (T2) Regressed on Familism (T1).*

Variable	Step 1			Step 2		
	β	<i>SE</i>	<i>t</i>	β	<i>SE</i>	<i>t</i>
Age (T1)	-.05	0.04	-1.3	-0.05	0.03	-1.29
Gender (T1)	-.00	0.05	-0.08	-0.0	0.05	0.94
Familism (T1)				0.03	0.04	0.40

Note. * $p < .05$, ** $p < .01$. $N = 771$. Step 1 included age and gender. Step 1, $R^2 = .00$, $F(2,769) = .86$, $p = \text{n.s.}$. Step 2 included Familism. Step 2, $R^2 = .00$, $F(3,768) = .81$, $p = \text{n.s.}$ Higher scores indicate stronger endorsement of familism and feeling-in-between. Gender was coded 1 for women and 0 for men. β represents standardized beta coefficients.

Table 4.10. *Regression Coefficients: Possibilities/Experimentation (T1) Regressed on Familism (T2).*

Variable	Step 1			Step 2		
	β	<i>SE</i>	<i>t</i>	β	<i>SE</i>	<i>t</i>
Age (T1)	-.04	0.71	-1.15	-.04	0.72	-1.15
Gender (T1)	-.03	0.03	-0.77	-.03	0.03	-0.75
Familism (T1)				.06	0.05	1.63

Note. $*p \leq .05$, $**p \leq .01$. $N = 776$. Step 1 included age and gender. Step 1, $R^2 = .00$, $F(2, 774) = .91$, $p = \text{n.s.}$. Step 2 included Familism. Step 2, $R^2 = .00$, $F(3, 773) = 1.50$, $p = \text{n.s.}$ Higher scores indicate stronger endorsement of familism and possibilities/experimentation. Gender was coded 1 for women and 0 for men. β represents standardized beta coefficients.

Table 4.11. *Lifetime Smoking (T3) Regressed on Emerging Adulthood Themes (T2)*

Predictor	Step 1			Step 2		
	B	SE	Exp (B)	B	SE	Exp (B)
Age (T3)	-0.25	0.16	0.78	-0.25	0.16	0.78
Gender (T1)	-1.02**	0.18	0.36**	-1.02	0.18	0.36
Identity Exploration (EA 2)				0.00	0.24	1.00
Instability (EA 2)				0.21	0.15	1.24
Other-Focused (EA 2)				-0.12	0.11	0.89
Self-focused (EA 2)				0.04	0.27	1.04
In-Between (EA2)				0.28	0.16	1.33
Possibilities/Experimentation (EA2)				0.07	0.21	1.07

Note: * $p < .05$, ** $p \leq .01$. $N = 715$. Model 1 $\chi^2 (2) = 37.73, p < .01$; Model 2 $\chi^2 (8) = 52.43, p < 0.01$. Gender was coded 1 for women and 0 for men; Higher scores indicated stronger endorsement of emerging adulthood themes. Lifetime smoking was coded 0 for “no” and 1 for “yes.” B represents unstandardized beta coefficients.

Table 4.12. *Past-Month Smoking (T3) Regressed on Emerging Adulthood Themes (T1)*

Predictor	Step 1			Step 2		
	B	SE	Exp (B)	B	SE	Exp (B)
Age (T3)	-0.31	0.27	0.73	-0.36	0.28	.70
Gender (T1)	-0.67**	0.20	0.51**	-0.63**	0.21	0.53**
Identity Exploration (EA 2)				-0.21	0.32	0.81
Instability (EA 2)				0.19	0.19	1.21
Other-Focused (EA 2)				-0.07	0.14	0.93
Self-focused (EA 2)				1.14**	0.38	3.13**
In-Between (EA2)				-0.01	0.21	0.99
Possibilities/Experimentation (EA2)				-0.71**	0.28	0.49

Note: * $p < .05$, ** $p \leq .01$. $N = 478$. Model 1 $\chi^2(8) = 11.98, p < .01$; Model 2 $\chi^2(8) = 25.28, p < .01$. Gender was coded 1 for women and 0 for men; Higher scores indicated stronger endorsement of emerging adulthood themes. Lifetime smoking was coded 0 for “no” and 1 for “yes.” B represents unstandardized beta coefficients.

