

Emerging Adulthood in Chinese Young People:
Does ego identity status moderate the relationship between transition features and burnout?

by

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Abstract

Dramatic social changes in contemporary society have resulted in young people taking a longer time to transition into adulthood. In Western cultures, Arnett (2000) identified this transition period as *emerging adulthood*. Individuals may experience this period differently, depending on their culture. Some young people in emerging adulthood may have negative experiences during this transition period because a multiplicity of life choices means that their future is uncertain. Young people's ego identity development may lead to a greater self-selection of paths and activities. The purpose of this study is to understand the transition features of emerging adulthood and how the role of ego identity protects against negative psychosocial outcomes in mainland China.

In order to answer the research questions, I recruited 603 young people, including university students and non-students aged 18-25 in mainland China. All participants were asked to answer a series of self-report questionnaires designed to measure their perceived adulthood status, emerging adulthood features (IDEA), ego identity development in the work domain (DIDS), and burnout symptoms (MBI).

Results showed that a large proportion of the participants perceived themselves to be in the period of emerging adulthood, with significant differences depending on gender and educational status. Instead of the hypothesized five-dimensional structure of the transition features of emerging adulthood, a three-dimensional structure (i.e., identity exploration/experimentation, instability/negativity, and desire to be independent) was supported. An interaction effect between educational status and gender was found in the "desire to be independent" variable. Using cluster analysis, four groups were extracted (i.e., searching moratorium, foreclosure, moratorium, and carefree diffusion). Based on a multigroup structural equation modeling approach, the moderating effects of ego identity status were found in the association between certain dimensions of the transition features of

emerging adulthood and dimensions of burnout.

The results suggest that it is important to help individuals to develop a personal ego identity to guard against the negative psychosocial functioning during emerging adulthood in mainland China. At the societal level, it may be prudent to allow young people to extend their transition time into adulthood, allowing them to adjust to the rapid changes in our information- and technology-based society. Further recommendations are offered for parents, teachers, and local communities.

Preface

This dissertation is an original work by Xiaozhou Zhang. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “A Mixed Methods Examination of Emerging Adulthood Among College Students and Non-students in Mainland China”, No. Pro00039164, on June 7, 2013.

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Chapter 1: Introduction

The development of contemporary young people has already received a lot of public attention. The Hollywood movies “Failure to Launch” (2006) and “Step Brothers” (2008) are good and yet extreme examples showing the conflict between what it means to be a “grown-up” and the reluctance of many young people to actually mature. In China, many negative labels are given to contemporary young people, such as “NEET” (not currently in employment, education or training [啃老族]), “lost generation” and “selfish generation.” Young people are frequently criticized for their lack of responsibility, immaturity, and selfishness. Even their parents begin to question when they will grow up. However, that is not the whole story. Studies have shown that people entering their twenties are faced with a multitude of problems that may make for a difficult transition into adulthood (Arnett, 2000, 2010, 2011; Douglass, 2007).

As an example of some of the modern difficulties impeding the transition to adulthood, let us look at the case of Hai Zhang. A 25-year-old Chinese architect, he committed suicide on September. 4, 2012, by jumping from the top of a building (Tang, 2012). He was one of the most popular colleagues in his office and was taking on three big projects at the same time. His girlfriend had visited him the night before and they celebrated “Chinese Valentine’s Day” together. He had phoned his parents to talk about his upcoming wedding ceremony. It seemed that everything was going well. He had a job and what appeared to be a stable relationship. So what made him take such an extreme action?

Leading up to his death, Hai had spent three days on a project but it had not gone well. Since he was a junior architect in the company, he had to work harder than others, a norm in modern Chinese society. He had also been anxious about his impending marriage, because he could not afford a house. Since he perceived himself as an adult and his parents had high expectations for him, he chose to take care of everything by himself. Multiple high

expectations and stressors combined with a lack of understanding and supports likely contributed to his burnout and, ultimately, his suicide.

Unfortunately, the difficulties that Hai faced are not unusual in contemporary China; they represent a common set of problems for Chinese youth transitioning into adulthood. Although it may seem that contemporary young people avoid taking responsibilities and transitioning into adulthood, the fact is that they may be suffering multiple stressors. We have to consider both sides of this issue. Several interrelated questions may help with this. For example, do young people perceive that they have achieved adulthood when they are 18-25 years old? When does a person become an adult? What are the typical features during this transition period? In contemporary Chinese society, what role do changes play during this transition? Is this struggle associated with negative psychosocial outcomes? What sort of supports can protect Chinese young people from negative emotional or behavioral experiences during this transition?

In order to answer these questions, I adopted the theory of emerging adulthood (Arnett, 2000) and the Identity Capital Model (Cote, 1996, 1997) to examine and gain a deeper understanding about the lives of Chinese young people. Traditionally, Chinese culture places on young people an emphasis on external adult-like behaviors, such as marriage, educational accomplishment, and obligation to others. In general, Chinese society tends to expect young adults to settle down by age 30, something that even Confucius spoke of back in the fifth century BC. In his commentary on the Confucian Analects, Legge (2009) quotes Confucius as saying “At thirty, I stood firm.” Many young single people choose blind dating and quick marriage before they are 30 because of their parents’ expectations. However, the realities that Chinese people face have changed in recent decades. Along with the economic revolution and social structural changes in China, finding stable jobs and getting married before 30 have become more difficult. Young people cannot live like their parents anymore. A new

developmental stage, *emerging adulthood*, is conceptualized to characterize these changes (Arnett, 2000). In Western cultures, Arnett (2000) identified emerging adulthood as a period in which people have left the dependency of childhood and adolescence but have not yet entered the enduring responsibilities of adulthood. Recently, multiple studies have examined this phenomenon in Western cultural settings (e.g. Arnett, 2010, 2011; Douglass, 2007). The studies have found that the traditional life cycle has gone off course in recent years. Many young people spend a lot of time traveling, volunteering, living with their parents, and avoiding long-term commitments. There are no exact models for these young people to follow. When the parents of today's emerging adults were growing up, it was normal for them to find a job and marry as soon as they graduated from high school. The youth of today take longer to assume traditional adult roles than members of previous generations did. Employers and the government have used the results of studies about the transition into adulthood to design services for young people, such as internships for career exploration and adulthood transition programs.

The theory of emerging adulthood was developed based on samples collected in Western cultures. How much of that theory applies to Chinese culture is still unclear. Economic advancement has created a middle class in China, and it is this group that is most frequently examined in North American studies of emerging adulthood (Arnett, 2004). However, there are many other cultural differences between Western and non-Western societies that have a prominent influence on psychological development.

Two of the most important constructs that differentiate societies are individualism and collectivism (Triandis, 2001), both of which influence emerging adulthood. Another important difference between China and North America is the freedom associated with being a student. In China, post-secondary education is much more prescriptive than in North America and thus may not allow the same type of exploration. A particularly unique factor in

China is the one-child policy, which also influences the perception and experiences of emerging adulthood among young people.

Furthermore, emerging adults are likely to have negative experiences during the transition period due to unexpected stress and uncertainty, and the lack of inner resources, intrapersonal relationships and societal supports. The socio-developmental Identity Capital Model (Cote, 1996, 1997) emphasizes capital acquisition by individualized identity-related work. That model provides rich information to explain the mechanism of how transition features — the common psychological and social features during emerging adulthood (Arnett, 2000) — contribute to negative psychosocial outcomes. Young people benefit from ego identity development, which refers to the development of the conscious sense of self (Erikson, 1966), leading to a greater self-selection of paths and activities. It is critical to understand the transition features of emerging adulthood and how the role of ego identity protects against negative psychosocial outcomes in China. This will help the youth of today to understand themselves. It will also help others to assist these youth to successfully transition into adulthood.

1.1 Research Questions

The overarching purpose of this research is to examine how the moderating role of ego identity status affects the association between the transition features of emerging adulthood and negative psychosocial functioning in mainland China. Consideration will be given to the demographic variables of gender, educational status, and presence of siblings. The research examines five specific questions in a sample of Chinese students and non-students aged 18-25 from mainland China:

- (1) Do these youth perceive themselves as adults?
- (2) What are the transition features of emerging adulthood for these youth?

- (3) What are the relationships between the dimensions of the transition features of emerging adulthood and burnout?
- (4) What is the ego identity status (the profile of ego identity development) in the work domain?
- (5) Does ego identity status in the work domain moderate the relationships between the dimensions of the transition features and burnout?

1.2 Organization of Dissertation

In Chapter One, I introduce the emerging adulthood in China, the theory of emerging adulthood from cultural perspectives, and research questions. Chapter Two contains the literature of emerging adulthood and its transition features with cultural consideration, psychosocial functioning and the moderating role of ego identity against burnout during emerging adulthood. Chapter Three describes the methods used in the present study. This includes a description of the research design, procedure, participants and approaches taken with the data analysis. Chapter Four presents the results of the description of self-perceived adulthood status, validation of the transition features model among the Chinese sample, and the moderating role of ego identity status between transition features and burnout. Chapter Five includes the discussion and explanations about limitations, future research, and implications.

Chapter 2: Review of the Literature

This literature review is divided into four parts: First, I present the literature about the conceptualization of emerging adulthood and its transition features from an universal perspective. Second, I situate emerging adulthood and its transition features in the Chinese context, including Confucian concepts, the economic development, gender, educational status, and whether or not emerging adults have siblings. Third, I use a cultural perspective to illustrate both adaptive and negative psychosocial functioning during emerging adulthood. Finally, I examine the literature on ego identity development and its protective role on psychosocial functioning during emerging adulthood.

2.1 Emerging Adulthood and Its Transition Features

When does a person become an adult? How does the conception of the transition to adulthood held by contemporary young people compare to the conceptions held by people in previous centuries? In most traditional cultures, people usually transition into adulthood right after adolescence, and marriage is often designated explicitly as the event that marks the transition from boy to man and girl to woman (Schlegel & Barry, 1991). However, a large number of young people in their teens and twenties still view themselves as not yet adults. In addition, the conception of the transition to adulthood held by the youth of today rejects marriage and other role transitions as essential markers of adulthood.

2.1.1 Criteria for transition into adulthood

According to anthropologists and sociologists, the transition to adulthood is perceived in terms of factors related to the timing of transitional events, such as finishing education, entering the labor force, marriage, and parenthood (Schlegel & Barry, 1991; Goldscheider, F. & Goldshider, C., 1999) in most traditional cultures. In Roman times, females believed that they became adults when they got married; as well, entering the labor force and marriage were the most important criteria for adulthood among males. Young people were thought to

be adults when certain of these events occurred (Harlow & Laurence, 2002).

Today, with the development of globalization and internationalization, however, the transition from adolescence to adulthood is not simply biological but also social and cultural. Young people obtain more opportunities to access additional education at various times during adulthood. For example, a large number of people choose to enter postgraduate school instead of entering the labor force immediately. This is understandable in light of the intangible and gradually developing nature of the criteria young people consider most important in making the transition (Arnett, 1994). A number of research studies have been conducted among western young adults and the criteria for adulthood were summarized as follows: accepting responsibility, making independent decisions, becoming financially independent and becoming a parent (Arnett, 1997, 1998, 2000; Greene, Wheatley, & Aldava, 1992).

2.1.2 Emerging Adulthood

The changes over the past century have altered the nature of personal development in Western societies. Because the current young people get married and become parents at their later ages compared with the previous years, it become necessary to distinguish between the concepts of adolescence and adulthood. Most scholars who study adolescence have focused on ages 10-18 as the years of adolescent development (Pearce, Boergers, & Prinstein, 2012; Hadjigeorgiou, Tomaritis, Solea, & Kafatos, 2012). College students, who are older than 18, have usually been studied as “adults” (Mahmoud, Staten, Hall, & Lennie, 2012), even though more recent research has demonstrated that individuals of this age have not yet assumed adult roles. To solve this inconsistency, Arnett has proposed emerging adulthood as a stage of identity development during the period from the late teens through the twenties, with a focus on ages 18-25 (Arnett, 2000).

To test his theory, Arnett (1994) explicitly asked 346 college students from the US if

they considered themselves adults. Only 23% participants said yes. The results of his follow-up research yielded similar results, showing that most emerging adults had left adolescence but felt that they had not yet completely entered young adulthood (1997, 1998). This pattern has also been replicated by samples in developing countries; Badger, Nelson, and Barry (2006) found that Chinese youth have a shortened period of emerging adulthood compared to their Western counterparts, but still, 35% of young people responded “in some respects yes, in some respects no” to the question of whether “they considered themselves adults.” Asked a similar question, 50% of Romanian college students in a different study answered that they did not consider themselves to be full adults (Nelson, 2009). Even though 60% of Indian participants viewed themselves as adults, 26% perceived themselves as not yet adults in some aspects (Seiter & Nelson, 2011). In their studies, Seiter and Nelson included both student and non-student samples. They found that 31% of student participants selected the response of “in some respects yes, in some respects no” to the question of whether they considered themselves adults, while only 11% of non-students chose this response. Chinese young people in current society may answer the question “do you consider yourself an adult” differently than those surveyed in other countries because of some unique cultural characteristics in China that pertain to gender roles, the one-child policy, and the nature of university. These characteristics will be discussed later.

2.1.3 Transition Features of Emerging Adulthood

To understand emerging adulthood, we need to consider what makes this developmental period distinct from adolescence and adulthood. Based on a qualitative data from interviews (Arnett, 2004), there are five main transition features of emerging adulthood: (a) feeling in-between, which means that emerging adults do not see themselves as either adolescents or adults; (b) possibility, which means that emerging adults have the potential to steer their lives in any number of desired directions and that they have enough space to try what they want; (c)

instability in residential status, intimate relationships, work and education; (d) identity exploration, especially in the areas of work, love, and world views; and (e) focus on the self, which means that emerging adults focus on their own achievements and pursuits.

In Western cultures it is relatively easy to see each of these features separately in young peoples' lives. According to Statistics Canada, 30.8% of Canadian people in their early twenties were part of a couple (2011), down from 51.8% in 1981; 59% of people aged 20 to 24 still lived with their parents (2011); and 58% of 15-to 24-year-olds are full-time students and/or worked part-time in a temporary position (Statistics Canada, 2013). These all indicated a lifestyle that was self-focused and not yet filled with adult responsibilities.

Arnett (2004) proposed that these features can fit "only under certain conditions that have occurred only quite recently and only in some cultures," such as the US (p. 21). However, it is not clear if other countries had such situations, as most of the studies about emerging adulthood sampled only North American subjects. This reveals that there is a large gap in the literature on emerging adulthood in other cultures. Owing to specific social and ecological conditions, emerging adulthood in many cultures has become more Western in some ways and remained distinct in others, making it more complicated to explore these transition features in non-Western cultures like China.

As these transition features are resolved (for example, an individual bought a home rather than renting, or a dating relationship turned towards marriage), the individual is assumed to move out of emerging adulthood and accept adult responsibilities. To measure this process, Reifman, Arnett, and Colwell (2007) developed the Inventory of the Dimensions of Emerging Adulthood (IDEA), based on an American sample. The IDEA includes six factors: identity exploration, experimentation/possibilities, negativity/instability, other-focused, self-focused, and feeling in-between. It has been used on various populations, mainly from Western countries such as Spain (Arias & Hernandez, 2007), Turkey (Atak &

Cok, 2008), Switzerland (Baggio, Iglesias, Studer & Gmel, 2014), and Romania (Negru, Subtirica, & Opre, 2011). It has also been used on at-risk populations in the US (Lisha, et al., 2012).

The IDEA has been adapted depending on the culture in which it is being used. For example, Arias and Hernandez (2007) applied an adaptation of the IDEA to a group of Mexican and Spanish young people. Their study revealed seven factors: adulthood postponement, instability, autonomy, explorations, worries, visions of future and possibilities, and identity moratorium. Atak and Cok (2008) adapted the IDEA for use in Turkey and found that three factors (identity exploration/feeling in-between, experimentation/self-focused, and negativity/instability) with 21 items fit Turkish young people. Lisha and her collaborators (2012) evaluated the psychometric properties of the IDEA in an “at-risk” sample of continuing (alternative) high school students in the US. The results revealed three factors, which were labeled identity exploration, experimentation/possibilities, and independence. There was a good validity and high internal consistency across these factors. A shorter version of the IDEA (eight items) was developed based on a group of Swiss young men. Four factors were revealed: experimentation, negativity, identity exploration, and feeling in-between (Baggio, Iglesias, Studer & Gmel, 2014). No empirical research has been done in the Chinese culture using the IDEA, but based on what the Inventory has shown in other cultures, it is assumed that there might be a unique theoretical structure of the IDEA for Chinese population.

2.1.4 Are Emerging Adulthood and Transition Features Universal?

Arnett’s theory is backed by strong evidence, but has been challenged by a number of researchers. One key criticism is that the theory of emerging adulthood does not apply to all young people who are between their late teens and early twenties (Bynner, 2005; Heinz, 2009). For instance, few individuals from developing countries experience emerging

adulthood. Supporting this assumption, Shlegel and Berry (1991) studied adolescents from traditional non-Western cultures, and found that most participants married before turning 20, at which age local people identified them as adults.

Arnett (2006), however, suggested that emerging adulthood was actually a universal developmental period and proposed that it had become an international phenomenon in the course of the 21st century. There are strong supports for this assertion: demographic features of emerging adulthood, including the rising median ages of marriage and parenthood, have become more prominent in some developing countries, as has increased participation in higher education (Douglass, 2007; US Bureau of the Census, 2011). For example, since 1981 in China, the legal age for marriage has been 20 for women and 22 for men, according to China's Marriage Law of 1980 (Tien, 1983). However, by 2005 in China, the average age of marriage was 25.2 for men and 23.3 for women (United Nations, 2005). Five years later, in Shanghai, the average age of marriage was 32.45 for men and 29.77 for women (Haines, 2011). Empirical research has also been conducted in developing countries such as Argentina (Facio & Micocci, 2003), China (Nelson, Badger & Wu, 2004; Badger, Nelson, & Barry, 2006; Nelson & Chen, 2007; Pang, 2011; Nelson, Duan, Padilla-Walker, & Luster, 2012), Romania (Nelson, 2009) and India (Seiter & Nelson, 2011) with results showing that young people in these countries have experienced emerging adulthood.

2.1.4.1 Across Social Classes

When emerging adulthood was first established as an area of study, researchers could not agree whether it is common to all social classes. For instance, Hendry and Klope (2007) argued that people from the working and lower social classes did not experience emerging adulthood. Specifically, Hendry and Klope (2007) indicated that emerging adulthood only applied to middle-class young people who went to university and had financial support during their late teens to early twenties. However, Arnett and Tanner (2011) disagreed with

Hendry and Klope and argued that although significant differences in life prospects existed among varied social classes, “there is enough similarity across social classes to merit the application of emerging adulthood to the age group as a whole” (p. 33).

To test whether or not emerging adulthood applied to all social classes, Konstam (2007) divided emerging adults into two cohorts-affluent and less affluent. Those from the affluent cohort usually experienced their late teens and early-to-mid-twenties as a time of exploring identity and possibilities. Correspondingly, the timing for marriage and parenthood was usually delayed and these young people had more opportunities to go to university. Most viewed themselves as not having reached adulthood, most likely because they perceived psychological development rather than discrete events as the criteria of being adults. As well, they experienced increased exploration rather than commitment in regards to their careers.

Konstam (2007) found that people in the less affluent cohort were more likely to encounter economic constraints and have limited possibilities for self-exploration. They usually struggled to enter an unpromising and unwelcoming labor market. Mortimer and Larson (2002) indicated that those with more limited economic resources had fewer career choices. Economic constraints determined people’s decisions, limiting experimental behavior and resulting in their making more “conservative” choices that would lead them transition into adulthood at an earlier age.

However, people in this cohort still did not perceive themselves as adults because they had limited financial support, and were less likely to settle down. For example, a research studied on a group of young people aged 18 to 25, and found that those who had only a high school diploma or less education, did not perceive themselves as adults (S. Hamilton & M. Hamilton, 2006). On average, the people in their study earned 30% less than people with university degrees. Even though these people worked full time, they did not see themselves as adults because they had less education and therefore earned less money. Earning a living

wage was a measure of adulthood, one that they could not achieve. They were still feeling in-between or as if they have not reached adulthood. They felt the same way as the subjects from the affluent cohort in the other studies, but for different, yet no less valid, reasons.

2.1.4.2 Across Students and Non-students

As one of the most important indicators of social class, educational status plays a significant role in how emerging adulthood was perceived. Previous research revealed that both student and non-student populations experience emerging adulthood. Arnett (1994) argued that the emerging adulthood theory drew great attention to young people who did not attend college or university after secondary school. Arnett (1997, 2004) studied young people from diverse social classes and indicated that emerging adulthood also existed among non-student populations.

Whether or not individuals attended college, there are distinct characteristics that are common to all emerging adults. For example, Negru, Subtirica, and Opre (2010) agreed that emerging adulthood existed among Romanian young people but that students and employed emerging adults had different features. Negru, Subtirica, and Opre (2010) determined that educational systems were protective systems, which usually prolonged individual exploration and self-focus. Other researchers have found that the more education that emerging adults have, the more likely they are to delay parenthood (Glick, Ruf, White, & Goldscheider, 2006). Seiter and Nelson (2010) compared the experience of emerging adulthood between Indian college students and non-students aged 18 to 26. They found that non-students had much less optimism than students, due to the caste system and extreme educational inequities.

Although some of the evidence about emerging adults comes from East Asian samples, China offers a particularly unique cultural context in which certain economic advances may make young people more likely to experience emerging adulthood. On the other hand, China also has a highly traditional culture which may actually prevent young people from

experiencing emerging adulthood. In the next section, I will review the cultural components of China (e.g., traditional values, economic growth, and demographic characteristics) that make the study of emerging adulthood both particularly important and difficult.

2.2 Chinese Culture as a Setting for Emerging Adulthood

Contemporary Chinese society combines traditional and modern elements. On the one hand, traditional beliefs and values are predominant in Chinese society even today. On the other hand, cultural values and beliefs have been influenced by Western culture, especially among young people, due to economic development and globalization.

2.2.1 Confucian Concepts

Nelson and Chen (2007) summarized Chinese culture as relatively homogenous and noted that “Confucian collectivism commonly served as a predominant ideological guideline for social activities” (p.86). Confucianism is a philosophical and ethical system developed from the teachings of the Chinese philosopher, Confucius (Yang & Tamney, 2011). It stresses the importance of education, the moral development of individuals, and a government based on morality rather than coercion (Rainey, 2010). Rainey (2010) summarized several important Confucian concepts including filial piety, harmony, etiquette or ritual, kindness, empathy/compassion, loyalty/dutifulness, and honesty/sincerity. In addition, family and relationships with others have always played an important role in an individual’s social and cultural life in China. These aspects of Chinese culture seem to contradict the focus on self that characterizes the Western concept of emerging adulthood.

Filial piety is defined as “respect and reverence for one’s parents and later extends to one’s teacher and elders” (Rainey, 2010, p. 24). Zhang and Liu (2012) also noted that a Chinese person should venerate his parents, take care of his own body as if it belonged to his parents, and avoid death before his parents. The virtue of filial piety is based on the fact that parents give children life, and raise the children, and in return, the children, should repay that

debt once grown up. Moreover, Chinese parents have traditionally been given considerable power over their children's career development (Chang, 2007). Nelson and Chen (2007) argued that as a result, "identity exploration" may not be considered a major developmental task for a large portion of Chinese young people. For example, until the early 21st century, only a small number of young people were able to enter university after high school. Their majors were determined based on the results of their entrance examinations. Now more students are able to attend university, but in addition to examination results, parents also play a role in determining what their children will study. Meanwhile, non-students are pressured by their parents to explore career development before they really know what they want to do. Thus, most Chinese young people, without much exploration, choose the career path decided by their parents, again missing out on an important component of emerging adulthood. For those who do not go to school, parents are still highly influential because of the belief that it is the responsibility of a mature adult to take care of significant others, such as parents (Nelson, Badger, & Wu, 2004). These non-students are likely to transition into adulthood more quickly.

Harmony has always been one of the central ideals of Confucianism. It is not only embedded in beliefs and attitudes but is also applied in daily life. Harmony should include the following elements: having a happy family and a nice neighborhood, denying one's self, and restraining one's self for long-term goals (Zhang & Liu, 2012). These elements means to suppress one's own desires and aspirations in terms of one's personal life. Interdependence has always been emphasized in Confucian philosophy and it influences not only the family but also the neighborhood and the whole society. Independence is not encouraged by Confucian culture; rather, Confucian culture requires each individual to obey the social structure in order to achieve harmonious order. Given the importance of harmony, it seems that it would be exponentially more difficult for Chinese young people to engage in identity

exploration, especially when that exploration is contrary to their parents' desire.

Filial piety and harmony were selected as the most relevant cultural considerations in the conceptualization of my research. Because of filial piety and harmony, Chinese young people are more likely to behave interdependently and be other-focused. From the perspective of emerging adulthood and transition features, this means that perhaps they are less likely to experience identity exploration and self-focus. However, even with this belief system Chinese young people may move through a period of emerging adulthood characterized by feelings of in-between, possibility, and instability. These feelings have likely emerged from recent economic shifts in China.

2.2.2 Economic Development

Changes in the economy have resulted in an increase in the upper middle-class, making China more relevant to emerging adulthood literature. The Chinese economy grew rapidly between 1978 and 2006, and the GDP increased at an average rate of 9.8% per year after the inflation adjustment (State Statistical Bureau, 2006). However, the creation of wealth on a dramatic scale has resulted in China becoming a very unequal society. Before 1978, when the economic revolution started, the gap between the rich and the poor was very small. Gini Coefficient ranges from 0 to 1, where 0 represents perfect equality, and 1 means one individual controls 100% of the income. In 2005, China's Gini Coefficient was 0.425. It increased to 0.438 in 2010, according to data from the World Bank (Zhang, 2012). This inequality exists not only between the urban and rural populations, but also between the educated and non-educated populations.

Along with economic development in China, the middle class which was seen as new, has become more prominent. Xin (2003) pointed out that people in the middle class have received a certain level of education, possess some expertise and occupational skills, and have a certain amount of disposable income. As in other countries, most people in the

Chinese middle class acquire more resources and have more opportunities to explore because the economy has improved. As I explained earlier in my dissertation, it is obvious that those in the middle class experienced emerging adulthood. Thus, the emergence of such a class in China suggests that it is an important concept to research.

Members of the middle class can now “afford” to take time before assuming their adult roles. They have also distinguished themselves from members of the lower class in terms of lifestyle. Their perceptions of the transition features that define emerging adulthood also differ from those of their cohorts in the lower class. Nelson and Chen (2007) used Arnett’s theory to look at Chinese emerging adults in the middle class. They found that these young people perceived themselves as neither in adolescence nor adulthood, which was comparable to findings about people in similar classes in Western cultures. My study appeared to be the first to look at emerging adulthood in non-students in China. However, I found a comparison study across social classes in India which showed that 31% of students and 11% of non-students indicated feeling in-between (Seiter & Nelson, 2011). From this, I developed a hypothesis that feeling in-between should exist in both student and non-student samples in China, albeit in different proportions.

With respect to “possibility,” current Chinese young people live an optimistic life, especially in their twenties thinking about their future and the economic development of their country. The youth of today usually have high expectations for personal and material consumption in China (Jacka, Kipnis & Sargeson, 2013). In terms of social class, individuals from the lower class are usually from families with financial limited financial resources as a result they may have lower expectations for the future. However, this passive situation is also their chance to strengthen themselves and adjust to the vulnerable environment. There is also evidence that people from a lower socioeconomic background are more optimistic. Arnett (2004) found that the lower the emerging adults’ social class background, the higher their

optimism that their life would be better than that of their parents. A similar pattern may exist in China.

Even though the economy has increased rapidly in China, Chinese young people, like their Western counterparts, experience instability in terms of housing, romantic relationships, and educational status. The past years have witnessed a frenzied expansion of Chinese universities. Many school, however, have just focused on major and curriculum expansion, but neglected the actual employment needs. Due to this blind expansion, university graduates are difficult to find jobs that reflect what they studied in their undergraduate programs (Lian, 2013). Those who are not able to enter university are also unstable in terms of housing or job situations. Most were born in rural areas and moved to cities to find work. In 2011, a total of 252.78 million migrant workers left their hometowns and worked in cities (Sheng, 2012). Due to limited resources and a lack of support, they usually experienced instability in their places of residence and employment for a long time,

In my study, I have chosen to focus on three demographic characteristics (gender, education, and presence of siblings) that seem likely to influence whether or not young people would relate to the five transition features. I chose these characteristics because although they are supposed to give rise to emerging adulthood, they may counterintuitively prevent opportunities for exploration in China.

2.2.3 Gender

Gender identity roles in China are both similar to and different from those in Western societies. Research indicated that more young females than males in China perceived themselves as adults (Johnson, Berg, Sirotzki, 2007). Research also showed that females were more mature than males in terms of the career development (Steitmatter, 1997). The unique characteristics of China's economic development and reforms exacerbate the gender differences.

In Confucian society (e.g., China), girls were expected to become adults earlier than boys; even in contemporary China, influenced by modern culture, this notion holds true. At an early age, girls in traditional cultures are socialized to become mothers by participating in household chores and taking care of younger siblings. If they graduate from university, girls are still required to work as well as take care of their home. Economic reforms in China accelerated the reform of the market-oriented employment system, which leads to gender inequality. In the current Chinese employment market, women usually have lower income levels and lower status occupations (Liu, 2008). They also experience discrimination in hiring and early retirement is also forced (Liu, 2008). Impacted by these social expectations and practices, which are unique to China, young Chinese males are likely to feel more in-between than females.

In addition, males and females progress differently through the stages of identity in specific domains. Researchers began to examine the role that gender played in identity development in specific domains as far back as the 1960s. The results showed that males focused more on occupational identity, while females were typically more concerned with interpersonal relationships (Douvan & Adelson, 1966). In Confucian cultures, females are more restricted by ideology about filial piety and harmony. Females are expected to take more family responsibility and behave interdependently. They have to sacrifice their career aspirations for the goals of marriage and motherhood (Seiter & Nelson, 2011). Previous research also indicated that males were prepared earlier for their future careers (Verma & Saraswathi, 2002; Ferriman, Lubinski, Benbow, 2009). It was hypothesized that compared with females, young Chinese males may have higher levels of both exploration and commitment in the work domain.

2.2.4 Educational Status

In North America, the university experience usually provides the opportunity to explore the

sense of self. University students can change their occupational plans and majors in school. At the same time, university also provides an isolated environment in which students might delay their career decisions. Thus, compared with non-students, university students tend to perceive themselves as not fully adult. Research results have also revealed that students are more likely to have feelings of in-between, while non-students tend to perceive themselves as adults (Johnson, Berg, Sirotzki, 2007; Arnett, 2000).

Young people in Asian countries may have similar perceptions. For example, Seiter and Nelson (2011) studied college students and non-students in India and found that more non-students than students were likely to feel that they had achieved adulthood. Although the economy is developing rapidly in contemporary China, the educational system is, to some extent, still restricted. For example, due to limited teaching resources, not every student can change majors (Ji & Ma, 2013). Similar to what occurs in Indian culture and in that country's educational system, Chinese university students have fewer opportunities to explore their career development, but can still spend a couple of years making career decisions. Thus, it was hypothesized that more Chinese university students than non-students perceive themselves to be in emerging adulthood.

Chinese university students have a higher level of foreclosed self-identity compared with non-students. Influenced by Confucian values such as interdependence and family harmony, Chinese parents usually have a high level of authority to decide their children's career development (Chang, 2007). Because students lack financial independence, they are more likely to be influenced by their parents' authority. In addition, students and non-students have different timelines by which to develop their ego identity in the work domain. Based on the Confucian Analects, a man should be independent by the age of 30 (Legge, 2009). Non-students start to explore their career choices after high school graduation, while students generally do not start this task until they graduate from university. Thus, students tend to

make final decisions about career choices (higher level of commitment) without enough exploration (lower level of exploration) to catch up to their non-student counterparts.

2.2.5 Presence of Siblings

As stated earlier, presence of siblings is an important construct in China, one that influences a person's perception about adulthood and experiences of emerging adulthood. The one-child policy was a unique phenomenon in China. Since 1979, the government has mandated that each married couple can have only one child. However, some families still have more than one child because this policy was implemented differently across varied population, provinces and areas. For example, the parents who were only one child were able to have the second child; the parents who were from rural places and only had one girl are able to have the second child (The National People's Congress of the People's Republic of China, 2003).

Liu's research (2014) revealed that university students with at least one sibling made more mature and clearer choices in the career domain compared with those without siblings. Similar results were also found by a study that looked at adolescents from rural Western China (Zheng, Hou, Liu, 2014); participants with at least one sibling reported higher scores on psychological adaptation and were more likely to be mature. Compared with those who have at least one sibling, individuals without siblings are more likely to perceive themselves as emerging adults.

Individuals without siblings may have more time and opportunities to explore their identities than individuals with siblings, whose family resources are more limited. Individuals with siblings are more likely to have foreclosed self-identities. Fang, Jing and Wang (2010) found that individuals without siblings usually came from wealthier families because there are fewer dependents on whom to spend resources. Parents can provide an only child with more supports, which results in more time for identity exploration, and therefore, a better ability to make career decisions. In other words, individuals without siblings may have a

higher level of identity exploration compared to individuals with siblings.

To summarize, gender, educational status, and presence of siblings are three unique and significant constructs for forming adulthood in China. Specifically, young males, students, and individuals without siblings are less likely to perceive themselves as adults but more likely than their counterparts to feel that they are in-between. Young males, students and individuals with siblings have a higher level of commitment; males, non-students and individuals without siblings have a higher level of exploration. *The first purpose of this study was to explore whether young people aged 18-25 in mainland China view themselves as having achieved adulthood and whether this view depends on various demographic features. The second purpose was to explore the transition features of emerging adulthood while taking into consideration the demographic variables.*

2.3 Psychosocial Functioning during Emerging Adulthood

2.3.1 Adaptive Functioning

Emerging adulthood is a full and intense period of life for many people. Numerous studies have shown that most people are optimistic during this period. Emerging adults have been shown to be highly optimistic about ultimately achieving their goals (Arnett, 2000; Arnett, 2005; Lapsley & Hill, 2010). Arnett (2007) also stated that emerging adults had a high level of satisfaction with their progress toward self-sufficiency, and enjoyed their self-focused development and freedom from role obligations and restraints. All of this results in high levels of well-being.

Numerous studies have shown that well-being improved during the course of emerging adulthood. For instance, an increased level of well-being was found in the longitudinal Monitoring the Futures studies (Schulenberg & Zarrett, 2006; Johnston, O'Malley, Bachman, & Schulenberg, 2004). Galambos, Baker, and Krahn (2006) also found that depressive symptoms declined and self-esteem increased in a longitudinal study among Canadian

emerging adults. However, findings on the psychosocial functioning of emerging adulthood seemed to be mixed or negative. For example, while some research indicated that experimentation and exploration led to negative outcomes (Arnett, 2004), other research showed positive effects (Twenge, 2006).

2.3.2 Negative Functioning

The phrase “storm and stress” is an example of the negative outcomes. In 1904, in an academic article, G. Stanly Hall used the term “storm and stress” to describe adolescent development. It was considered quite normal for individuals to have extremes of behaviors and emotions during adolescence. About one-fourth of adolescents have experienced significant mental health problems (Kaltiala-Heino, Marttunen, Rantanen, Rimpeia, 2003). This “storm and stress” was often attributed to adolescents having to resolve an identity crisis (Erikson, 1950, 1968) by evaluating their abilities, interests, and childhood influences. Arnett (1994, 2000) extended this idea to emerging adulthood. He indicated that the first tentative step toward an adult identity take place in adolescence, but become more prominent and serious in emerging adulthood.

In contemporary Western social media, the term “quarter-life crisis” is used to describe young people who are no longer adolescents but have not yet reached adulthood. Robbins and Wilner (2001) described emerging adults as experiencing an “overwhelming sense of helplessness and cluelessness, of indecision and apprehension” (p.4) and trying to find a place in the adult world. In his (2006) book, “Generation Me: Why Today’s Young Americans are More Confident, Assertive, and Entitled—and More Miserable than Ever Before,” Twenge said that current young Americans were described as having more mental health problems than in the past. Research has found that emerging adulthood is the peak period for much of the misconduct discouraged by Western societies: illegal drug use, risky sexual behavior, risky driving behavior, antisocial behavior, binge drinking, and so on (Brindis &

Irwin, 2006). Arnett (2000) stated that the prevalence of binge drinking peaks in young people aged 18-25 years old. He also indicated that drug use is the highest during emerging adulthood (Arnett, 2005). Schulenberg and Zarrett (2006) found that the incidence of psychopathology and problem behaviors increased during emerging adulthood. Park, Mulye, Adams, Brindis, and Irwin (2006) indicated that the negative outcomes—including mortality, morbidity, risk behaviors, and health care access and utilization — peak during the young adult years. Tanner and his colleagues (2007) studied a group of young people between the ages of 21 and 30 and found that depression and post-traumatic stress disorders were at a higher level than such conditions in the general population.

Prominent issues in psychosocial functioning in Asian populations are quite different from those in Western societies (Nelson, Badger, & Wu, 2004). There is little research about mental health in Asian emerging adults. However, two profiles can be summarized to describe the current psychosocial functioning among young people in Asia: a lower rate of risk behavior problems and a higher rate of internal emotional problems (Fulign, 2007; Chung & Mallery, 1999).

The Confucian doctrine emphasizes control and obligation. A study in the US found that young adults in Asian immigrants' families felt a stronger sense of family obligation and reported less financial instability and less confusion than youth from North America (Fuligni, 2007). Due to stricter family restrictions, certain behaviors (e.g., drug use) are prohibited in Asian American families due to huge punishment for breaking those restrictions. Little research has been conducted in China. However, due to the shared family values, it can be hypothesized that there may be a lower rate of risk behaviors during emerging adulthood in China compared with their counterparts in the US.