Table 4.13. *Hookah Use (T3) Regressed on Emerging Adulthood Themes (T2)*

Predictor	Step 1			Step 2		
	B	SE	Exp (B)	B	SE	Exp (B)
Age (T3)	-0.20	0.39	0.82	-0.21	0.39	0.81
Gender (T1)	-0.78*	0.32	0.46*	-0.75*	0.32	0.47*
Identity Exploration (EA 2)				0.38	0.47	1.46
Instability (EA 2)				0.01	0.28	1.01
Other-Focused (EA 2)				-0.03	0.21	0.97
Self-focused (EA 2)				0.38	0.54	1.46
In-Between (EA2)				-0.44	0.28	0.64
Possibilities/Experimentation (EA2)				-0.28	0.40	0.76

Note: * $p < .05$, ** $p \leq .01$. $N = 718$. Model 1 $\chi^2(2) = 6.20, p < .05$; Model 2 $\chi^2(8) = 9.77, p = \text{n.s.}$. Gender was coded 1 for women and 0 for men; Higher scores indicated stronger endorsement of emerging adulthood themes. Lifetime smoking was coded 0 for “no” and 1 for “yes.” B represents unstandardized beta coefficients.

Table 4.14. *E-Cigarette Use (T3) Regressed on Emerging Adulthood Themes (T2)*

Predictor	Step 1			Step 2		
	B	SE	Exp (B)	B	SE	Exp (B)
Age (T3)	-0.44	0.38	0.65	-0.43	0.38	0.65
Gender (T1)	-0.72*	0.28	0.49*	-0.71*	0.28	0.49*
Identity Exploration (T2)				0.39	0.42	1.48
Instability (T2)				0.23	0.25	1.25
Other-Focused (T2)				-0.08	0.19	0.92
Self-focused (T2)				0.06	0.47	1.06
In-Between (T2)				-0.20	0.26	0.82
Possibilities/Experimentation (T2)				-0.12	0.36	0.89

Note: * $p < .05$, ** $p \leq .01$. $N = 719$. Model 1 $\chi^2(2) = 7.831, p < .05$; Model 2 $\chi^2(8) = 10.85, p = \text{n.s.}$ Gender was coded 1 for women and 0 for men; Higher scores indicated stronger endorsement of emerging adulthood themes. Lifetime smoking was coded 0 for “no” and 1 for “yes.” B represents unstandardized beta coefficients.

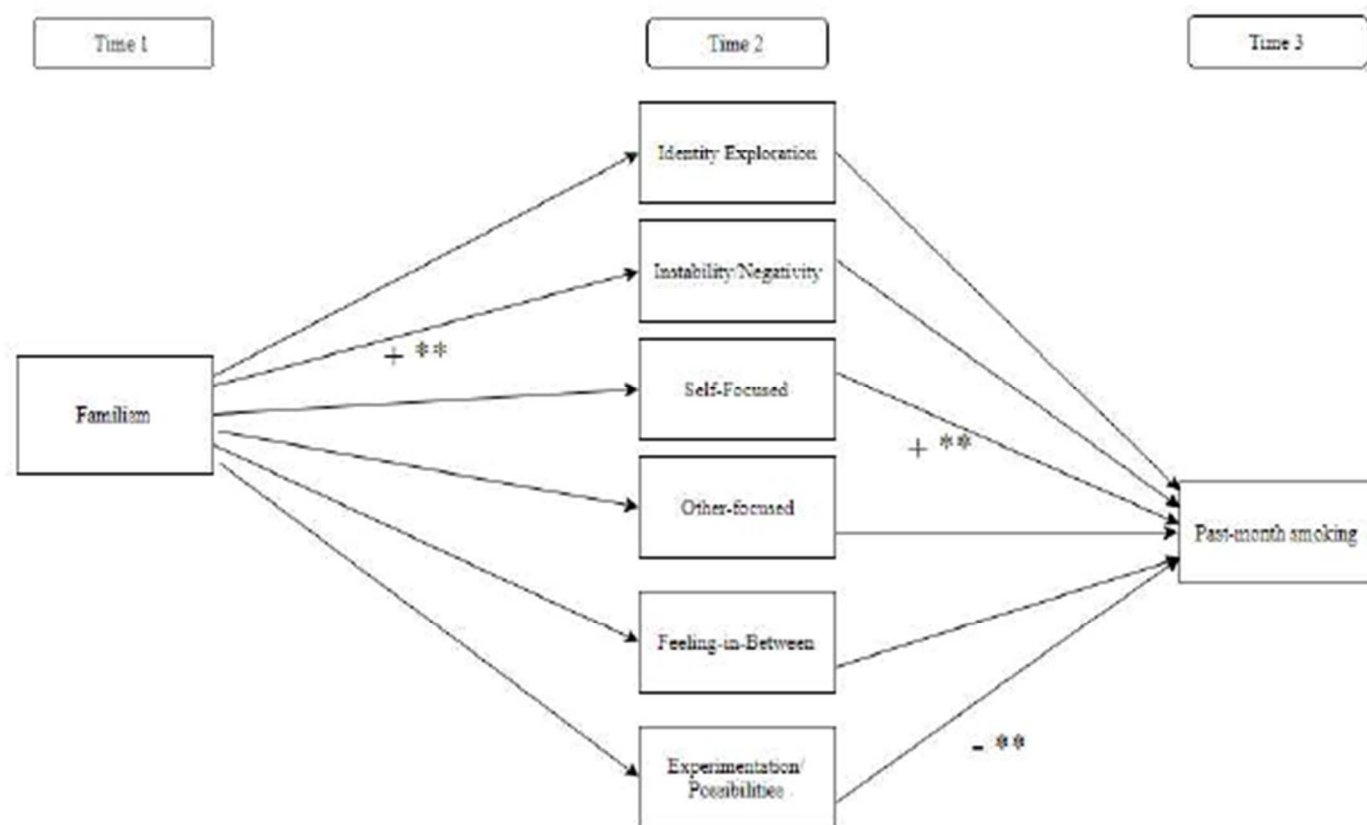


Figure 4.1. Model integrating family oriented values, emerging adulthood experience, and past-month smoking. This figure illustrate the direction of significant associations between variables after controlling for age and gender. Only past-month was associated to emerging adulthood experiences, therefore this is the only outcome included for time 3. $** p < .05$.

CHAPTER 5

DISCUSSION

This study aimed to expand the extant literature on the experiences of Hispanic emerging adults by assessing whether endorsing familism was associated with the six different experiences of emerging adulthood (Arnett, 2003). Additionally, theoretical work has proposed that five experiences of emerging adulthood (i.e., all emerging adulthood experiences except other-focused) could account for the increase in substance use during emerging adulthood (Arnett, 2005). Therefore, the current study also examined whether the experiences of emerging adulthood would be associated with tobacco use in a sample of Hispanic emerging adults. Below I discuss the key findings.

Familism and Emerging Adulthood Experiences

Based on theory and previous research, I hypothesized that familism would be negatively associated with experiencing emerging adulthood as a time of instability/negativity over time. In line with the above hypothesis, the results indicated that higher familism was associated with lower instability/negativity over time. One reason why endorsing familism could lead to feeling that emerging adulthood is more stable and less negative could be that for Hispanic emerging adults, endorsing familism relates to lower family conflict. Research conducted with adolescents shows that when there are cultural differences between adolescents and parents, there is more family conflict (Syed and Mitchell, 2013). Therefore, Hispanic emerging adults who believe that their family should take a central role in their lives might also endorse more traditional

cultural values, which align more with their parents' values, potentially decreasing family conflict; less family conflict would lead to an increased sense of stability for Hispanic emerging adults.