There is a higher prevalence of internalized emotional problems such as shame, stress, and burnout in academic learning and in the development of careers and intimate

relationships among Chinese people. Most Chinese people aged 17 to 19 years old need to take a national exam towards the end of high school. After the exam, they will be selected by universities based on their final test scores. After being accepted by a particular university, it is not easy to transfer or change majors (Ji & Ma, 2013 April). A large number of students may suffer from stress and burnout during this process. Students also feel ashamed if their scores are low compared to their peers, or if their scores are too low to secure acceptance into their dream schools. This phenomenon of social comparison is quite common in both school and work settings (Chung & Mallery, 1999). To tap into the psychosocial functioning of Chinese young people, I include burnout in the present study.

2.3.2.1 Burnout

Maslach (1981) defined burnout as a syndrome of emotional exhaustion and cynicism that occurred among individuals who performed “people work” of some kind (e.g., health care, education, and social work). Recently, the concept of burnout has been expanded to include all types of work as well as a condition experienced by students. Students’ academic burnout exists because their core activities could be considered as a kind of work (Schaufeli et al., 2002; Tuominen-Soini, Salmela-Aro & Niemivirta., 2008; Kiuru, et al, 2008; Salmela-Aro et al., 2009).

Burnout consists of three conceptually distinct but empirically related dimensions: exhaustion due to work/study demands, cynical and detached attitude toward one’s work/studies, and feelings of incompetence as an employer/student (Maslach, C., Schaufeli, W. B., Leiter, M. P., 2001; Schaufeli, et al., 2002; Salmela-Aro et al., 2009). Characteristics associated with emotional exhaustion include feeling tired and listless as well as restless and nervous (Farber, 1991). Characteristics associated with cynicism include feeling cold, distant, and angry (Maslach & Leiter, 1997). People who feel incompetent often experience general unhappiness and dissatisfaction with themselves and their effectiveness (Maslach et al.,

2001).

Although full of possibilities, emerging adulthood is not always an enjoyable experience. The difficulties in dealing with some major developmental tasks (e.g., transition into adulthood, identity exploration) and some life problems (e.g., instability and fluctuation in residence), are likely to result in disappointment. Feeling in-between means that individuals are still in the transition period, which leads to a high level of stress. Bell and Lee (2008) found that individuals experienced the lowest stress if they were living independently, not students, and married. Ego Identity was defined with a single bipolar dimension, ranging from identity synthesis to identity confusion (Erikson, 1968). Identity synthesis refers to “a reworking of childhood identification into a larger and self-determined set of ideals, values, and goals” (Luyckx, Duriez, Klimastr, & Witte, 2010, p 339); identity confusion refers to “an inability to develop a workable set of goals and commitment on which to base an adult identity” (Luyckx, Duriez, Klimastr, & Witte, 2010, p 339). According to Arnett’s research (2000), the changes in current society result in the delayed process of identity formation among young people. Most young people experiencing identity confusion during emerging adulthood are likely to have negative psychosocial functioning outcomes (Schwartz, Zamboanga, Luyckx, Meca, & Ritchie, 2013) such as burnout (Luyckx, Duriez, Klimastr, & Witte, 2010). In addition, prior research has documented a link between instability and emotional exhaustion and cynicism (Luyckx, Witte, & Goossens, 2011). A longitudinal study also found that the higher the initial level of social handicapping, the higher the level of work burnout (Salmela-Aro, Tolvanen, & Nurmi, 2011).

The profile of psychosocial functioning is likely to be different in Chinese and Western cultures. For example, burnout resulted from work or study stress is a more prominent psychosocial outcome among Chinese young people. In addition, little research has been done to examine the dimensions of the transition features of emerging adulthood and burnout.

Thus, *the third purpose of this study was to examine the relationship between the dimensions of transition features of emerging adulthood and burnout in mainland China.*

2.4 Ego Identity Development

Which groups of emerging adults are well functioning? What are the indicators leading to healthy developmental paths? One explanatory variable may be ego identity development. Erikson (1968) emphasized identity in his psychosocial theory, which was the root of many ego identity theories and much research. Erikson indicated that identity and role confusion were the central crises of the adolescent stage of life, and that these confusions were going to be dealt with during the “young adulthood” period. Although this period is originally assumed to be adolescence, the delay of adulthood now suggests that resolving an identity crisis may be a large part of emerging adulthood, at least in Western countries. According to Erikson’s theory, ego identity is classified as identity synthesis and confusion. Identity synthesis represents a coherent and internally consistent sense of self over time and across situations. Confusion represents a fragmented or piecemeal sense of self that do not support self-directed decision making.

To examine these ideas empirically, Marcia (1993) developed the Identity Status Model. He proposed an orthogonal dimension of exploration and commitment in order to describe the decision-making processes which were part of identity development. Marcia crossed these two dimensions and created four identity status categories: *achievement*, which represents commitments enacted following a series of exploration; *moratorium*, which represents a state of active exploration with few commitments; *foreclosure*, which represents a set of commitments enacted without prior exploration; and *diffusion*, which represents an absence of commitments coupled with a lack of interest in exploration (see **Fig. 1**).

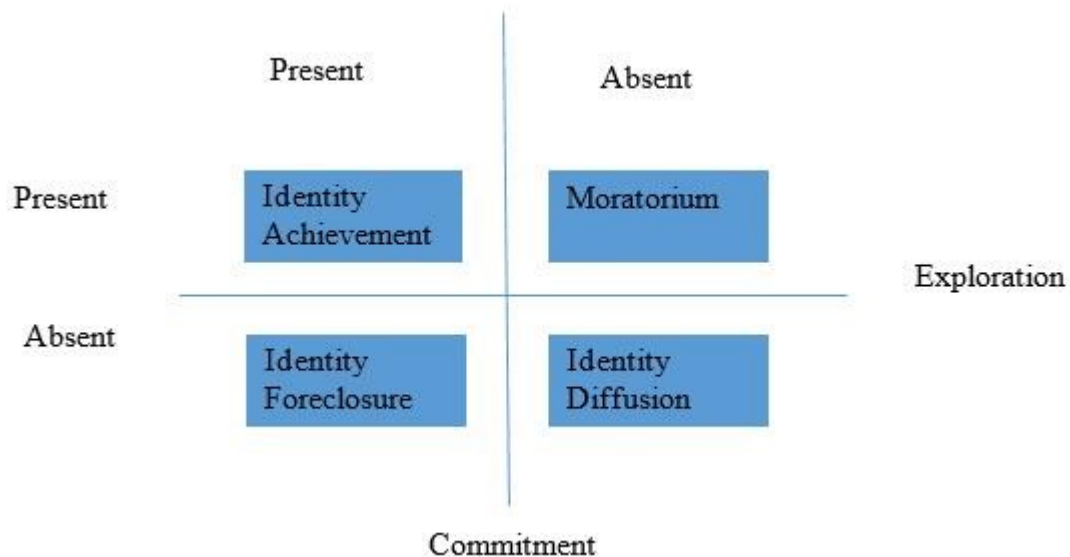


Figure 1 Ego Identity Status Model (Marcia, 1993).

Focusing on emerging adults, Luyckx, Goossens, Soenens, and Beyer (2006) developed the dual-cycle model (see **Fig. 2**), which unpacked identity exploration into two separate processes (exploration in breadth and exploration in depth) and commitment into two separate processes (commitment-making and identification with commitment). Luyckx et al. (2008) expanded this model using data from two late adolescent samples. The fifth dimension is labeled “ruminative exploration,” as one of the components of exploration. These five dimensions are combined to subsume two complementary identity cycles. The first cycle (identity formation) includes identity exploration in breadth and in the commitment-making processes by which individuals explore alternatives and enact commitments. The second identity cycle (identity evaluation) includes exploration in depth and identification with commitment processes by which individuals re-evaluate their identity and assess the degree of certainty about their choices (Luyckx, Schwartz, Berzonsky, Soenens, Vansteenkiste, Smits, & Goossens, 2008).

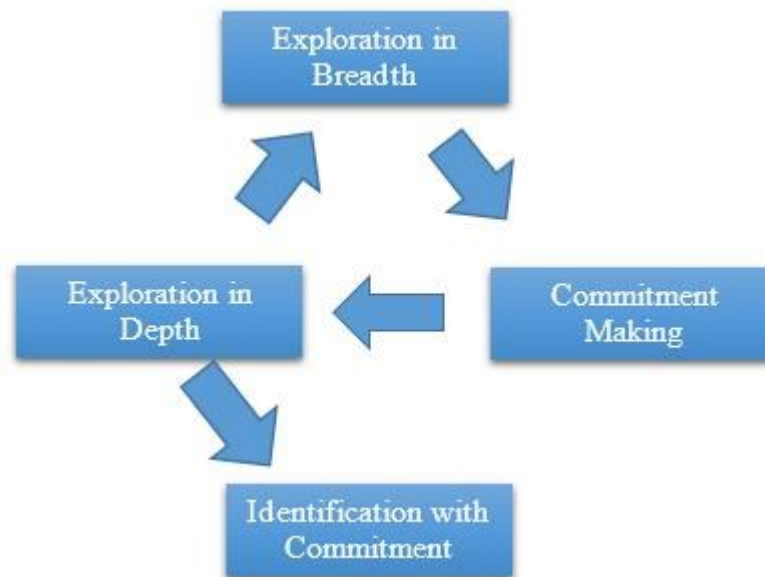


Figure 2 Identity process dual-cycle model (Luyckx, Goosens, Soenens, & Beyer, 2006).

Empirical research on identity status has often taken a person-centered approach in order to tease out different ways that groups of young people resolve their identity crises. Bergman and Magnusson (1997) defined “person-centered analysis” as an approach that identifies key patterns of values across variables. The person is the unit of analysis. The purpose of a person-centered approach is to group individuals into different categories. Each category contains individuals who are similar to each other and different from individuals in other categories (Muthen & Muthen, 2000).

A person-centered focus is useful in identity research, where data often include heterogeneous groups of individuals. For example, in a study on a sample of Italian college and university students ages 18 to 30, six identity statuses were derived: achievement (high on all except for a low score on ruminative exploration), foreclosure (high on commitment processes and low on all exploration processes), moratorium (moderate on commitment processes and high on all exploration processes), diffused diffusion (low on commitment processes and high on ruminative exploration processes), carefree diffusion (low on all identity processes), and undifferentiated (moderate on all processes) (Crocetti, Luyckx, Scrignaro, & Sica, 2011). Luyckx, Duriez, Klimstra, and Witte (2010) revealed five identity

statuses (i.e., “achievement,” “foreclosure,” “moratorium,” “carefree diffusion,” and “diffused diffusion”) in a Dutch-speaking Belgian sample of people aged 21 to 40 who were working as employers. Ego identity has been consigned to different domains. In a study on identity development among German emerging adults, six ego identity statuses were revealed in relational (i.e., “achievement,” “foreclosure,” “moratorium,” “carefree diffusion,” “troubled diffusion” and “undifferentiated”) and professional (i.e., “achievement,” “foreclosure,” “moratorium,” “carefree diffusion,” “searching moratorium” and “undifferentiated”) domains (Luyckx, Seiffge-krenke, Schwartz, Crocetti, & Klimstra, 2014).

2.4.1 Cultural Consideration

Across cultures, compared with previous generations, the youth of today take longer to reach key milestones (e.g. marriage, career, parenthood). Arnett (2004) argued that in Western cultures, identity exploration is the most central feature of emerging adulthood because it provides the greatest opportunity to delve into possibilities for love and work. Echoing, Arnett and Konstant (2007) pointed out that “A notable feature of emerging adulthood is the opportunity for extensive identity exploration in the love and work domains” (p. 29). Arnett and Tanner (2006) also believed that young people experience the most frequent occurrences of significant life events, such as searching for jobs. In Western society, the normal path of identity development is to explore and seek out a personal sense of identity (e.g., Schwartz, Adamson, Ferrer-Wreder, Dillon, Berman, 2006).

However, when it comes to certain aspects of emerging adults in non-Western cultures, the basic profile of identity development is unclear. The Western conception of how identity is conceived might not apply in Asian countries (Berman, You, Schwartz, Teo, Mochizuki, 2011). People who are influenced by the Confucian doctrine might have a unique profile of identity development. Triandis (1995) argued that individuals in Chinese society are not encouraged to develop individual identities due to cultural values of collectivism. Zhang and

Liu (2012) also pointed out that endurance, which means restraining the self for long-term goals, is one of the core elements of Confucian teaching. Based on these statements, Nelson and Chen (2007) indicated that identity exploration in work and love are not considered as major developmental tasks for young people in China. Lewis (2003) found that subjects in an Asian-American urban college sample were more likely to be foreclosed or diffused compared to Caucasian Americans. In addition, even though economic development has rapidly increased in China, most emerging adults, especially from lower social classes, still lack opportunities to explore careers. Compared to their Western counterparts, Chinese people are more likely to commit to certain goals without sufficient exploration.

The educational system in China also influences the profile of ego identity development. As previously stated, it is quite difficult for Chinese college students to transfer schools or change majors once they are accepted by a certain university. Non-students in China usually have few opportunities to consider their career development. They have to find a job immediately to fulfill their daily living needs (Nelson & Chen, 2007). Thus, it is suggested that Chinese young people are more prone to commit in the area of work without sufficient exploration. These factors also make it more likely that more Chinese young people experience foreclosure instead of moratorium.

To sum up, identity development is one of the most important tasks during emerging adulthood in China. In Western cultures, exploration is the most common task. China's unique pattern, as pointed out earlier, reflects its culture. Thus, *the forth purpose of this research was to explore the demographic and profile characteristics of ego identity development in the work domain in mainland China.*

2.4.2 Ego Identity Status and Psychosocial Functioning

Commitment, one developmental status of ego identity, is linked with positive psychological adjustment. Schwartz, Zambanga, Luyckx, Meca, and Ritchie (2013) conducted a review of

the concomitants and consequences of identity in adolescence and emerging adulthood, including articles published since 2000 on four primary health domains: well-being, distress/internalizing, externalizing/health risks and health-promoting behaviors, and outcomes in individuals with chronic diseases. They found that both achievement and foreclosure were linked with relatively high levels of well-being, lower levels of internalizing problems, fewer health risk behaviors, and more health-promoting behaviors. Croetti, Luyckx, Scignaro, and Sica (2011) found similar patterns: individuals in achievement and foreclosure identity status displayed a more adjusted profile than those with the other statuses. Luyckx, Duriez, Klimstra, and Witte (2010) found that individuals in identity achievement status showed the most optimal profile — low burnout and high engagement — in the school study. A conclusion might be drawn that a higher level of self-understanding and commitment is predictive of positive psychological functioning.

The opposite is true for the diffusion identity status. Luyckx, Klimstra, Schwartz, and Durize (2013) revealed that individuals in the troubled diffusion trajectory fared worst in terms of self-esteem, depression, and community integration over time. Schwartz et al. (2011) also pointed out that externalizing and health risk behaviors were the “dark side” of carefree diffusion.

More complex results are found in moratorium status. Porfeli, Lee, Vondracek, and Weingold (2011) found that university students (mean age = 21.7) with searching moratorium status in the career domain reported elevated levels of stress, symptoms of anxiety and depression, and negative work experience on the Vocational Identity Status Assessment (Porfeli, et al., 2011). However, Crocetti, Rubini, Luyckx, and Meeus (2008) studied Dutch adolescents (mean age = 14.2) and found that those with classical moratorium status scored significantly higher than their search moratorium counterparts on symptoms of anxiety and depression measured by the Utrecht-Management of Identity Commitment Scale.

In summary, different types of ego identity developmental status result in diverse psychosocial outcomes. As shown in the literature, individuals who make a commitment either in achievement or foreclosure status tend to have a high level of well-being. Those in diffusion status who neither explore nor make commitment tend to have a low level of well-being. However, previous research revealed that controversial psychosocial outcomes resulted from moratorium status across different samples and measurements. Thus, it is necessary to use a unified sample and measurement to examine the role that each type of ego identity developmental status plays in psychosocial outcomes.

2.4.3 The Moderating Role of Ego Identity Status

During emerging adulthood, individuals with similar transition situations still experience different psychosocial problems including substance abuse, antisocial behavior, and depressive affects. The Identity Capital Model can be used to explain these differences. As discussed in the previous section, individuals who are in different identity development statuses experience diverse psychosocial functioning during the transition period.

2.4.3.1 Socio-developmental Identity Capital Model.

The Identity Capital Model was developed to create an understanding of how, from a social-psychological perspective, individuals capture and nurture the personal resources needed to cope with the transition challenges in both post-secondary school and work settings in the contemporary society (Cote, 1996, 1997). This model assumed that individuals can compensate for some of the negative aspects (e.g., instability) by investing in identity-related work as they transitioned into another stage. This would allow them to acquire the necessary identity capital (Cote, 2002). Identity-related work in the individualization process needs to develop an individual life project and resolve adult identity issues by capturing “identity capital” resources. Identity capital resources are internal resources such as an internal locus of control, self-moderation, self-esteem, a sense of purpose in life, and social perspective

(Cote, 1997). Certain internal resources are postulated to enable a mastery of external structures (Cote & Schwartz, 2002). Thus, individuals with capital acquisition are better able to pursue opportunities of self-improvement and optimal well-being in various areas of their lives (Cote & Levine, 2002).

Ego identity is an integrated part of the Identity Capital Model (Cote & Schwartz, 2002). The youth of today experience instability and uncertainty when they transition from school to work and from single status to establishing intimate relationships. Individuals in the identity achievement status are more likely to attain the sense of maturity and adulthood by which individuals capture resources to cope with the unpredictability and lack of control during the transition period. They know where to go and where to get supports. They are also capable of handling the transition issues by using these resources. It is likely for them to have more opportunities to fulfill the needs of self-actualization. However, for those who are in the identity diffusion status, the transition instability and uncertainty create a mismatch between individuals' personal resources and surrounding contextual characteristics. The mismatch is more likely to lead to a sense of floundering or drifting, affecting an individual's mental health and well-being in multiple life domains (Luyckx, Witte, Goossens, 2011; Schulenberg et al., 2004). To sum up, the ego identity development status moderates the association between experienced transition features and psychosocial functioning in emerging adults.

Making-commitment appears to play a protective role against negative psychological functioning such as anxiety and depressive symptoms. Schwartz et al. (2010) indicated that identity consolidation protected against risky behaviors such as taking dangerous drugs, having sex with strangers, and riding with drunk drivers. Skorikov and Vondracek (2007) also found that ego identity played a protective role when it came to some misconduct (e.g., alcohol and drug use, minor delinquency). Luyckx, Witte, and Goossens (2011) revealed that the sense of adulthood moderated the positive relationship between instability and

self-esteem as well as the negative relationship between instability and depressive symptoms.

Along with the developmental transition, ego identity status plays an important role in psychosocial functioning. There is ample evidence that identity status has the potential to inhibit negative psychological functioning. However, there have been few studies on burnout experienced by young people in the transition period, both in Western societies and in mainland China. It is still unclear whether or not ego identity status in the work domain provides the same type of protective effect against burnout? *The fifth purpose of this research was to explore the moderating role that ego identity status (the profile of ego identity development) in the work domain plays in the relationship between dimensions of emerging adulthood's transition features and burnout in mainland China.*

2.5 Research Questions

The overarching purpose of this research is to examine how the moderating role of ego identity status affects the association between the transition features of emerging adulthood and negative psychosocial functioning in mainland China. Consideration will be given to the demographic variables of gender, educational status and presence of siblings. Following each research question below, hypotheses are offered based on the theories or previous literature.