Furthermore, previous research has found that as Hispanic adolescents acculturate to mainstream American culture, they experience less family cohesion, particularly for Hispanic girls (Lorenzo-Blanco, Unger, Baezconde-Garbanati, Ritt-Olson, and, Soto, 2012). It has been theorized that as Hispanic girls acculturate to mainstream American culture they endorse less traditional gender roles (Gil and Vasquez, 1996), potentially leading to more disagreement with parents and leading to a lower sense of family cohesion. Future research could build on these findings with adolescents and assess whether there are similar gender differences in the impact of cultural values and the sense of instability for Hispanic emerging adults. For example, Hispanic women, but not men, who endorse more familism might endorse less instability and negativity because they would probably endorse lower levels of acculturation, challenge less traditional gender roles, and therefore experience less family conflict. Experiencing more family cohesion might buffer Hispanic emerging adult women from experiencing emerging adulthood as a time of instability and negativity.

The second hypothesis of the current study stated that familism would be positively associated with the experience that emerging adulthood is a time to focus on others. This association has not been tested in previous research; however, scholars have highlighted that Hispanics living in the U.S. often endorse values that emphasize the group and other-oriented goals, such as familism, more than White Americans (Schwartz, Zamboanga, Rodriguez, & Wang 2007). Therefore, researchers have suggested that

Hispanic emerging adults who endorse higher levels of these family-oriented values would perceive emerging adulthood as a time to focus on others (Syed and Mitchell, 2013; Schwartz, 2016). Surprisingly, the results of the current study indicate that Hispanic emerging adults who endorse more familism seem not to focus more on others than those who endorse lower levels of familism. One potential explanation for this result is that the items of the other-focused scale are not specific enough (i.e., “time of settling down,” “time of responsibility for others,” and “time of commitments to others”). The item “time of settling down” does not necessarily refer to making commitments to others, and the other two items are too broad and could be interpreted as referring to individuals outside the family (e.g., friends). Therefore, respondents might have interpreted the items as focusing on other people besides family members; for example, “others” could include friends, or for emerging adults in college, “others” could include members of a Greek organization or a club. Emerging adults who see their family as central to their lives would not necessarily see emerging adulthood as a time to focus on other people besides family members, and therefore, familism would not be associated with perceiving emerging adulthood as a time to focus on others.

Furthermore, previous results showing that Hispanic emerging adults perceive this period as a time to focus on others could have been caused by variables other than family-oriented values. For example, most research looking at the experience of Hispanic emerging adults has used samples of low-income participants (Sanchez, Esparza, Colón, & Davis 2010; Katsiaficas, Suárez-Orozco, & Dias, 2015); therefore, the previously reported emphasis on focusing on others (i.e., family and community) could be driven by socioeconomic status, rather than by family-oriented values. For instance, research has

found that ethnic minority emerging adults from lower socioeconomic backgrounds start adopting adult roles faster as they enter emerging adulthood (Benson and Furstenberg, 2003); these roles encompass an increase in financial responsibility, which includes helping support their families. Similarly, research with a diverse sample of college students found that those from immigrant families spent more time in activities related to family responsibilities such as caretaking, as well as more financial chores such as working in family businesses compared to non-immigrant families (Tseng, 2004). Future research could further assess the role that SES plays in the experience of emerging adulthood of Hispanics in the U.S., who are over-represented among the poor, with Hispanics comprising 28.1% of the more than 45 million poor Americans (Krogstad, 2014).

In regards to the relation between familism and the other four experiences of emerging adulthood (i.e., identity exploration focus on the self, feeling in between adolescence and adulthood, and possibilities/experimentation), there is a scarcity of empirical and theoretical work on how familism could be associated with these experiences; therefore, in this study, I examined the question of whether and how familism relates to identity exploration, focus on the self, feeling in between adolescence and adulthood, and possibilities/experimentation. Results show that familism was not related to identity exploration, focus on the self, feeling in between adolescence and adulthood, and possibilities/experimentation over time. Therefore, even though Hispanic emerging adults often endorse more family-oriented values than their White peers (Fuligni, Tseng, & Lam, 1993), in this study, familism was not linked to how much participants endorsed the experiences of emerging adulthood proposed by Arnett.