1. Do people aged 18-25 perceive themselves to have reached adulthood in mainland China? Based on previous research findings, (e.g., China, Badger, Nelson, & Barry, 2006; India, Seiter & Nelson, 2011), it was hypothesized that the majority of the participants perceive themselves as “in-between.”

(a) Taking into consideration demographic variables such as gender, educational status, and presence of siblings, are there differences in emerging adults' perceptions of having reached adulthood in mainland China? I hypothesized that males perceived themselves as more “in-between” than females (Johnson, Berg, Sirotzki, 2007; Streitmatter, 1997), university students perceived themselves as more “in-between” than non-students (Arnett,

1997;1998), and individuals without siblings perceived themselves as more “in-between” than those with siblings (Liu & Ye, 2014; Zheng, Hou, & Liu, 2014).

2. What are the transition features of emerging adulthood among people aged 18-25 in mainland China? This question is comprised of three sub-questions:

(a) Does Arnett’s theoretical model, which derived from his emerging adulthood theory, fit the Chinese sample? If this model does not fit, what is the appropriate model for the Chinese sample? Based on Nelson and Chen’s (2007) findings, it can be hypothesized that the transition features of emerging adulthood could fit into a five-factor structural statistical model (i.e., feeling in-between, instability, possibility, identity exploration, and self-focused).

(b) What is the most endorsed feature of emerging adulthood? Based on previous research (Reifman, Colwell & Arnett, 2007), it can be hypothesized that “identity exploration” is the most endorsed feature of emerging adulthood.

(c) Taking into consideration demographic variables such as gender, educational status, and presence of siblings, are there differences in transition features of emerging adulthood? In keeping with the previous rationale about the impact of demographic differences on perceived adulthood status, it can be hypothesized that compared with their counterparts, males, university students and individual without siblings may exhibit higher levels in all dimensions of the transition features of emerging adulthood.

3. What are the relationships between the dimensions of the transition features of emerging adulthood and burnout among people aged 18-25 in mainland China? Previous research showed that most emerging adults who were experiencing identity confusion had negative psychosocial functioning outcomes (Luyckx, Witte, & Goossens, 2011). Research also found that emerging adults were optimistic and enjoyed their self-focused development and freedom, which resulted in a high level of well-being (Arnett, 2007). Thus, if Arnett’s model were made to fit the Chinese sample, it can be hypothesized that instability, identity

exploration and feeling in-between may be positively associated with all dimensions of burnout; possibility and self-focused may be negatively associated with all dimensions of burnout.

4. What is the ego identity status (the profile of ego identity development) among people aged 18-25 in mainland China? This question is comprised of two sub-questions:

(a) What is the profile of ego identity development from Marcia's model using a person-oriented approach? Based on Marcia's (1993) Identity Status Model, which included four identity status categories as well as the common categories identified by previous research (Crocetti, Luyckx, Scignaro, & Sica, 2011; Luyckx, Seiffge-krenke, Schwartz, Crocetti, & Klimstra, 2014), it can be hypothesized that four categories of ego identity development (i.e., foreclosure, moratorium, diffusion and achievement) may be identified in the work domain.

(b) Taking into consideration demographic variables such as gender, educational status, and presence of siblings, are there differences in the profile of ego identity development? Influenced by Confucian values such as interdependence and family harmony, it can be hypothesized that more females might be in the foreclosure status (higher level on commitment but lower level on exploration) (Seiter & Nelson, 2011); university students tend to be in the foreclosure status, indicating that they launch into a job without enough exploration to catch up with those who are in the full time employment; more individuals without siblings than those with siblings tend to be in the moratorium status (Fang, Jing, & Wang, 2010).

5. What are the moderating roles of ego identity status in the work domain between each dimension of the transition features of emerging adulthood and burnout, controlling for the three demographic variables? Based on Cote's (1996, 1997) Identity Capital Model as well as the previous research findings, it can be hypothesized that achievement status may have a

protective role in the relationship between each dimension of the transition features of emerging adulthood and burnout, controlling for the demographic variables (Malanchuk, Messersmith, & Eccles, 2010).

2.6 Novel Contributions

Emerging adulthood has become a focus of research during the past 20 years but little has been done on this topic and how it relates to China. In the present study, three novel contributions are highlighted: firstly, there has been little research on emerging adulthood in China, so this research will be pioneering in emerging adulthood research and benefit the large community of young people in China. Secondly, university students were the participants in most of the previous studies on emerging adulthood. The present study recruited both student and non-student participants, which lead to more accurate and comprehensive conclusions about emerging adulthood—the novel development stage. Lastly, most of the previous research focused on the influence of social classes and demographic variables during emerging adulthood. In the present study, ego identity developmental status, which is one type of personal resources and an integrated part of the Identity Capital Model, was involved in coping with potential challenges during the transition period.

Chapter 3: Methods

This chapter describes the research methods and design used in this dissertation. The research procedure and sampling methods are elaborated, and the participants' characteristics and measures are described. Finally, the approaches to the data analysis are introduced.

3.1 Research Design

In order to answer the research questions, I conducted a cross-sectional quantitative self-report study. A large number of young people aged 18-25 in mainland China were recruited. They were asked to answer a series of self-report questionnaires designed to measure their perceived adulthood status, emerging adulthood features, and ego identity development in the work domain. After the data were collected, I examined the cross-cultural validity of the emerging adulthood features' questionnaire, and conducted cluster analysis to examine the different profiles of ego identity development. Finally, I carried out multiple analyses to examine the potential causal relationships between the predictors and criterion variables. The predictors were demographic (i.e., gender, educational status, and presence of siblings) and self-perceived adult status; the criterion variables were dimensions of transition features of emerging adulthood (i.e., identity exploration, experimentation/possibility, feeling in-between, self-focused, other focus, and negative/instability), ego identity development in the work domain (i.e., commitment-making, identification of commitment, exploration in depth, exploration in breadth, ruminative exploration) and burnout (i.e., emotional exhaustion, cynicism, and self-efficacy reduction).

3.2 Procedure and Sampling

Ethical approval was obtained from the Human Research Ethics Committee of the University of Alberta. Two main ethical considerations in this research were informed consent and confidentiality. A written consent form (see Appendices A-1 and A-2 for both English and Chinese version) was presented at the beginning of the questionnaire. The form explained the

purpose of the study and confidential and voluntary principles of the research. After the study was completed, participants also received a debriefing letter with more information and recommended resources.

The questionnaire included 120 items. All items were forward- and back-translated. This translation procedure consisted of several steps. First, two native Chinese teachers who had taught English for at least five years translated all of the items from English to Chinese. One teacher translated the document, and the other checked and amended it. Second, two native English speakers who were fluent in Chinese independently back-translated the document using a similar iterative process. I corrected the inconsistencies between the back-translated items and original items. Third, three psychology professors (my co-supervisors, Dr. Robert Klassen and Dr. Lia Daniels; and one of my research committee members, Dr. Marian Rossiter), who are experts in this research domain, checked all the items to ensure that the translations were accurate.

The hard copy of the translated questionnaires was distributed to both student and non-student participants who were 18 to 25 years old. I adopted convenience and snowball sampling to collect the data. For student participants, I recruited students from Beijing Normal University (BNU) and the China University of Petroleum (CUP, Beijing). A letter of invitation was sent to all the instructors teaching undergraduate courses in the School of Psychology at BNU and the School of Humanities Social Science at CUP during the 2013 summer term. The instructors were offered a formal research consent letter from my program supervisor and department. Eventually, 13 instructors responded that they would like to distribute the questionnaires in their classes. The instructors handed out the questionnaires at the beginning of the classes and collected the questionnaires within 24 hours. In addition to the above recruitment method, I also recruited student participants from online forum boards at the two universities. The questionnaires were handed out to potential participants, who

were asked to return the questionnaires in 24 hours.

I recruited non-student participants from a vehicle equipment factory in Beijing. A letter of invitation was given to the manager of the factory. Dr. Chuanjin Tao, a professor at the School of Social Development and Public Policy at BNU, referred me to the manager who helped me to distribute the questionnaires to all the workers. The questionnaires were handed out after working hours and collected before working hours the next day. As a supplementary data collection method, an advertisement was posted on the university online forum and displayed in local businesses affiliated with the university (e.g., restaurants, printing stores, hair salons, fruit stores, convenience stores) and surrounding the campus. The poster included my contact information and let potential participants know that they could contact me by email or phone. After obtaining oral consent by phone from potential participants, I contacted them and made appointments to hand out the questionnaire. I asked for the questionnaire to be returned in 24 hours. There were 39 participants who had literacy issues, so I read through the questionnaires for them. Snowball sampling was also used to collect non-student participants.

In order to ensure confidentiality, both student and non-student participants had the choice of when and where to fill out the questionnaire. Concerning data management and analysis, participants' identification was coded as numbers rather than names. Questionnaires were kept in a locked drawer and will be destroyed in five years. The electronic materials have been stored with a password in my personal computer and will be deleted in five years.

In order to thank the participants for taking time to answer the questionnaire, modest compensation (i.e., a gift valued at about two dollars) was offered to those who returned a completed questionnaire. Eight hundred hard copies of the questionnaire were distributed and 736 returned. The data was collected from July to September 2013.

3.3 Participants

I received a total of 736 responses (response rate = 92.00%). Before analysis, I examined the data entry accuracy and missing values for all variables. After removing the missing data, 607 valid participants aged 18-25 years remained in the analysis. More than half of the participants were university students (60.63%). The details of the demographic characteristics of the participants are presented in **Table 1**.

Table 1 Demographic Characteristics of Participants

Variables	All groups (<i>n</i> = 607)	Students (<i>n</i> = 368)	Non-Students (<i>n</i> = 239)
Gender			
Male (%)	50.25	41.14	64.41
Female	49.75	58.86	35.59
Age			
18-21 (%)	53.82	68.66	29.28
22-25	46.18	31.34	70.72
Birth location			
Urban (%)	40.69	50.00	26.27
Sub-urban	17.11	16.12	18.64
Rural	42.19	33.88	55.08
Presence of siblings			
0 (%)	52.51	55.59	47.61
1	27.59	25.61	30.74
2 and more than 2	19.90	18.80	21.65
Ethnicity			
Han (%)	91.86	89.62	95.34
Minority	8.14	10.38	4.66
Religion			
No religion (%)	87.54	91.01	82.13

Buddhist	3.99	2.82	6.38
Christian	2.49	1.91	3.40
Islamic	2.33	2.72	1.70
Employment status			
Full-time students (%)	60.63	100	---
Part-time employed	0.98	---	2.51
Full-time employed	36.57	---	92.89
Non-students and unemployed	1.81	---	4.60
Work type			
Self-employed (%)	10.02	---	25.26
Operating staff	19.88	---	49.54
Professionals and technical	9.24	---	22.18
Business enterprise personnel	1.36	---	3.02
Relationship status			
Single, not dating (%)	46.20	48.91	42.02
Dating casually	7.76	10.33	3.78
Dating seriously	5.61	4.35	7.56
Dating monogamously	32.01	35.33	26.89
Living with partner, not married	3.30	0.82	7.14
Married without children	3.47	0.27	8.40
Married with children	1.49	---	3.78
Divorced/separated/widowed	0.17	---	0.42
Education			
Junior middle	1.15	---	2.93
High school	2.14	---	5.44
Technical secondary school	12.19	---	31.96
College (Part time)	23.89	---	60.67
1 st (%)	21.42	35.33	---
2 nd	12.85	21.20	---
3 rd	12.85	21.20	---
4 th	13.51	22.28	---

Father's education

No school experience (%)	0.66	0.27	1.27
Elementary	8.26	8.15	8.44
Junior middle school	31.74	23.37	44.73
High school	29.42	25.82	35.02
College diploma	4.47	4.89	3.80
Bachelor's degree	22.64	32.88	6.75
Master's degree and higher	2.81	4.62	---

Mother's education

No school experience (%)	2.98	3.53	2.12
Elementary	11.09	11.96	9.75
Junior middle school	34.44	23.64	51.27
High school	26.66	24.46	30.08
College diploma	4.24	5.70	1.39
Bachelor's degree	19.21	28.26	5.08
Master's degree and higher	1.49	2.45	---

Living status

Living with parents (%)	20.30	2.72	47.48
Living with partner	4.62	---	11.76
Dormitory	66.50	96.20	20.59
Living with others, not partner	5.45	0.54	13.03
Living alone	2.97	0.54	6.72

3.4 Measures

The full questionnaire in Chinese included questions in four domains: perception about personal developmental status (e.g., “Do you think you have reached adulthood?”), psychological and experienced transition features of emerging adulthood (e.g., “Do you agree with the statement that you are in the time of many possibilities?”), ego identity development in the work domain (e.g., to what extent have you decided “what direction you want to follow in life?”) and burnout (e.g., “I feel emotionally drained by my studies”). Details of the

measures used in this study are described in the following paragraph.

3.4.1 Background information

Participants were asked to provide demographic information that specified their age, gender, educational level, employment status, siblings, residence status, marital status and family background (e.g., birthplace, parents' educational level, and marital status). Details of the demographic questions were presented in Appendices B-1 and B-2 for both the English and Chinese versions of the questionnaire.

3.4.2 Perceived Adulthood Status

To assess this, the question “Do you think that you have reached adulthood?” was administered (Arnett, 1998, 2003; Nelson & Barry, 2005). This item was scored on a three-point Likert scale: 1 (no), 2 (in some respects yes, in some respects no) and 3 (yes).

3.4.3 Transition Features

The *Inventory of the Dimensions of Emerging Adulthood* (IDEA) (31-item; Reifman et al., 2007) was used to measure transition features of emerging adulthood. The participants were asked to think about “this time in your life” as “the present time, plus the last few years that have gone by, and the next few years to come, as you see them.” The original version of the questionnaire included six subscales: “identity exploration” (IE) (seven items, such as “time of finding out who you are”), “experimentation/possibility” (EX) (five items, such as “time of many possibilities”), “self-focus” (SF) (six items, such as “time of personal freedom”), “feeling in-between” (FB) (three items, such as “time of feeling adult in some ways but not others”), “other focus” (OF) (three items, such as “time of settling down”) , and “negative/instability” (NE) (seven items, such as “time of confusion”).

Except for “other focus,” the other five subscales were proposed to represent the theory of emerging adulthood. Responses to items in the “other focus” category were reverse-coded. All items were scored on a four-point Likert scale from one (strongly disagree) to four

(strongly agree). The IDEA showed good psychometric properties, with evidence of reliability (Cronbach's alpha range from 0.70 to 0.85; Reifman et al., 2007) and validity (Reifman et al., 2007).

3.4.4 Identity Development

The *Dimensions of Identity Development Scale* (DIDS) (25-item; Luyckx, et al., 2008) was used to measure identity development. The original version of the DIDS included five subscales: “commitment making” (CM) (five items, such as “decide the direction I want to follow in life”), “identification with commitment” (IC) (five items, such as “plans for the future offered me a sense of security”), “exploration in breadth” (EB) (five items, such as “think about the direction I want to take in my life”), “exploration in depth” (ED) (five items, such as “think about the future plans I have made”), and “ruminative exploration” (RE) (five items, such as “keep looking for the direction I want to take in my life”).

For this study, the original measures were adapted to fit the work context. For example, participants were asked to “indicate the extent to which you currently agree with the following statement regarding your vocational path.” No items were reverse-coded and all items were scored on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The DIDS showed good psychometric properties, with evidence of reliability (Cronbach's alpha range from 0.79 to 0.86; Luyckx, et al., 2008) and validity ($\chi^2/df=2.49$, CFI=.94; Luyckx, et al., 2008).

3.4.5 Burnout

The student and work versions of the *Maslach Burnout Inventory* (MBI) were used to measure burnout. The original (English) 15-item MBI was developed to evaluate the level of burnout among students (Schaufeli, Martinez, Pinot, Salanova & Bakker, 2002). This scale has been used among the Chinese as well (Hu & Schaufeli, 2009). The MBI included three scales: exhaustion (EX) (five items, such as “I feel emotionally drained by my studies”),

cynicism (CY) (four items, such as “I doubt the significance of my studies”), and efficacy reduction (ER) (six items, such as “I cannot effectively solve the problems that arise in my studies”). Participants responded on a seven-point Likert scale ranging from 1 = never to 7 = always. I adapted the MBI to fit the work setting, including three scales: EX (five items, such as “I feel emotionally drained by my work”), CY (four items, such as “I doubt the significance of my work”), and ER (six items, such as “I cannot effectively solve the problems that arise in my work”).

Participants responded on a seven-point Likert scale ranging from 0 (never) to 6 (always). The scale showed good reliability (Cronbach’s α s ranged from 0.73 to 0.85 for the three subscales) and validity in previous cross-cultural studies (e.g., Schaufeli et al., 2002).

3.5 Data Quality Issues

As Teddlie and Tashakkori (2009) noted, high-quality data were necessary but not sufficient to answer high-quality research questions. When using a survey model, it was important to consider a number of quantitative approaches, chief among them validity and reliability. Most measures involved in this study were developed and validated in English cultures; none of the measures had looked at Chinese culture. Thus, the construct validity and reliability of each measure needed to be tested in the formal data analysis process based on the statistical techniques in the following section.

According to Groves et al. (2004, p. 241), the psychometrics properties’ standards of measures included “content standards (e.g., are the questions asking about the right thing?), cognitive standards (e.g., do the respondents understand all the questions?), and usability standards (e.g., can respondents complete the questionnaire easily?).” These three standards were included in the validity consideration. Content validity, including an expert review and pilot study, was conducted to fulfill the requirements of good data quality. The procedures are described below.

3.5.1 Expert Review

Teddlie and Tashakkori (2009) recommended using experts to judge whether the measurements actually measure what they were intended to. Groves et al. (2004) noted that “questionnaire design experts assess whether the questions meet the content, cognitive and usability standards” (p. 242). In the present study, two educational psychology experts (Dr. Robert Klassen and Dr. Marian Rossiter) from the University of Alberta helped me to review the items, the structure of the questions, response alternatives, and navigational rules of the questionnaire. In addition, two English-Chinese bilingual researchers unfamiliar with the research were involved in the review process. One was a third-year PhD student in the Linguistics Department and the other was a second-year PhD student in the Department of Educational Psychology. Both were invited to help revise the language elements of the questions.

3.5.2 Pilot Study

In order to investigate the usability of the measures, a pilot study was conducted. Fink (2003) provided seven points to check the survey during the pilot process: (a) Are instructions for completing the survey clearly written? (b) Which questions, if any, are confusing? (c) Do you understand how to indicate your responses? (d) Are the response choices mutually exclusive? (e) Are the response choices exhaustive? (f) Do you feel that your privacy has been respected and protected? (g) Do you have any suggestions regarding the clarification of instructions, improvements in the questionnaire format, or the addition or deletion of questions?

Twenty participants (10 students and 10 non-students), none of whom would be involved in the formal study, were recruited to participate in the pilot study. These participants were 18 to 25 years old and they were recruited with the same procedure with the formal session. For student participants, I recruited five students from BNU and five from CUP. I recruited five non-student participants from a vehicle equipment factory located in

Beijing.

In addition to the above seven points, the completion time was recorded to improve the quality data in the formal process. Based on the pilot study, some changes were made: (a) “living with partner, not married” and “divorced/separated/widowed” were added as responses to the question about “intimate relationship status” because some participants elaborated their responses to “others,” using terms such as “common-law” and “divorced”; (b) the forth response to the work identity question was clarified to “unemployment and not a student” because some participants reported that they were students and not involved in employment; (c) According to pilot participants’ comments, I reordered the sequence of the responses to the question related to participants’, father’s and mother’s education from the lowest to the highest levels; (d) item 62 (对他人承担的时候) was changed to “对他人负责的时候,” which was more appropriate in terms of Chinese grammar; (e) A word (“方向”) was added at the end of item 100 (有关职业发展方面, 我一直在寻找我想要的生活), which clarified the meaning of this item.

3.6 Data Analysis

SPSS 22 and Mplus 7 (Muthén & Muthén, 1998-2012) were used to manage and analyze the data. At first, the psychometric properties of all the measures (i.e., IDEA, DIDS, and MBI) were examined. The specific analyses included the following steps: a) a series of Confirmatory Factor Analyses (CFA) with full sample ($n = 607$) was conducted to examine the construct validities of all measures. Model fit was evaluated using the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). Generally, a value of 0.90 for the CFI can be considered acceptable, and RMSEA values of less than 0.08 indicate a reasonable fit (Hu & Bentler, 1999); b) The full sample was randomly split into two parts. For the measures in which the model did not fit according to the CFA results, Exploratory Factor Analyses (EFA) were conducted to explore the new structures with the first half of the

sample (n=304); then, CFA were conducted to validate the new found factor structure using the second half of the sample (n=303); c) Cronbach's alpha coefficients and correlations were conducted to examine the reliability for all scales. Then, the inter-correlation among gender, educational status, siblings status (i.e., presence of siblings), and all dimensions of IDEA, DIDS and MBI were conducted to examine the relationships among all variables.

As explained above, the first research question examined whether young people aged 18-25 years old in mainland China perceive themselves as adults. In order to answer this question, analyses included the following steps: a) the frequency of each response ("yes," "no," and "in some respects yes and in some respects no") was examined; and b) the descriptive frequency was examined and a series of Chi-square of independence analyses conducted to examine the effects of demographic factors on self-perceived adulthood (i.e, gender, educational status, and presence of siblings).

In order to answer the second research question, which focused on the transition features of emerging adulthood among young people in mainland China, the analyses included the following steps: a) a repeated ANOVA was used to examine the most endorsed features of emerging adulthood; and b) to examine the role of the demographic variables, a series of three-way ANOVA, with SPSS, was conducted with demographic variables as the predictors and all dimensions of the IDEA as the criterion variables.

The third research question aimed to examine the relationship between the transition features of emerging adulthood and each dimension of burnout among young people in mainland China. To answer this question, three hierarchical regression analyses were conducted with demographic variables as controlled variables, all dimensions of the IDEA as predictors, and all dimensions of MBI as criterion variables.

The fourth research question aimed to describe the profile characteristics of ego identity development in the work domain among young people in mainland China. The analyses

included the following steps: a) a cluster analysis, with SPSS, was used to examine ego identity status (the profiles of identity development) in the work domain; b) Chi-square of independence analyses were conducted to examine the relationship between demographic variables (i.e., gender, educational status, presence of siblings) and ego identity status.

The fifth question aimed to explore the protective role of ego identity status in the work domain against each dimension of burnout among young people in mainland China. After controlling for the demographic variables by Mplus, multiple-group modeling was conducted to test the moderating effects of ego identity statuses on the relationship between each dimension of the transition features of emerging adulthood and burnout.

Chapter 4: Results

In this chapter, I will report on a variety of data analysis procedures, including: (a) handling missing data; (b) examining the psychometric properties of all the measures; (c) testing the zero order correlations for all variables in the study; (d) investigating the self-perceived adult status; (e) examining the transition features of emerging adulthood; (f) revealing the relationship between dimensions of the transition features of emerging adulthood and burnout; (g) examining the demographic and profile characteristics of ego identity development; (h) reviewing the moderation role of ego identity statuses on the relationship between dimensions of the transition features of emerging adulthood and burnout after controlling for the demographic variables. The major findings are summarized at the end of each section.

4.1 Handling the Missing Data

Data was collected from 736 participants and the response rate was 92.00%. Individual items of subscales were screened for accuracy of data entry and missing data value. Twenty-nine cases were deleted from all analyses when it was found that they were missing all data points except for some demographic variables. Another 31 cases were deleted because the participants did not fill out even one item. Forty-two cases were deleted because the participants' ages were out of the research age range. Finally, 27 cases were deleted when it was found that the participants had reported controversial information (e.g., they identified themselves as students, but also reported that they were working full time). Ultimately, 607 valid participants aged 18-25 years old were involved in the analysis. No individual items from any subscale were missing more than 5% of data points. To differentiate from the regular values, all missing data points were labeled as -99.

4.2 Psychometric Properties of Measurements

The validity and reliability of all measures are reported in this section and based on the full sample. I began by testing the hypothesized factor structure for each scale by Confirmatory

Factor Analyses (CFA). If satisfactory fit was found, the original structure was retained. However, if it did not fit, I used Exploratory Factor Analysis (EFA) to identify the underlying factors in the Chinese sample. The reliabilities of the measures were examined using Cronbach's alpha.

4.2.1 The Inventory of the Dimensions of Emerging Adulthood (IDEA).

4.2.1.1 Validity

I examined the five-dimensional factor structure of IDEA (negative/instability, identity exploration, feeling in-between, self-focused, other focused) based on Reifma, Arnett and Colwell's framework (2007) using the full Chinese sample ($N = 607$). The model did not fit well, $\chi^2/df = 4.95$, CFI = 0.69, RMSEA = 0.08. Thus, EFA was conducted to explore a new structure of IDEA followed by a new CFA.

Since the samples were recruited all at once, all participants were randomly divided into two groups. EFA was used to explore the construct of the IDEA with half of the participants ($n = 304$). Then, CFA was conducted to cross-validate the EFA results with the other half of the participants ($n = 303$).

The 31 items of the original IDEA were subjected to a principal axis factoring with 304 participants, followed by a varimax rotation. A Kaiser Meyer-Olkin (KMO) test showed a result of 0.86, indicating that the IDEA was appropriate for factor analysis. Based the Eigenvalues rule (i.e., eigenvalues >1), eight factors were retained. The eight factors explained 57.92% of the total variance. However, 11 items had complex factor loadings (i.e., 1, 4, 5, 7, 10, 13, 14, 18, 25, 29, and 30).

Principal components analysis was conducted again after removing the 11 items with complex factor loadings, and a three-factor solution was obtained. The three factors explained 45.10% of the total variance with KMO = 0.82, $p < 0.001$. The first factor was labeled "identity exploration/experimentation" (items 2, 15, 16, 21, 26, 27, 28, 30). It included items

related to exploring whose personal identity are, recognizing new things, and experimentation. The second factor was labeled “instability/negativity” (items 3, 6, 8, 9, 11, 17 20), and included items related to negative feelings and experiences of instability. The third factor was labeled “desire to be independent” (items, 12, 19, 22, 23, 24), and included items related to the desire to provide for oneself and separate from one’s parents. This short version of the IDEA consists of items describing the features of emerging adulthood in the Chinese sample. Pattern coefficients were shown in **Table 2**, along with other EFA psychometric information.

Table 2 Summary of EFA of the IDEA using Principle Components Analysis (n = 304)

Original version	Pattern coefficient			<i>M (SD)</i>
	Identity exploration/ experimentation	Instability/ negativity	Desire to be independent	
2. Time of exploration	0.55			3.09(0.78)
15. Time of independence	0.53			3.17(0.82)
16. Time of open choices	0.72			3.24(0.77)
21. Time of trying out new things	0.53			3.09(0.79)
26. Time of seeking a sense of meaning	0.75			3.14(0.83)
27. Time of deciding your own beliefs and values	0.70			3.22(0.76)
28. Time of learning to think for yourself	0.63			3.25(0.74)
30. Time of gradually becoming an adult	0.70			3.37(0.70)

3. Time of confusion	0.66	2.83(0.91)
6. Time of feeling restricted	0.57	2.77(0.91)
8. Time of feeling stressed out	0.65	3.14(0.80)
9. Time of instability	0.59	2.76(0.95)
11. Time of high pressure	0.67	2.70(1.00)
17. Time of unpredictability	0.53	2.94(0.85)
20. Time of many worries	0.59	3.02(0.81)
12. Time of finding out who you are	0.41	2.91(0.91)
19. Time of self-sufficiency	0.56	2.25(0.97)
22. Time of focusing on yourself	0.70	2.83(0.87)
23. Time of separating from parents	0.68	2.93(0.92)
24. Time of defining yourself	0.64	3.07(0.81)

CFA was conducted to examine the three-factor structure of the IDEA with 303 participants. The model fit was good, $\chi^2/df = 2.96$, CFI = 0.90, RMSEA = 0.06. The three latent factors were labeled as “identity exploration/experimentation,” “instability/negativity,” and “desire to be independent.”

4.2.1.2 Reliability

The reliability of the new IDEA was satisfactory. For the total score of the IDEA, the Cronbach’s coefficient was 0.81. For the scores of the three dimensions, the Cronbach’s coefficient ranged from 0.62 to 0.80 among the full sample.

The corrected item-factor correlations for each item were all in the moderate range ($r = 0.43$ to $r = 0.73$). The Pearson correlations of the IDEA total scores and three

sub-dimensional scores were as follows: identity exploration/experimentation ($r = 0.79$), instability/negativity ($r = 0.70$), and desire to be independent ($r = 0.72$). The correlation coefficients among the three dimensions are presented in **Table 3**. These correlation coefficients are all at a statistically significant level of $p < 0.01$ with a sample size of 607. The results of these reliabilities and correlation analyses indicated substantial internal consistency of the IDEA scale and dimensions.

Table 3 The IDEA's Reliability, Means, Standard Deviations and Correlations between dimensions (N = 607)

	Identity exploration/ experimentation	Instability/ negativity	Desire to be independent	Total
Identity exploration/ experimentation	1			
Instability/negativity	0.23**	1		
Desire to be independent	0.47**	0.26**	1	
<i>M</i>	3.20	2.85	2.71	
<i>SD</i>	0.48	0.53	0.53	
Alpha	0.80	0.74	0.62	0.81

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

4.2.2 The Dimensions of Identity Development Scale (DIDS).

4.2.2.1 Validity

I examined the factor structure of ego identity development in work domain measures for the full Chinese sample (N=607) using CFA. The results indicated that the model fit was good, $\chi^2/df = 3.79$, CFI = 0.93, RMSEA = 0.07. The original five factors —“commitment-making,” “identification with commitment,” “exploration in depth,” “exploration in breadth,” and “ruminative exploration” — were retained. No exploratory analyses were conducted.

4.2.2.2 Reliability

The reliability for the DIDS was satisfactory. For the total score of the DIDS, the Cronbach's coefficient was 0.94. For the scores of the five dimensions, the Cronbach's coefficient ranged from 0.81 to 0.92.

The correlation coefficients for the five sub-scales was presented in **Table 4**. These correlation coefficients were all at a statistically significant level of $p < 0.01$, with a sample size of 607. The results of these reliability and correlation analyses indicated substantial internal consistency of the DIDS scale and dimensions.

Table 4 The DIDS Reliability, Means, Standard Deviations and Correlations between Dimensions (N = 607)

	1	2	3	4	5	Total
1. Commitment-making	1					
2. Identification with commitment	0.75**	1				
3. Exploration in breadth	0.56**	0.61**	1			
3. Exploration in depth	0.59**	0.63**	0.69**	1		
5. Ruminative exploration	0.21**	0.34**	0.46**	0.49**	1	
<i>M</i>	3.30	3.33	3.68	3.55	3.58	
<i>SD</i>	0.95	0.86	0.86	0.82	0.88	
Alpha	0.92	0.86	0.88	0.81	0.85	0.94

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

4.2.3 The Maslach Burnout Inventory (MBI).

4.2.3.1 Validity

I examined the factor structure of the MBI for the full Chinese sample (N=607) using CFA. The results indicated that the model fit was good, $\chi^2/df = 3.65$, CFI = 0.96, RMSEA = 0.07. The original three factors — “emotional exhaustion,” “cynicism,” and “efficacy reduction” were retained. No exploratory analyses were conducted.

4.2.3.2 Reliability

The reliability for the MBI was satisfactory. For the total score of the MBI, the Cronbach's coefficient was 0.88. For the scores of the three dimensions, the Cronbach's coefficient ranged from 0.86 to 0.90.

The correlation coefficients for the three dimensions were presented in **Table 5**. These correlation coefficients were all at a statistically significant level of $p < 0.01$ with a sample size of 607. The results of these reliability and correlation analyses indicated substantial internal consistency of the MBI scale and dimensions.

Table 5 The MBI Reliability, Means, Standard Deviations, and Correlations between Dimensions (N = 607)

	Emotional exhaustion	Cynicism	Efficacy reduction	Total
Emotional exhaustion	1			
Cynicism	0.70**	1		
Efficacy reduction	0.17**	0.12**	1	
<i>M</i>	3.87	3.76	4.68	
<i>SD</i>	1.67	1.72	1.35	
Alpha	0.90	0.87	0.86	0.88

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

4.2.4 Summary

This section examined the psychometric properties of all measures (i.e., IDEA, DIDS, and MBI) for the Chinese sample. After a series of validity and reliability analyses, a new Chinese version of the IDEA with 20 items was created, while the DIDS and the MBI were retained in their original factor structure. In sum, the versions of the IDEA, DIDS and MBI can be used in the current Chinese culture.

4.3 Zero Order Correlations

Prior to testing the research hypotheses, descriptive analyses of all variables were conducted.

Table 6 shows the descriptive statistics and inter-correlation matrix for gender, educational status, presence of siblings, dimensions of transition features of emerging adulthood (“identity exploration/experimentation,” “instability/negativity,” and “desire to be independent,”), dimensions of identity development (“commitment-making,” “identification with commitment,” “exploration in depth,” “exploration in breadth,” and “ruminative exploration”), and dimensions of burnout (“emotional exhaustion,” “cynicism,” and “efficacy reeducation”).

As shown in **Table 6**, correlations between dimensions of the transition features of emerging adulthood and burnout were significantly positive, and in the expected direction. This indicates a higher level of the transition features of emerging adulthood and burnout. In addition, commitment-oriented dimensions (i.e., “commitment-making” and “identification with commitment”) of ego identity development correlated negatively with all dimensions of burnout, and exploration-oriented dimensions (i.e., “exploration in breadth,” “exploration in depth,” and “ruminative exploration”) of ego identity development correlated positively with all dimensions of burnout.

Table 6 Descriptive Statistics for and Inter-correlations among all Measurements (N = 607)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Gender	—	-.23**	.09*	-.11**	.02	.07	-.13**	-.05	.02	.07	.01	.04	-.16**	-.10*	-.04
2. Educational status		—	.08	.24**	-.03	.07	.06**	.10*	.07	-.07	.07	.05	.38**	.08**	.07
3. Presence of siblings			—	.05	.02	.06	.10*	-.08*	-.04	-.09*	-.06	.07	.01	.01	-.01
4. Adulthood status				—	.09*	.02	.21**	.19**	.15**	.10*	.17*	.09*	.08	.02	.10*
5. Identity exploration					—	.23**	.47**	.28**	.36**	.36**	.36**	.31**	.00	-.07	.25**
6. Instability/negativity						—	.26**	.00	.04	.09*	.11**	.31**	.32**	.29**	.02
7. Desire to be independent							—	.31**	.34**	.20**	.23**	.19**	.13**	.08*	.15**
8. Commitment-making								—	.85**	.56**	.59**	.21**	.00	-.08*	.24**
9. Identification with commitment									—	.61**	.63**	.34**	-.02	-.11**	.26**
10. Exploration in depth										—	.69**	.46**	-.04	-.07	.21**
11. Exploration in breadth											—	.49**	-.01	-.06	.24**
12. Ruminative exploration												—	.12**	.09*	.12**
13. Emotional exhaustion													—	.70**	.17**
14. Cynicism														—	.13**

15. Efficacy reduction																—
M	—	—	—	—	3.20	2.85	2.71	3.30	3.33	3.68	3.55	3.58	3.89	3.76	4.72	
SD	—	—	—	—	.48	.53	.53	.95	.86	.86	.82	.88	1.69	1.73	1.38	

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

4.4 Research Question 1: Self-perceived Adulthood Status

Participants were asked, “Do you think you have reached adulthood?” The responses were “yes,” “no,” and “in some respects yes, in some respects no.” Frequency descriptive analysis revealed that 3.5% of participants responded “no,” 25.5% responded “yes” and 71% responded “in some respects yes, in some respects no.”

It was not appropriate to include all three demographic variables in one analysis because the cell sizes would become too small. Thus, three pairs of Pearson Chi-Square analyses were performed to examine the relationship between demographic variables and self-perceived adulthood status (See **Table 7 to 9**).

The Chi-Square analysis was significant for gender, $\chi^2 (1, n = 603) = 11.28, p < 0.05$, indicating that there was a significant relationship between gender and self-perceived adulthood status. More females reported that they had reached adulthood in some respects. The Chi-Square analysis was also significant for educational status, $\chi^2 (1, N = 607) = 44.77, p < 0.01$, indicating that there was a significant relationship between educational status and self-perceived adulthood status. More students reported that they had reached adulthood in some respects.

For the question about presence of siblings, the frequency of the “no” response fell below five. Thereby the “no” cases were deleted from the following analyses. Field (2009) indicated that the lower responses on “no” violated the assumption that no more than 20% of expected frequencies fall below five for a Chi-Square analysis. The Chi-Square analysis was not significant for the question of presence of siblings, $\chi^2 (1, n = 577) = 1.66, p = 0.20$, indicating that there was no significant relationship between presence of siblings and the perception about having reached adulthood.

Table 7 Relationship between Gender and Perceptions of Having Reached Adulthood (n =

603)

	Male	Female	χ^2	Cramer's V
No	12	9	11.28*	0.14
	(0.42)	(-0.41)		
Yes	94	59		
	(2.00)	(-2.01)		
In some respects yes; in some respects no	197	232		
	(-1.34)	(1.31)		

Note. Standardized residuals are presented in parentheses below group frequencies.

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

Table 8 Relationship between Educational Status and Perceptions of Having Reached Adulthood (N = 607)

	Student	Non-student	χ^2	Cramer's V
No	13	8	44.77**	0.27
	(0.14)	(-0.11)		
Yes	59	96		
	(-3.62)	(4.50)		
In some respects yes; in some respects no	296	135		
	(2.13)	(-2.71)		

Note. Standardized residuals are presented in parentheses below group frequencies.

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

Table 9 Relationship between Presence of Siblings and Perceptions of Having Reached Adulthood (n = 577)

	Only child	Have siblings	χ^2	Cramer's V
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Yes	231	72	1.66	0.05
	(.51)	(-.82)		
In some respects yes; in some respects no	196	78		
	(-.50)	(.84)		

Note. Standardized residuals are presented in parentheses below group frequencies.

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

This section examined frequency distribution of self-perceived adulthood status and its relationships with other demographic variables. Analyses indicated that a large proportion of the participants perceived themselves to be in-between adolescence and adulthood. Based on Chi-Square analyses, the results found significantly different distributions of gender and educational status on participants' self-perceived adulthood.