Lastly, although studying gender was not central to the current study, it is important to note that for the current sample, women endorsed more than men that emerging adulthood was a time to focus on others. The fact that there were no gender differences in the other experiences of emerging adulthood is consistent with previous research that has shown no difference in how emerging adult women and men experience this life period, at least according to Arnett's theory (Arnett, 1998; Arnett, 2000). In two different non-Hispanic samples, researchers found that women report that emerging adulthood is a time to focus on the self more than men (See Reifman, A., Colwell, M. J., Arnett, J. J., 2007) which is opposite to the results found in the present study. Therefore, future research could further explore whether there are gender differences in emerging adulthood experiences, as well as why Hispanic women, more than men, tend to see emerging adulthood as a time to focus on others, and how that might impact their lives in different domains.

Emerging Adulthood Experiences and Tobacco Use

The second set of hypotheses and research questions of the current study focused on the association of emerging adulthood experiences and tobacco use. Specifically, in the current study, I assessed four different measures of tobacco use: lifetime smoking, past-month smoking, hookah use, and e-cigarette smoking. One of the research questions of the study was whether thinking that emerging adulthood is a time to focus on the self was related to past-month smoking; those who had expressed more that emerging adulthood was a time to focus on the self reported more past-month smoking than those who did not think that emerging adulthood was a time to focus on the self. These results show support for Arnett's idea that because the person sees emerging adulthood as a time

to focus on themselves and experiences less social control from parents and other individuals, they may be more likely to engage in substance use (Arnett, 2005).

Furthermore, based on previous research, I hypothesized that perceiving emerging adulthood as a time full of possibilities and for experimentation would be associated with the four measures of tobacco use. In line with the hypothesized associations, the results showed that those who perceive emerging adulthood as a time of possibilities and experimentation were more likely to report lifetime smoking over time. However, when controlling for gender and age, perceiving emerging adulthood as a time full of possibilities was no longer related to lifetime smoking, suggesting that gender or age were more strongly related to lifetime smoking than perceiving emerging adulthood as a time of possibilities for experimentation; men reported more lifetime smoking than women.

In addition, after controlling for age and gender, perceiving emerging adulthood as a time full of possibilities and experimentation was related to past-month smoking over time. However, the result were in the opposite direction to the hypothesized one; those who believed that emerging adulthood was a time full of possibilities for experimentation were less likely to report past-month smoking over time than those who endorsed less that emerging adulthood was a time of possibilities and experimentation. These results are unexpected and contrary to what has been found in the past; previous studies found that participants who reported that emerging adulthood was a time full of possibilities for experimentation were more likely to report hookah use, e-cigarette use, marijuana use, and binge drinking (Allem, Sussman, and Unger, 2016; Allem & Unger, 2016; Allem, Forster, Neiberger, & Unger, 2015). Results did not replicate in the current

study maybe because participants in the previous studies were college students exclusively. In a college setting, experimenting with different substances might be normative, and for some it might be expected, which might not be the case in other contexts. For instance, in other contexts endorsing that emerging adulthood is a time full of possibilities and for experimentation might apply to other life domains that do not include substance use. Emerging adults could see emerging adulthood as a time in which they can work and become financially independent from their parents, move out from their parents' home, explore different career paths, or date different people to see what type of person they would like to be with in a romantic relationship (Arnett, 2007). Future research should assess whether cigarette smoking and OTPs use is more prevalent among emerging adults who are college students, and whether perceiving emerging adulthood as a time full of possibilities and experimentation has a different meaning in different contexts.

Moreover, based on previous research, I hypothesized that perceiving emerging adulthood, as a time to focus on others would be related to less tobacco use over time. Contrary to this hypothesis, the results showed that there were no differences in how much participants endorsed that emerging adulthood was a time to focus on others and whether they reported lifetime smoking, past-month smoking, hookah use, or e-cigarette use over time. These results are inconsistent with a previous study that found that Hispanic emerging adults who saw emerging adulthood as a time to focus on others were less likely to use marijuana and binge drink (Allem, Lisha, Soto, Baezconde-Garbanat, & Unger, 2013). However, the only study, other than the current one, assessing tobacco use, specifically past-month and lifetime e-cigarette use, did not find that focusing on others

was protective of e-cigarette use (Allem & Unger, 2016; Allem, Forster, Neiberger, & Unger, 2015). Therefore, thinking that emerging adulthood is a time to focus on others might be protective against substance use, but it might depend on the type of substance that is being studied. Binge drinking and marijuana use could be perceived as more disruptive of one's behavior, and potentially affect negatively others more than tobacco use. Future research should further assess whether focusing on others is indeed protective against use of more disruptive substances for Hispanic emerging adults and emerging adults in general. Additionally, future research on smoking should assess whether family members smoke because in that case smoking could be a behavior that helps connect with others; thus, focusing on others in emerging adulthood could be linked to an increased likelihood of using tobacco products if parents smoke.

Besides the previous hypotheses, for the current study I had exploratory research questions for the other experiences of emerging adulthood: identity exploration, instability/negativity, and feeling in between and adolescence. Arnett had proposed that these experiences would be associated with substance use; however, there is little empirical evidence supporting these hypothesized associations. Results show that feeling that emerging adulthood was a time for identity exploration, of transition between adolescence and adulthood, and a time of instability was associated with lifetime smoking; however, after controlling for age and gender, these emerging adulthood themes were no longer associated with lifetime smoking. Therefore, in the current study, perceiving that emerging adulthood was a time for identity exploration, to focus on others, and transition in-between adolescence and adulthood was not associated with tobacco use.

In summary, after controlling for age and gender, only feeling that emerging adulthood was a time to focus on the self and a time of possibilities and experimentation were associated with past-month smoking over time. No other emerging adulthood experience was related to any of the four measures of tobacco use. It is interesting that two themes of emerging adulthood were associated with past-month smoking, but not with lifetime smoking; this pattern of associations may be due to issues with the measure of lifetime smoking; participants report whether they had tried cigarettes in the past, which includes whether they had tried cigarettes during adolescence. Therefore, many of those who reported lifetime smoking probably had not tried cigarettes as emerging adults, which could have masked the association between emerging adulthood themes and cigarette use in emerging adulthood. Thus, past-month smoking is a better measure of smoking during emerging adulthood because it specifies a recent period. Therefore, associations between emerging adulthood themes and past-month cigarette smoking show support to the proposed link between emerging adulthood themes and cigarette use (Arnett, 2005). Future studies could assess the association between emerging adulthood themes and cigarette use by using longitudinal statistical designs that could account for issues of temporality between the themes and the cigarette use measure.

Limitations

The sample was a convenience sample limited to participants who completed a survey as adolescents in certain high schools in Los Angeles. Therefore, the analyses may not generalize to Hispanic emerging adults in other regions of the U.S. Additionally, the experience of Hispanic emerging adults might vary depending on whether they are first, second, or third generation; and for those who are immigrants, on the number of years in

the U.S. Thus, future studies should assess how generation status and length of stay affect how Hispanics experience emerging adulthood. The study measures were all self-reported, thus, the accuracy of the information is limited by the willingness of participants to disclose, as well as their ability to recall past behavior. Additionally, the measures of tobacco use were all dichotomized which does not assess frequency or extent of tobacco use for those who actually reported tobacco use. Lastly, it is important to note that the statistical analyses were correlational, thus, the associations found are not evidence of causal links between the variables of the study.

Conclusions and Implication

To conclude, the current study is also one of the few studies to assess Arnett's proposed connection between the experiences of emerging adulthood and substance use in a sample of Hispanic emerging adults (Arnett, 2005). The current study shows partial support to Arnett's theory, with results showing associations between the emerging adulthood experiences and cigarette use, but not with OTPs use. Particularly, participants who thought that emerging adulthood was a time to focus on the self were more likely to report past-month smoking. This result is relevant for public health campaigns aimed at decreasing tobacco use among Hispanic emerging adults; for example, campaigns could include messages redefining what focusing on the self means, such as that it entails living a healthy lifestyle.