4.5 Research Question 2: The Transition Features of Emerging Adulthood

4.5.1 The structure of the transition features of emerging adulthood fit the Chinese sample.

As reported above, the EFA and CFA of the IDEA showed that the five-dimensional structure proposed by Arnett's emerging adulthood theory did not fit with the Chinese sample. A new three-dimensional structure of the IDEA with 20 items showed adequate reliability using the current sample. The revised version of the IDEA that I used included these three dimensions: identity exploration/experimentation, instability/negativity, and desire to be independent.

4.5.2 The most endorsed features of emerging adulthood

A repeated ANOVA was used to examine identification with the three transition features measured by the IDEA. Huyun-Feldt was used to assess the corresponding F

value, because the assumption of sphericity was violated, $\chi^2 (2) = 35.35, p < 0.001$. Results showed that there was a significant difference of identification with the transition features of emerging adulthood, $F_{(1.89, 1146.91)} = 216.32, p < 0.001, \chi^2 = 0.26$. Participants most strongly endorsed the factor of identity exploration/experimentation, followed by instability. Desire to be independent was identified as the least endorsed feature (see **Table 10** for all Bonferroni-corrected post-hoc test results).

Table 10 Relative Identification with the Transition Features of Emerging Adulthood (N = 607)

Features (I)	Features (J)	<i>M</i> (I-J)	Std. Error	<i>p</i>
Identity	Instability/negativity	0.35*	0.03	0.000
Exploration/experimentation	Desire to be independent	0.49*	0.02	0.000
	Identity	-0.35*	0.03	0.000
Instability/negativity	exploration/experimentation			
	Desire to be independent	0.14*	0.03	0.000
Desire to be Independent	Identity	-0.49*	0.02	0.000
	exploration/experimentation			
	Instability/negativity	-0.14*	0.03	0.000

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

4.5.3 Sociodemographic variables effect

A series of three-way (gender, educational status, and presence of siblings) univariate analyses were performed on dimensions of the transition features of emerging adulthood (see **Table 11**).

Table 11 Effects of Demographic Variables on the Transition Features of Emerging Adulthood (F/ η^2)

	Identity exploration/ experimentation	Instability/ negativity	Desire to be independent
Main effects			
Gender	1.39/0.00	2.54/0.00	0.45/0.00
Educational status	0.25/0.00	5.29*/0.01	34.62***/0.06
Presence of siblings	0.28/0.00	0.94/0.00	0.91/0.00
Interaction effects			
Gender *	3.12/0.01	0.10/0.00	3.87*/0.01
Educational status			
Gender * Presence of siblings	0.00/0.00	1.65/0.00	2.16/0.00
Educational status*	3.05/0.01	0.88/0.00	2.40/0.00
Presence of siblings			
Gender*Educational status*	0.20/0.00	1.71/0.00	0.12/0.00
Presence of siblings			
<i>Note. *$p < .05$, **$p < .01$, ***$p < .001$</i>			

Results revealed that an interaction effect between gender and educational status was found in the “desire to be independent” variable, $F_{(1,589)}=3.87, p < 0.05$. Specifically, male students reported higher scores than females in the “desire to be independent” variable, $F_{(1,365)}=8.01, p < 0.01$; however, there were no other significant differences between male and female non-students, $F_{(1,234)}=0.12, p = 0.73$, see **Fig. 3**.

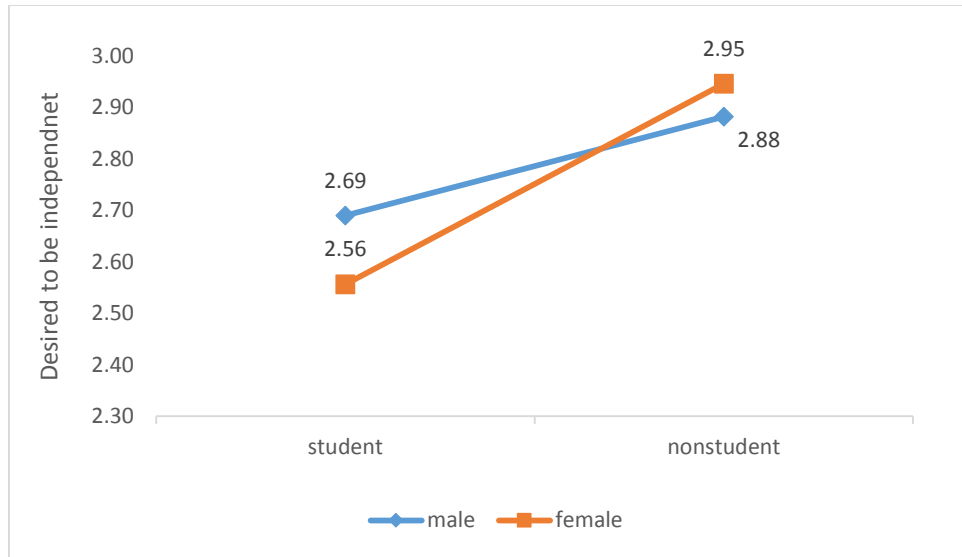


Figure 3 Interaction effect of gender and educational status on desire to be independent

The findings indicated a main effect of educational status for instability/negativity, $F_{(1, 589)} = 5.29, p < 0.05$, with non-student participants ($M = 2.94, SD = 0.04$) scoring significantly higher than student participants ($M = 2.82, SD = 0.03$). It also found a main effect of educational status for “desire to be independent,” $F_{(1, 589)} = 34.62, p < 0.01$, with non-student participants ($M = 2.91, SD = 0.04$) scoring significantly higher than student participants ($M = 2.62, SD = 0.03$).

Instead of the five-dimensional structure of the transition features of emerging adulthood, a three-dimensional structure (i.e., identity exploration/experimentation, instability/negativity, and desire to be independent) was found for the Chinese sample, with good psychometric properties. Mean-level analyses found that identity exploration/experimentation was the most emphasized feature. The interaction effect between educational status and gender was found in the desire-to-be-independent variable. The main effects of educational status on instability/negativity and the desire to be independent variables were also significant.

4.6 Research Question 3: Relationships between Dimensions of the Transition Features of Emerging Adulthood and Burnout

After controlling for demographic variables (i.e., gender, educational status, presence of siblings), three separate hierarchical regression analyses were conducted with three dimensions of the IDEA as predictors and each dimension of the MBI as criterion variables.

Results showed that educational status predicted emotional exhaustion and cynicism positively in Step 1, indicating that non-students suffered more emotional exhaustion and cynicism. In Step 2, individuals who scored higher on instability/negativity suffered more on emotional exhaustion and cynicism; individuals who scored higher on identity exploration/experimentation tended to report low levels of cynicism but high levels of efficacy reduction (see **Table 12** to **14**).

Table 12 A Hierarchical Regression Analysis with Emotional Exhaustion Regressed on the Transition Features of Emerging Adulthood (N = 607)

Independent variables	R^2	$\Delta R^2/\text{Sig. } F$	B/SE B	<i>t</i>
<i>Change</i>				
Step 1	0.14	0.14/0.00		
Gender			-0.23/0.13	-1.75
Educational status			1.23/0.14	9.14***
Presence of siblings			-0.05/0.08	-0.60
Step 2	0.23	0.09/0.00		
Identity			-0.13/0.15	-0.85
exploration/experimentation				
Instability/negativity			1.03/0.12	8.50***

Desire to be independent	-0.14/0.14	-1.01
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Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 13 A Hierarchical Regression Analysis with Cynicism Regressed on the Features of Emerging Adulthood (N = 607)

Independent variables	R^2	$\Delta R^2/\text{Sig. } F \text{ Change}$	B/SE B	t
Step 1	0.07	0.07/0.00		
Gender			-0.11/0.14	-0.79
Educational status			0.92/0.14	6.44***
Presence of siblings			-0.03/0.09	-0.37
Step 2	0.16	0.09/0.00		
Identity			0.44/0.16	2.83**
exploration/experimentation				
Instability/negativity			1.01/0.31	7.88***
Desire to be independent			-0.01/0.15	-0.05

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

Table 14 A Hierarchical Regression Analysis with Efficacy Reduction Regressed on the Features of Emerging Adulthood (N = 607)

Independent variables	R^2	$\Delta R^2/\text{Sig. } F \text{ Change}$	B/SE B	t
Step 1	0.01	0.01/0.36		
Gender			-0.06/0.12	-0.48
Educational status			0.18/0.06	1.53
Presence of siblings			-0.01/0.07	-0.07
Step 2	0.07	0.07/0.00		
Identity			0.74/0.13	5.58***
exploration/experimentation				

Instability/negativity	-0.13/0.11	-1.15
Desire to be independent	0.12/0.13	0.93

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

The results revealed, to some extent, the association between dimensions of transition features of emerging adulthood and burnout. More specifically, identity exploration/experimentation was associated positively with cynicism and self-efficacy reduction, and instability was associated positively with both emotional exhaustion and cynicism.

4.7 Research Question 4: Ego Identity Development

4.7.1 Ego identity status (the profiles of ego identity development)

A two-step cluster analysis (Gore, 2000) was carried out on ego identity development in the work domain. Prior to conducting the analysis, 24 univariate (i.e., values more than three SDs below or above the mean) and multivariate (i.e., individuals with high Mahalanobis distance values) outliers were removed.

Based on previous research, three to six cluster solutions were conducted and evaluated for substantive interpretability, parsimony and explanatory power. A hierarchical cluster analysis was conducted using Ward's method based on squared Euclidian distances. Then, an iterative K-means clustering analysis was conducted, and the hierarchical cluster analysis' centroids were used as the non-random starting points.

Using the two-step cluster analysis, four clusters were found in work ego identity development. If the number of clusters was more than four, the sample sizes in some clusters were too small (e.g., less than 10). To examine the stability of the cluster solutions, a double-split cross-validation procedure was conducted (Tinsley & Brown, 2000). The

total sample was randomized first and then split into two groups with equal sub-samples. Then, the two-step procedure was conducted in each half, and two separate sets of clusters were created. Finally, a Kappa test was used to determine whether the new clusters agreed with the original cluster (Cohen, 1980). At least 0.60 of an agreement was considered acceptable (Asendorpf, Borkenau, Ostendorf, & van Aken, 2001). The Kappa value was 0.64, indicating the stability of the four-cluster solution in the present study.

The final four-cluster solution is presented in **Fig.4**. Results showed that the first cluster of participants—*searching moratorium*— ($n = 149$, 25.56% of participants) reported high scores on all ego identity processes, suggesting that this group had overall high levels of exploration in breadth and depth, as well as high levels of commitment-making but with much over-searching and thinking in the work domain.

The second cluster of participants—*foreclosure*—($n = 232$, 39.79% of participants) reported higher scores on both commitment-making and identification, coupled with low scores on exploration in breadth, depth and rumination, suggesting that this group had already made a commitment but had a lack of exploration in breadth and depth in the work domain. Since participants responded about the experiences of their career development, rather than only about their current situations, it can be assumed that those who reported low scores on exploration did not explore in the past. This group also had the largest number of participants among all four clusters.

The third cluster of participants—*moratorium*—($n = 132$, 22.64% of participants) displayed a high level of exploration in breadth, depth and rumination, coupled with low commitment-making and identification. The profile of this cluster suggested a group with high exploration, which might interfere with commitment-making and evaluating in the

work domain.

The fourth cluster of participants —*carefree diffusion*—($n = 70$, 12.01% of participants) reported lower scores on all ego identity processes. The profile of this cluster suggested that this group of participants had not started to think about and practice any work-related activities. This group had the smallest number of participants of all four clusters.

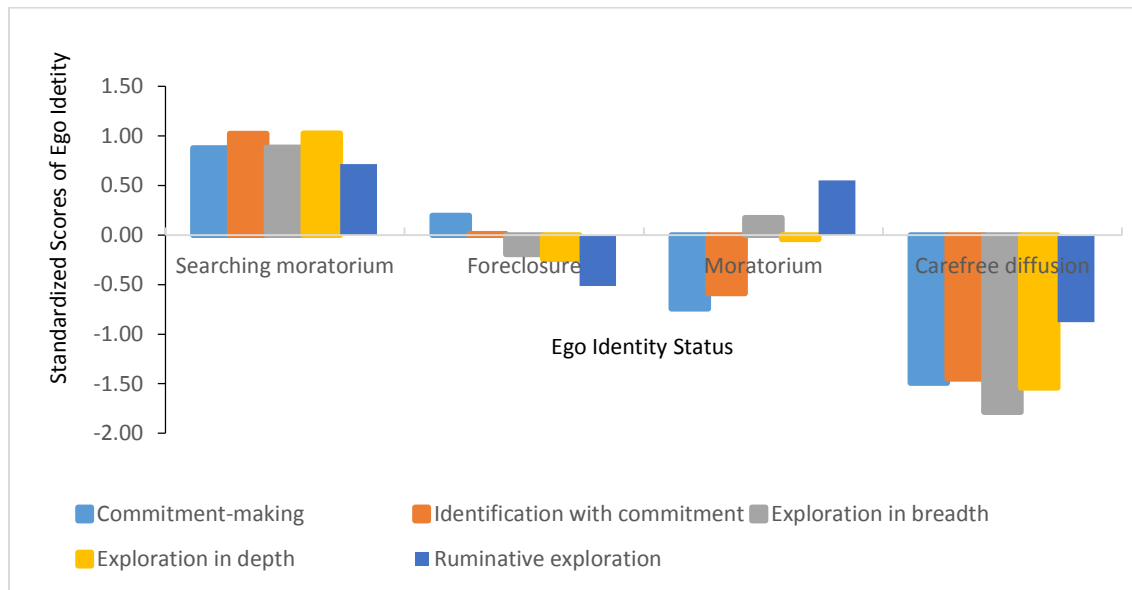


Figure 4 The ego identity status (profile of ego identity development) in the work domain.

4.7.2 Demographic variables effects

Differences in demographic variables (i.e., gender, educational status, presence of siblings) between the four classes of ego identity status were examined. All the three demographic variables were dummy coded: 0 = male, 1 = female; 1 = student, 1 = non-student; 0 = only child, 1 = have siblings. The clusters differed with respect to gender ($\chi^2(3) = 11.29$, $p < 0.05$, Cramer's $V = 0.14$) and educational status ($\chi^2(3) = 21.07$, $p < 0.001$, Cramer's $V = 0.19$), respectively. With respect to presence of siblings ($\chi^2(3) = 2.99$, $p = 0.39$), the four clusters did not differ significantly. More female participants

(67.24%, n =156) were identified in the foreclosure cluster and more non-students (75.00%, n = 99) were identified in the moratorium cluster.

The cluster analysis revealed four groups of ego identity status: searching moratorium, foreclosure, moratorium, and carefree diffusion. In addition, demographic effects for gender and student status were also found on the variable of ego identity status.

4.8 Research Question 5: The Moderation Role of Ego Identity Status between the Dimensions of Transition Features of Emerging Adulthood and Burnout

A multi-group structural equation modeling approach was used to examine the moderating effect of ego identity status profiles on the relationship between the three dimensions of the transition features of emerging adulthood and burnout. At the same time, the models were conducted controlling for the effects of gender, educational status, and presence of siblings.

Fig. 5 shows a structure for relationships between dimensions of the transition features of emerging adulthood and each dimension of burnout. This structure controlled for demographic variables.

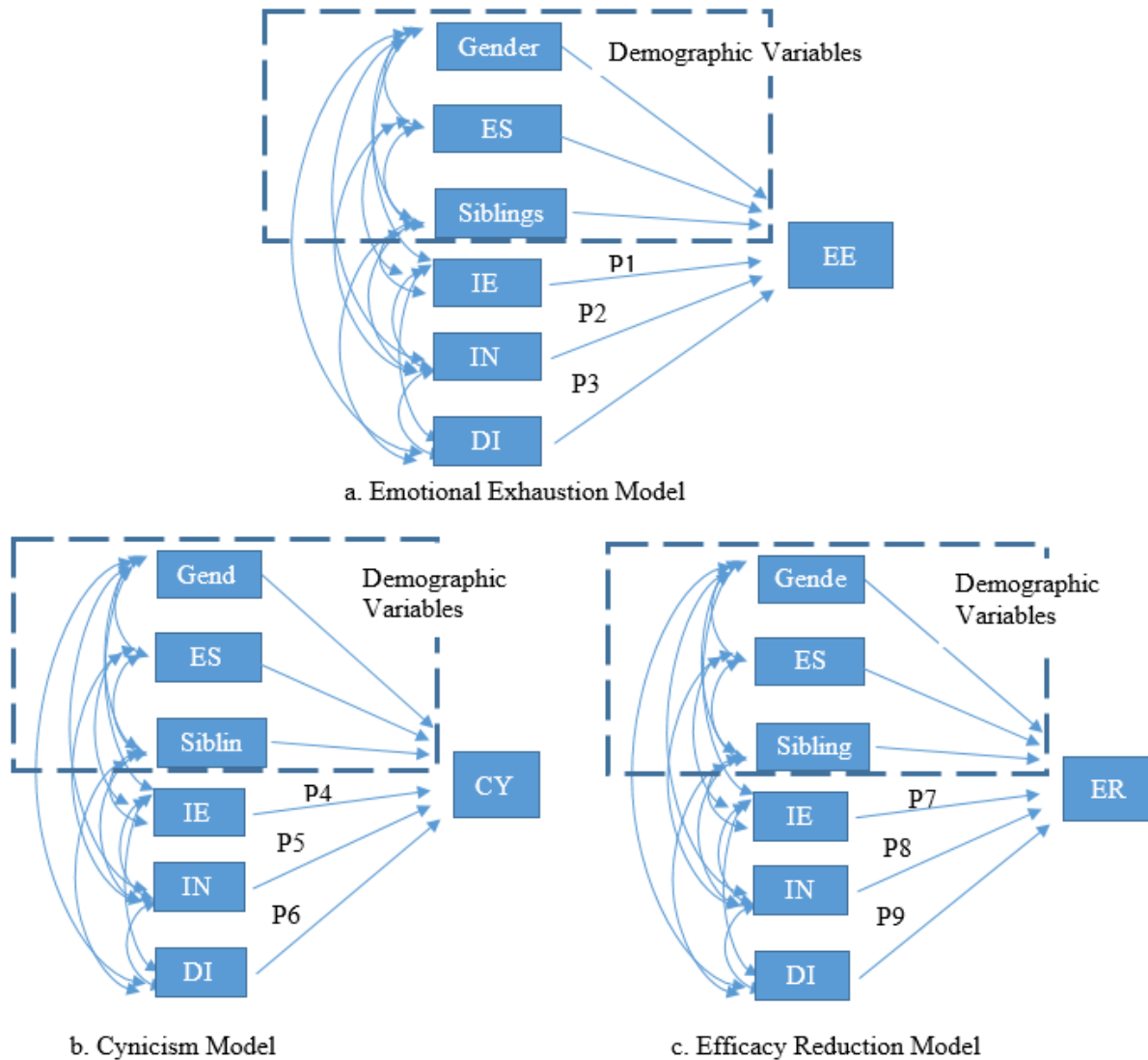


Figure 5 Model specification for the relationship between dimensions of transition features of emerging adulthood and burnout across four identity status groups.

Note. IE means identity exploration/experimentation; IN means instability/negativity; DI means desire to be independent; EE means emotional exhaustion; CY means cynicism; ER means efficacy reduction; d means disturbance (residual variance).