Lastly, this study was the first, to my knowledge, to assess how a family oriented value, familism, relates to Arnett's emerging adulthood experiences in a sample of Hispanic emerging adults. The results show that the degree to which Hispanic emerging adults endorse familism is related to how they experience emerging adulthood;

particularly, that this family oriented value is linked to a lower sense of instability during emerging adulthood. This result is in line with calls from scholars to expand the field of emerging adulthood research to include cultural components when working with ethnic minorities (Schwartz, 2016; Cote, 2014); this will allow us to gain a better understanding of how ethnic minority emerging adults experience this developmental period.

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APPENDIX A

COMPLETE SURVEY ITEMS

Demographic questions (T1)

A. About you:

Your birthday:

Month:

Day:

Year:

A.1. How old are you?

- ☐ 12 years old or younger
- ☐ 13 years old
- ☐ 14 years old
- ☐ 15 years old
- ☐ 16 years old
- ☐ 17 years old
- ☐ 18 years old or older

A.2. What is your sex?

- ☐ Female
- ☐ Male

A.3 In what grade are you?

- ☐ 9th grade
- ☐ 10th grade
- ☐ 11th grade
- ☐ Ungraded or other grade

Familismo

Beliefs and values. This section is about your opinions...ABOUT FAMILY...

		Definitely No (1)	Probably No (2)	Probably Yes (3)	Definitely Yes (4)	I prefer not to answer (- 9)
1	If one of my relatives needed a place to stay for a few months, my family would let them stay with us.	1	2	3	4	9
2	I expect my relatives to help me when I need them	1	2	3	4	9
3	When a family makes an important decision, they should talk about it with their close relatives	1	2	3	4	9
4	If anyone in my family needed help, we would all be there to help them	1	2	3	4	9

Emerging adulthood experiences (T2)

•First, please think about this time in your life. By “time in your life,” we are referring to the present time, plus the last few years that have gone by, and the next few years to come, as you see them. In short, you should think about a roughly five-year period, with the present time right in the middle.

Is this time in your life a...

		Strongly disagree (1)	Somewh at disagree (2)	Agree (3)	Strongly agree (4)	I prefer not to answer (5)
1	time of many possibilities?	1	2	3	4	5
2	time of exploration?	1	2	3	4	5
3	time of confusion?	1	2	3	4	5
4	time of experimentation?	1	2	3	4	5
5	time of personal freedom?	1	2	3	4	5
6	time of feeling restricted?	1	2	3	4	5
7	time of responsibility for yourself?	1	2	3	4	5
8	time of feeling stressed out?	1	2	3	4	5
9	time of instability?	1	2	3	4	5

10	time of optimism?	1	2	3	4	5
11	time of high pressure?	1	2	3	4	5
12	time of finding out who you are?	1	2	3	4	5
13	time of settling down?	1	2	3	4	5
14	time of responsibility for others?	1	2	3	4	5
15	time of independence?	1	2	3	4	5
16	time of open choices?	1	2	3	4	5
17	time of unpredictability?	1	2	3	4	5
18	time of commitments to others?					
19	time of self-sufficiency?					
20	time of many worries?	1	2	3	4	5
21	time of trying out new things?	1	2	3	4	5
22	time of focusing on yourself?	1	2	3	4	5
23	time of separating from parents?	1	2	3	4	5
24	time of defining yourself?	1	2	3	4	5
25	time of planning for the future?	1	2	3	4	5

26	time of seeking a sense of meaning?	1	2	3	4	5
27	time of deciding on your own beliefs and values?	1	2	3	4	5
28	time of learning to think for yourself?	1	2	3	4	5
29	time of feeling adult in some ways but not others?	1	2	3	4	5
30	time of gradually becoming an adult?	1	2	3	4	5
31	time of being not sure whether you have reached full adulthood?	1	2	3	4	5