The models were fitted four times to the observed covariance matrices. First, all the parameters in the structural part of the models were estimated freely (one baseline model for each dimension of burnout). **Table 15** to **17** presented the parameters of the

modeling results.

Table 15 Standardized Coefficients for Baseline Model of Relations between Dimensions of the Transition Features of Emerging Adulthood and Emotional Exhaustion across Four Identity Statuses by Controlling for Gender, Educational Status, and Presence of Siblings

		Carefree ^a	Searching moratorium ^b	Moratorium ^c	Foreclosure ^d
		(<i>n</i> = 70)	(<i>n</i> = 149)	(<i>n</i> = 132)	(<i>n</i> = 232)
Gender		-0.08*	-0.09*	-0.10*	-0.10*
Educational status		0.33***	0.34***	0.33***	0.36***
Presence of siblings		-0.01	-0.01	-0.02	-0.02
P1	IE – EE	0.28*	-0.22***	-0.03	-0.04
P2	IN – EE	0.40***	0.34***	0.22**	0.32***
P3	DI – EE	-0.18	0.13	0.02	-0.11

Note. IE means identity exploration/experimentation; IN means instability/negativity; DI means desire to be independent; EE means emotional exhaustion.

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

Table 16 Standardized Coefficients for Baseline Model of Relations between Dimensions of the Transition Features of Emerging Adulthood and Cynicism across Four Identity Statuses by Controlling for Gender, Educational Status and Presence of Siblings

		Carefree ^a	Searching moratorium ^b	Moratorium ^c	Foreclosure ^d
		(<i>n</i> = 70)	(<i>n</i> = 149)	(<i>n</i> = 132)	(<i>n</i> = 232)
Gender		-0.04	-0.04	-0.04	-0.04
Educational status		0.24***	0.24***	0.24***	0.26***
Presence of siblings		-0.01	-0.01	-0.02	-0.02
P4	0.26*	-0.14*	-0.07	-0.19**	-0.04
P5	0.36**	0.33***	0.10	0.30***	0.32***
P6	-0.20	0.11	-0.09	0.09	-0.11

Note. IE means Identity exploration/experimentation; IN means instability/negativity; DI

means desire to be independent; CY means cynicism.

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

Table 17 Standardized Coefficients for Baseline Model of Relations between Dimensions of the Transition Features of Emerging Adulthood and Self-efficacy Reduction across Four Identity Statuses by Controlling for Gender, Educational Status, and Presence of Siblings

		Carefree ^a	Searching moratorium ^b	Moratorium ^c	Foreclosure ^d
		($n = 70$)	($n = 149$)	($n = 132$)	($n = 232$)
Gender		-0.02	-0.02	-0.03	-0.03
Educational status		0.06	0.06	0.06	0.07
Presence of siblings		-0.01	-0.01	-0.01	-0.01
P7	0.35*	0.13	0.23*	0.25***	-0.04
P8	-0.09	-0.04	-0.21*	0.04	0.32***
P9	-0.10	0.10	0.07	-0.05	-0.11

Note. IE means Identity exploration/experimentation; IN means instability/negativity; DI means desire to be independent; ER means efficacy reduction.

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

The parameters of each path in the structural part of the baseline models were constrained to be equal across the four ego identity status groups, one by one, developing three constrained models initially. There were three paths for each model; thus, the model was constrained three times initially. Model comparisons were made between the baseline and constrained models, respectively. If the initial constrained models that fit the data were significantly worse (i.e., the change of the Chi-Square value for the model fit was significant), moderating effects existed in these models. Since there were four groups, the two groups that had different predictive effects were examined further, using the same process. **Tables 18 to 20** showed the parameters of the comparison of the models.

In the emotional exhaustion model, the results showed that ego identity status moderated the relationship between identity exploration/experimentation and emotional exhaustion. Subsequent structure comparison analyses revealed that the relationships between identity exploration/experimentation and emotional exhaustion were significantly different between the searching moratorium and carefree groups as well as between the searching moratorium and foreclosure groups. More specifically, the relationship was negative in the searching moratorium group, while the relationship was positive in the carefree group, and there was no significant relationship in the foreclosure group.

The results indicated that the searching moratorium ego identity status might buffer the negative emotion when people were practicing exploration and experimentation. In other words, when individuals were experiencing a high level of identity exploration and experiments, those in the searching moratorium ego identity group (who had experienced a high level of exploration and commitment) had a significantly lower level of emotional exhaustion than those in carefree diffusion (who dislike investing time and energy into identity development) and foreclosure ego identity groups (who had experienced a high level of commitment) (see **Fig. 7**).

Table 18 Multigroup Structural Equation Modeling Analysis between Dimensions of the Transition Features of Emerging Adulthood and Emotional Exhaustion

	χ^2	df	$\Delta\chi^2$	RMSEA	C.I. of RMSEA
Baseline model (EE)	15.13	9		0.06	[0, 0.13]
Constrained model (P₁)	27.82	12	12.69**	0.10	[0.05, 0.14]
Constrained model (P ₂)	16.49	12	1.36	0.05	[0, 0.11]

Constrained model (P ₃)	22.60	12	7.47	0.08	[0.02, 0.13]
Constrained model (P₁^{ab})	27.81	10	12.68***	0.11	[0.06, 0.16]
Constrained model (P ₁ ^{ac})	18.32	10	3.19	0.08	[0, 0.13]
Constrained model (P ₁ ^{ad})	18.36	10	3.23	0.09	[0.03, 0.14]
Constrained model (P ₁ ^{bc})	18.02	10	2.89	0.08	[0, 0.13]
Constrained model (P₁^{bd})	19.51	10	4.38*	0.08	[0.02, 0.14]
Constrained model (P ₁ ^{cd})	15.13	10	0	0.06	[0, 0.12]

Note. RMSEA means Root Mean Square Error of Approximation; EE means emotional exhaustion; C.I. of RMSEA means the confidence interval of the value of the RMSEA; “P₁” means the path parameter between “identity exploration/experimentation” and “emotional exhaustion”; “P₂” means the path parameter between “instability” and “emotional exhaustion”; “P₃” means the path parameter between “desire to be independent” and “emotional exhaustion”; “ab” means the comparison between the groups “carefree” and “searching moratorium”; “ac” means the comparison between the groups “carefree” and “moratorium”; “ad” means the comparison between the groups “carefree” and “foreclosure”; “bc” means the comparison between the groups “searching moratorium” and “moratorium”; “bd” means the comparison between the groups “searching moratorium” and “foreclosure”; “cd” means the comparison between the groups “moratorium” and “foreclosure.”

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

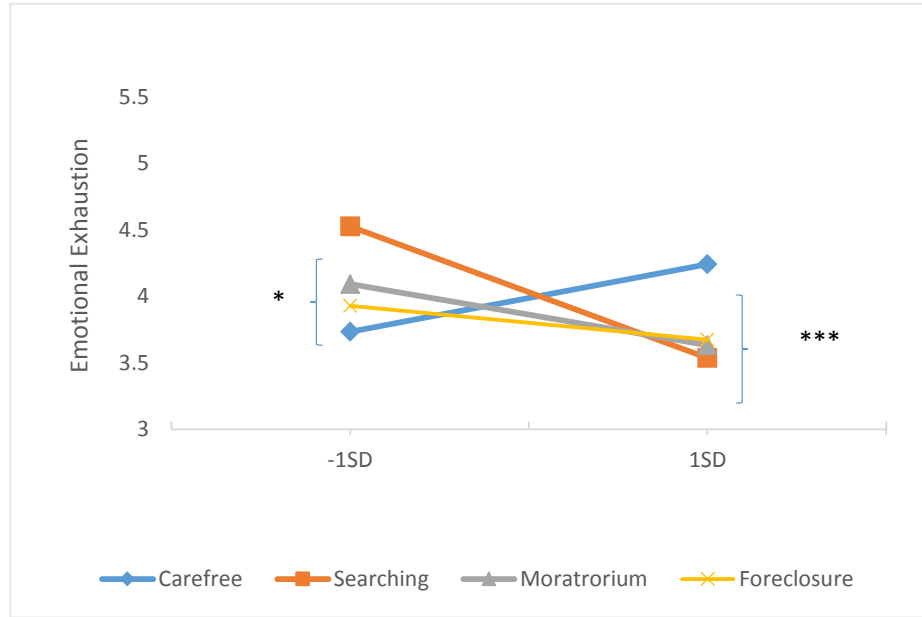


Figure 6 The relationship between identity exploration/experimentation and emotional exhaustion among four groups

Note: -1SD means below one standard deviation; 1SD means above one standard deviation. * $p < .05$, ** $p < .01$, *** $p < .001$

In the cynicism model, the results found that ego identity status moderated the relationship between identity exploration/experimentation and cynicism. Subsequent structure comparison analyses revealed that the relationships between identity exploration/experimentation and cynicism were significantly different between the carefree and searching moratorium groups as well as between the carefree and foreclosure groups. More specifically, identity exploration/experimentation was negatively associated with cynicism in the searching moratorium and foreclosure groups, while the relationship was positively associated in the carefree group.

The results indicate that the searching moratorium and foreclosure ego identity statuses might buffer the negative behaviors when people were practicing exploration and experimentation. In other words, when individuals were experiencing a high level of

identity exploration and experiments, those in the searching moratorium ego identity group (who had experienced a high level of exploration and commitment) or foreclosure group (who had experienced a high level of commitment) had a significantly lower level of cynicism than those in the carefree diffusion ego identity status group (who dislike investing time and energy into identity development) (see Fig. 7).

Table 19 Multi-group Structural Equation Modeling Analysis between Dimensions of the Transition Features of Emerging Adulthood and Cynicism

	χ^2	df	$\Delta\chi^2$	RMSEA	C.I. of RMSEA
Baseline model (CY)	5.95	9		0	[0, 0.07]
Constrained model (P₄)	16.80	12	10.85*	0.05	[0, 0.11]
Constrained model (P ₅)	10.17	12	4.22	0	[0, 0.07]
Constrained model (P ₆)	13.81	12	7.86	0.04	[0, 0.10]
Constrained model (P₄^{ab})	12.74	10	6.79**	0.04	[0, 0.11]
Constrained model (P ₄ ^{ac})	9.34	10	3.39	0	[0, 0.09]
Constrained model (P₄^{ad})	16.10	10	10.15**	0.07	[0, 0.12]
Constrained model (P ₄ ^{bc})	6.44	10	0.49	0	[0, 0.06]
Constrained model (P ₄ ^{bd})	5.95	10	0	0	[0, 0.06]
Constrained model (P ₄ ^{cd})	6.66	10	0.71	0	[0, 0.06]

Note. RMSEA means Root Mean Square Error of Approximation; CY means cynicism; C.I. of RMSEA means the confidence interval of the value of the RMSEA; “P₁” means the path parameter between “identity exploration/experimentation” and “emotional exhaustion”; “P₂” means the path parameter between “instability” and “emotional exhaustion”; “P₃” means the path parameter between “desire to be independent” and “emotional exhaustion”; “ab” means the comparison between the groups “carefree” and “searching moratorium”; “ac” means the comparison between the groups “carefree” and

“moratorium”; “ad” means the comparison between the groups “carefree” and “foreclosure”; “bc” means the comparison between the groups “searching moratorium” and “moratorium”; “bd” means the comparison between the groups “searching moratorium” and “foreclosure”; “cd” means the comparison between the groups “moratorium” and “foreclosure.”

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

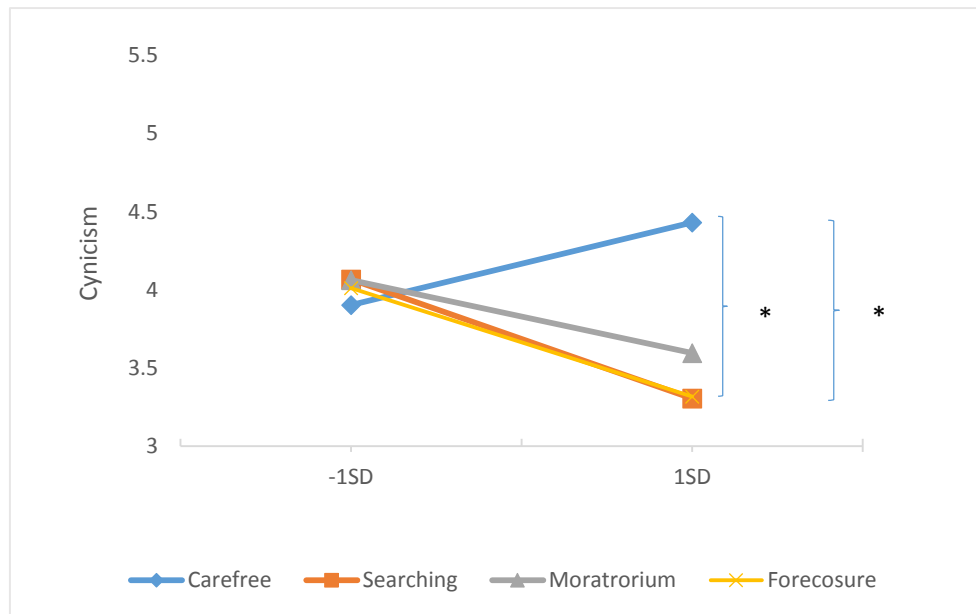


Figure 7 The relationship between identity exploration/experimentation and cynicism in four groups

Note. -1SD means below one standard deviation; 1SD means above one standard deviation. * $p < .05$, ** $p < .01$, *** $p < .001$

In the efficacy reduction model, the results showed that ego identity status moderated the relationship between instability and efficacy reduction. Subsequent structure comparison analyses revealed the relationship between instability and efficacy reduction. More specifically, instability negatively associated with efficacy reduction in the moratorium group, while the relationship was not significantly different in the foreclosure group.

The results indicated that the moratorium ego identity status might buffer the negative self-concept when people were perceived to have a higher level of instability. In other words, when individuals were experiencing and had feelings of a high level of instability, those in the moratorium ego identity group (who had experienced a high level of exploration) had significantly lower levels of self-efficacy reduction than those in the foreclosure ego identity status group (see Fig. 8).

Table 20 Multi-group Structural Equation Modeling Analysis between Dimensions of the Transition Features of Emerging Adulthood and Efficacy Reduction

	χ^2	df	$\Delta \chi^2$	RMSEA	C.I. of RMSEA
Baseline model (ER)	15.71	9		0.07	[0, 0.13]
Constrained model (P ₇)	16.15	12	0.44	0.05	[0, 0.11]
Constrained model (P₈)	23.64	12	7.93*	0.08	[0.01, 0.13]
Constrained model (P ₉)	18.28	12	2.57	0.06	[0, 0.11]
Constrained model (P ₈ ^{ab})	15.78	10	0.07	0.06	[0, 0.12]
Constrained model (P ₈ ^{ac})	16.76	10	1.05	0.07	[0, 0.12]
Constrained model (P ₈ ^{ad})	16.46	10	0.75	0.07	[0, 0.12]
Constrained model (P ₈ ^{bc})	17.84	10	2.13	0.07	[0, 0.13]
Constrained model (P ₈ ^{bd})	16.18	10	0.47	0.07	[0, 0.12]
Constrained model (P₈^{cd})	21.54	10	5.83*	0.09	[0.04, 0.14]

Note. RMSEA means Root Mean Square Error of Approximation; ER means efficacy reduction; C.I. of RMSEA means the confidence interval of the value of the RMSEA; “P₁” means the path parameter between “identity exploration/experimentation” and “emotional exhaustion”; “P₂” means the path parameter between “instability” and “emotional exhaustion”; “P₃” means the path parameter between “desire to be independent” and “emotional exhaustion”; “ab” means the comparison between the groups “carefree” and

“searching moratorium”; “ac” means the comparison between the groups “carefree” and “moratorium”; “ad” means the comparison between the groups “carefree” and “foreclosure”; “bc” means the comparison between the groups “searching moratorium” and “moratorium”; “bd” means the comparison between the groups “searching moratorium” and “foreclosure”; “cd” means the comparison between the groups “moratorium” and “foreclosure.”

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

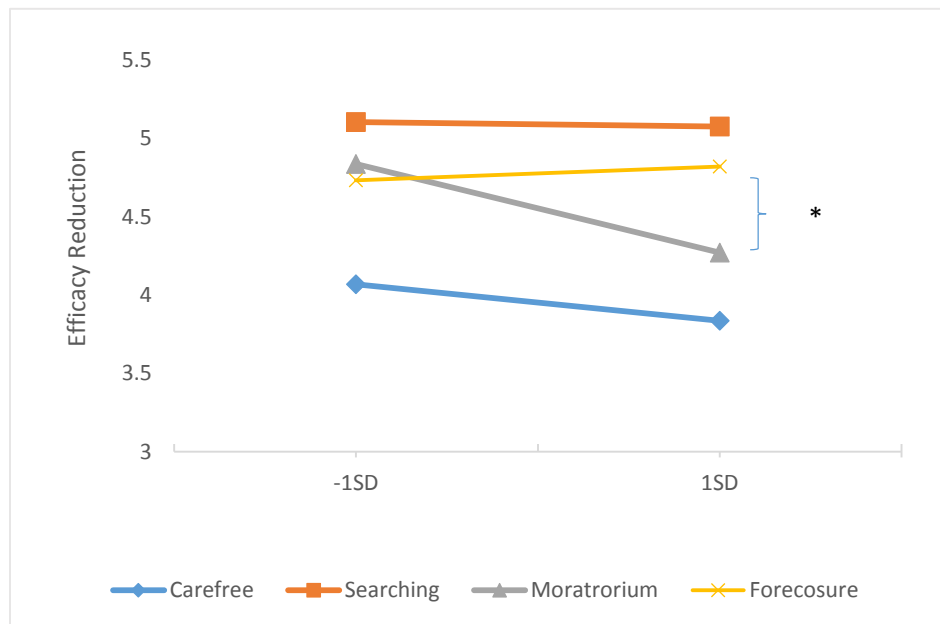


Figure 8The relationship between instability and efficacy reduction among four groups

Note: -1SD means below one standard deviation; 1SD means above one standard deviation. * $p < .05$, ** $p < .01$, *** $p < .001$

Using a person-centered approach, four groups were extracted (searching moratorium, foreclosure, moratorium, and carefree diffusion). Based on the multi-group structural equation modeling approach, the moderating effects of the ego identity status were found in the association between certain dimensions of the transition features of emerging adulthood and dimensions of burnout.

Chapter 5: Discussion

The main purpose of this study is to understand the role of identity status as a moderator between the transition features of emerging adulthood and burnout in mainland China, taking into consideration significant demographics (gender, educational status, and presence of siblings). Some of my hypotheses are supported. I will discuss five findings that enhance our current understanding of emerging adulthood in China. These findings lead me to conclude that, indeed, emerging adulthood, as conceptualized by Arnett, is experienced by young people in China. First, the statistical distribution of perceived adulthood among Chinese young people was similar to that of their Western counterparts. Second, transition features had a unique structure. Third, the experiences of emerging adulthood were different between males and females and between university students and non-students. Fourth, there were no significant differences in the experiences of emerging adulthood between individuals with siblings and individuals without siblings. Fifth, multiple dimensions of transition features were associated with burnout in most instances; however, within this, some features are better than others to protect an individual from burnout. Finally, I will address limitations, directions for future research, and the practical implications of these results.

5.1 “In Some Respects Yes, In Some Respects No”

The present research found that 71% of participants, including university students and non-students, responded “in some respects yes, in some respects no” to questions about whether they perceived themselves as adults. The responses of Chinese young people in this study are similar to those in previous studies (Wu, 2011; Pang, 2010; Nelson & Chen, 2007; Nelson & Badger, 2004; Nelson, et al., 2013). The high proportion of responses in

this category supports the Arnett's emerging adulthood theory.

Furthermore, this pattern of findings is also in line with previous research. As was presented in the literature review, emerging adulthood has been addressed as a world phenomenon. Emerging adulthood exists in cultures other than in the West (Douglass, 2007; Moreno, 2012; Cote & Bynner, 2008), for example, in Japan, South Korea (Rosenberger, 2007; Jones & Ramdas, 2004), India (Nicole & Nelson, 2011), Argentina (Facio & Micocci, 2003), Latin America (Fuligni, 2007), and China (Nelson, Badger & Wu, 2004; Wu, 2011). My study provides further empirical evidence that emerging adulthood exists in mainland China.

However, a higher percentage of individuals perceived themselves as “in-between” was revealed in this study, which distinguishes my study from Nelson et al. (2004) and Wu (2011). Given that Nelson et al. and Wu only studied university students, I compare my results that focused on university students to theirs. In Nelson et al.'s study, 35% of the university students felt ambivalent about their adult status. In Wu's study (Wu, 2011), 73.2% of the university students felt they were in-between of adolescence and adult status. The percentage was substantially higher in my study (82.4%). In other words, a much higher percentage of Chinese university students in the current study was ambivalent about their adult status compared to the participants surveyed a couple of years ago.

The role of social changes may provide a perspective from which to explain this pattern of change. I collected my data in 2013 from university students in the metropolitan city of Beijing. Wu (2011) collected his data in 2008 among university students in the undeveloped city of Lanzhou. Although the data was also collected in 2001 by Nelson and his colleagues from university students in Beijing (Nelson, et al.,

2004), certain social factors, such as higher education, which impacts individuals' perceptions about their adult status, have changed in this decade in China.

Specifically, since 1999, people receiving higher education in China has rapidly increased (China Education Department, 2007). According to statistics compiled by the Ministry of Education, it was estimated that 13.5% of young people aged 18-22 were admitted into universities in 2001, which had increased to 23.3% in 2008 and 34.5% in 2013 (Gross Enrolment Rate of Education by Level, 2014). In 2001, being a university student showed one's intelligence and industriousness; it also as implies that there would be a better job opportunity after graduation. However, due to higher education reform in China, university admittance has become less competitive and does not guarantee job security. Individuals who enroll in universities are usually over 18 years old and legally adults. However, these university students still feel they are not fully adults because it becomes difficult in such unstable situations to find a job, which is one of the criteria to be an adult.

In addition, multiple educational choices have been offered to Chinese young people since the late 1970s when China opened to the outside world. Chinese parents are not satisfied with China's education system, which values students merely for their academic performance at the cost, for decades, of their personal lives and interests. Thus, a growing number of Chinese parents are sending their children abroad to study at a younger age. According to an educational report, the number of Chinese students studying abroad at various educational levels reached 459,800 in 2014 (China's Students Overseas, 2015), meaning that Chinese young people have multiple choices for their education. These choices offer young people many opportunities to explore before

making career decisions. In sum, a lack of job security and more educational choices after high school may help explain why the higher percentage of university students perceive themselves to be in-between in the present study.

5.2 The Appropriateness of Arnett's Theoretical Model for Chinese Young People

One important question in my study is whether or not Arnett's theoretical model fits Chinese young people. The unique structure of the transition features of emerging adulthood includes three dimensions — “identity exploration/experimentation,” “instability/negativity” and “desire to be independent” — which were revealed among Chinese young people in the present research. According to the results of psychometric analyses using Chinese young people sample, the three-dimension structure had good reliability and validity. I will summarize Arnett's theoretical model first. Then I will provide evidence based on the current study to defend my argument that Arnett's theoretical model fits Chinese young people only to certain degree.

Arnett (2004) proposed five characteristics of emerging adulthood: (a) identity exploration, especially in love and work; (b) instability in various life aspects; (c) self-focused; (d) feeling in-between, neither adolescent nor adult; (e) possibilities, when hopes flourish, and when people have an unparalleled opportunity to transform their lives.

In general, theories must be carefully examined across cultural settings before they can be used beyond those settings (Cheung & Rensvold, 2002; Spencer, Fitch, Grogan-Kaylor & McBeath, 2005). Arnett (2004) proposed that his features can only fit for certain countries like US, and “only under certain conditions that have occurred only

quite recently and only in some cultures” (p. 21). As discussed in the literature review, the structure of the transition features of emerging adulthood is demonstrated to be different in diverse cultures (Arias & Hernandez, 2007; Atak & Cok, 2008; Baggio, Iglesias, Studer & Gmel, 2014; Negru, Subtirica, & Opre, 2011; Lisha, et al., 2012). A criticism of this emerging adulthood theory is that it may be insufficiently developed due to cultural limits. The present study makes a positive contribution to improving the theory.

What makes Chinese culture unique is that it melds traditional and modern elements. That, in part, helps explain why the structure of the transition features of emerging adulthood among Chinese young people is different from the one originally developed in Western society. On the one hand, traditional Confucian beliefs and values (i.e., filial piety, harmony, and family obligation) are still predominant in Chinese society (Zhang & Liu, 2012; Nelson & Chen, 2007). On the other hand, new social and moral standards emerge as transition features, especially among young people, due to economic development and globalization. For instance, self-achievement becomes highly valued among the youth of today in China due to increasing opportunities and rapid economic growth (Yue & Cheung, 2000). In addition, Chinese youth are becoming more and more self-centered and disrespectful to their elders (Liu, 2011) because of the “one child” policy. In this complex cultural background, the transition features of emerging adulthood may present unique characteristics. The specific dimensions will be discussed in the following sections.

In my study, identity exploration was a new composite dimension that comprises items from “feeling in-between,” “identity exploration,” and “possibilities,” all of which were part of the original measure. Arnett (2004, 2006) described emerging adulthood as a

period in which individuals are free to explore possibilities in a variety of life domains. Kroger and Marcia (2011) also stated that constructing a strong identity represents a core developmental task during the transition to adulthood. In addition, exploration and experimentation are beneficial for individuals' identity development. Furthermore, Cheng and Berman (2012) explained that experimentation and exploration help Chinese adolescents to achieve a sense of who they are and how they can fit into their society. Literature has also supported "identity exploration" as one of the transition features of emerging adulthood among Chinese young people.

Becoming independent and self-sufficient are central issues of emerging adulthood (Arnett, 2011). Chinese young people also consider independence, especially in the financial sense, as one of the criteria necessary to become an adult (Wu, 2011; Nelson & Chen, 2007). Chinese individuals' desire to be independent is also emphasized as one of the features of emerging adulthood, but this is more due to parents' expectations than to actual desire on the part of the emerging adults. A comparison study between parents and young people showed that more mothers perceived their children to be adults than children themselves (Nelson, Duan, Padilla-Walker & Luster, 2012).

Independence and self-sufficiency have different meanings for people from diverse cultures. In individualistic societies, this cultural belief, which is called the ethic of autonomy, means that individuals are in a period of self-focused leisure, achievement, and fun. In contrast, emerging adults from collectivistic societies move away from dependence on their parents and try to show they can manage their lives on their own (Arnett, 1998). In China, traditional collectivistic beliefs place a stronger emphasis on the interests of the group, especially family, over the preference of individuals. For Chinese

young people, the primary motivation for being independent is to provide financial stability and to be responsible for their families for themselves, rather than to focus on their careers, relationships, worldviews, and self-sufficiency (Zhang & Liu, 2012). For example, “factory girls” are a group of young women who leave their rural villages to seek work in China’s booming industrial cities and support their families financially (Chang, 2008). Rather than the emphasis on self-focused leisure and fun that emerges from a Western sample, the willingness to be independent and take care of family members are the accurate signs of self-sufficiency among Chinese young people.

The desire to be independent and self-sufficient pushes young people to grow up. However, due to the social changes in contemporary Chinese society, most young people experience life without clear direction. In the past, children lived with their parents, went to school, graduated, moved out of the house, got jobs, married. In other words, their lives were shaped by obligations to family members and employers.

Today’s emerging adults have a different kind of life. They may live independently, but if they do have jobs, those jobs often don’t pay a living wage. Most Chinese parents continue to support their children who no longer live under the same roof. Yet these children have no family obligations. Having no direction often makes people feel anxious and depressed. Dickson and MacLeod (2008) found that adolescents reported higher scores on depression and anxiety when they have no clear goals or plans. In addition to a lack of direction, people experience various challenges in the transition period, such as being unemployed, breaking up with partners, having to pay bills, and struggling to find financial support. This situation gets even worse nowadays in China. Due to reforms in higher education, there have been more university graduates but fewer employment

opportunities since 1999 (China Education Department, 2007). A large number of graduates cannot find jobs and therefore lack stability. Furthermore, individuals may feel incapable of controlling their lives even though they are willing to become independent in this financially unstable situation. Thus, instability/negativity arises as one of the transition features of emerging adulthood among Chinese young people.

I conclude that emerging adulthood is currently prevalent in China, but that Arnett's emerging adulthood model does not fully apply to the Chinese young people in my study. More specifically, the transition features of emerging adulthood among Chinese young people include identity exploration/experimentation and instability/negativity, which are almost identical to the features developed in Arnett's theory. The third dimension—desire to be independent—conceptualizes both taking care of family members and the willingness to be independent, referred to as “self-focused” in Arnett's theory.

5.3 Gender and Educational Differences

For each component of emerging adulthood (endorsement, transition features, and identity status clusters), I examined differences between gender, educational status, and presence of siblings. Differences emerged consistently for gender and education are discussed in the following sections.

The present study found that males and females had different perceptions of emerging adulthood. Specifically, females than males reported that they were in between of adolescents and adults. This result can be explained by the fact that Chinese young men experience more societal pressure to assume adult roles. In China, males are expected to become financial independently earlier than females, due to different gender roles and social expectations based on Confucian concepts. For example, Chinese male

people have to afford a whole house in order to get married and are supposed to be adults. Compared with males, females have been given more time to approach their career goals.

Furthermore, there are barriers for Chinese females to get access to the employ market. Chinese females usually have lower incomes and less prestigious occupations status than males, despite economic reforms (Liu, 2008). They are socialized to help with household chores and take care of younger siblings, according to the three cardinal guides of the Confucianist ethics and morals (Li, 2001). Chinese females are easily assumed to have bad work performance due to multiple family roles, thus they have to get more educations and trainings to get the same positons with their male counterparts. Take into account these reasons, Chinese young females are stuck in between and need more time to settle down, especially in work aspect.

However, more female participants were identified in the foreclosure cluster (low exploration and high commitment), which partially supports the hypothesis of this study. This result can be explained by the fact that Chinese young women were influenced by the concept of harmony to a higher degree. Women are more relationship oriented, they are more would like to follow the suggestions from the significant figures like parents.

This study also supports the theory that educational status is related to Chinese young people's perceptions about adulthood status, transition features of emerging adulthood, and ego identity development. Specifically, more university students reported that they were in-between of adolescence and adulthood. This result is consistent with the hypothesis and previous research (Anett, 1997, 1998; Seiter & Nelson, 2011). Individuals who are in employment reported higher scores than university students on the levels of instability/negativity and desire to be independent. Moreover, compared to university

students, the moratorium group (low level of commitment and high level of exploration) included more people who were currently employed or have work experience. These findings can be explained by the fact that universities usually provide an isolated and protective environment in which students can delay their life choices (Johnson, Berg, Sirotzki, 2007).

Post-secondary schooling in China is seen as a period of delaying “real life,” in which individuals typically try many different options and do not make long-term decisions. A research showed that youth with higher levels of education were likely to stay at home longer, or at least for as long as it takes to complete their education, which delayed their developmental path to adulthood (Bendit, Hein, & Biggart, 2009; Moreno, 2012). This makes university students feel more as if they are in-between of adolescence and adulthood.

Due to their highly structured schedules, few university students feel unstable and independent in their daily lives. The Ministry of Education in China controls most higher education institutions through policy-making, legislation, planning, funding, and evaluation (Ministry of Education of the People’s Republic of China, 2015). The only real “work” option for Chinese university students is to register as full-time students for four years while enrolled in undergraduate programs. School provides a simple and relaxed environment in which young people mainly focus on their academic performance. Most students do not consider career development until graduation. In addition, students are able, to a certain extent, to live a stable life for at least four years without financial burden. Most university students can be fully supported by their parents in China (Li, 2007). Fewer students desire to be independent in this situation. However, those who are

currently employed have to live independently with fewer opportunities to gain financial support from their parents. Therefore, university students are more likely to experience a lower level of “instability/negativity” and “desire to be independent” than individuals who are currently employed.

Even though education is highly valued in China, a significant proportion of young people enter the work force right after graduation from high school. Some freely choose to leave school. Others have no choice because of a bad situation (e.g., lower exam scores, lack of financial support). Some try different kinds of work and explore their dream jobs. Others have to make decisions at an early age due to limited financial resources. The pursuit of post-secondary education directs some emerging adults to a different lifestyle. Those who pursue university education have lives structured around going to classes, doing homework, and preparing for exams. Most of their work focuses on school and they have fewer opportunities to explore in order to make a commitment to career development (Arnett, 2011). Compared to university students, the moratorium group (low commitment and high exploration) in the present study included more people who were working or had work experiences.

5.4 China's One-Child Policy

My results indicated that between individuals with siblings and those without, no significant differences were found in perceptions about adulthood status, transition features of emerging adulthood, or ego identity development. The results are inconsistent with the hypothesis and can be explained by the particular characteristics of the current sample, which was recruited only from young people in Beijing.

Due to China's one-child policy¹, families with only one child have been common since the 1970s. Usually, individuals who have siblings receive little family support (Liu, Qin, & Mu, 2010). Even though individuals with at least one sibling show more mature and clearer choices in their careers (Liu, 2014), there is also evidence that individuals without siblings may receive more family support to explore their career possibilities. For example, research by Fang and his colleagues revealed that an only child had more time and opportunities to make a career decision after enough exploration, but that individuals with siblings were more likely to have a foreclosed self-identity due to their family's limited resources (Fang, Jing, & Wang, 2010).

Individuals without siblings benefit from all of their family's resources, and they are more likely to experience emerging adulthood. However, because of the traditional concept that Chinese young people must care for their elderly parents, individuals without siblings have an additional burden along with benefits. According to the Law of the People's Republic of China on the Protection of the Rights and Interests of the Elderly (The Central People's Government of the People's Republic of China, 2005), children are required to support parents who are above 60 years old. This is a big burden for those who are studying or working in big cities, especially for those who have no siblings. They have to make a significant effort to look after themselves in a big city, and also consider and prepare their parents' retirement living arrangements. A young university lecturer in the Jiangsu province, Zhang Ye, stated that taking care of elderly parents is reasonable but puts too much pressure on people who are in search of work and

¹ Chinese government announced it would relax the rules to allow all couples to have two children (Forsythe, 2015). However, this new two-child policy will not be implemented until it is ratified in annual session of the National People's Congress scheduled in March 2016 (Xinhua, 2015; BBC, 2015). The current sample from the present study are mainly impacted by one-child policy.

independent in big cities (The Associated Press, 2013 July). For individuals who have no sisters or brothers to push them to explore, there is even more pressure to make a commitment to career development at an early age.

In the present study, I recruited participants from two universities and a local factory in Beijing. Participants without siblings have more family support than those with siblings, but the former have more responsibilities for their elderly parents. These two competing demands of family support and responsibilities may result in no difference in the experience of emerging adulthood between individuals who have siblings and those who do not. In other words, the positive effects of family resources may be counteracted by the negative effects of family responsibilities. In order to gain a better understanding about these competing roles, further research is needed on the only-child family. For instance, participants from families with diverse features (e.g., middle-upper class, having different numbers of children) should be involved in such a study and compared to each other.

5.5 Protecting against Burnout

I examined the relationship between the transition features of emerging adulthood and burnout and then involved profiles of ego identity status as the moderating factor in this relationship. The specific explanations will be discussed in the following section.

5.5.1 Relationship between the transition features of emerging adulthood and dimensions of burnout.

My results showed that those who experience more instability/negativity were also more likely to experience emotional exhaustion and cynicism. Generally, young people have many potential sources of instability/negativity, such as temporary residences,

casual jobs, and unstable intimate relationships. Instability/negativity is conceptualized as the meaning of possibility. Previous studies showed that possibility was an advantage of emerging adulthood (Fazio & Micocci, 2003; Arnett, 2007). Erikson (1966) may have foreseen this negative relationship when he stated that the inability to settle upon an identity can result in significant confusion and distress for some individuals. These types of instability/negativity are not limited to Western society (e.g., Tanner et al., 2009), they are also prevalent and even more evident in an Eastern societies such as China. Over the last two decades, China has become one of the countries with the highest economic growth rates in the world, with a rare, sustained “economic prosperity.” However, along with the economic development, it has become instability/negativity: economic restructuring, an increasing rate of unemployment leading to layoffs, the world’s most serious corruption, and a wide range of ecological destruction (Wang, Hu, & Ding, 2002). This instability affects individuals on a daily basis; they have faced social stresses such as expensive housing, competitive university programs, and fewer employment opportunities. Overall, it seems that for the sample of this study, instability/negativity is not an adaptive component of emerging adulthood but something rendering individuals more vulnerable to burnout, at least in terms of emotional exhaustion and cynicism.

My results also showed that identity exploration positively predicted cynicism and efficacy reduction. This means that those who have a higher level of experimentation and identity exploration are less likely to exhibit protective action to reduce a perceived threat. The high level of experimentation and identity exploration also results in a decreased belief in one’s ability to complete tasks and reach goals. This can be explained by Erikson’s Theory of Psychosocial Development. Erikson (1966) believed that those who

received positive reinforcement through personal exploration would develop a strong sense of self and feelings of control and competence, the latter of which motivated behaviors and actions. Hypothetically, the higher level of experimentation may be, to some extent, the result of a higher level of failures of personal exploration in the areas of educational attainment, career development, and intimate relationships. Such failures will lead to individuals' decreased belief in and desire for achievement in those life areas.

5.5.2 The moderating role of ego identity status

Based on the positive association between the transition features of emerging adulthood and burnout, multiple group modeling analyses were conducted to examine whether ego identity status could play a protective role against burnout symptoms. The results showed that searching moratorium ego identity status played a moderating role in the relationship between identity exploration/experimentation and emotional exhaustion as well as cynicism; moratorium ego identity status played a moderating role in the relationship between instability/negativity and self-efficacy reduction.

More specifically, when individuals were experiencing a high level of identity exploration and experimentation, those in the searching moratorium ego identity group (i.e., had experienced a high level of exploration and commitment) had a significantly lower level of emotional exhaustion than those in the carefree diffusion (i.e., not investing time and energy into identity development) and foreclosure ego identity status (i.e., had experienced a high level of commitment) groups. When individuals were experiencing a high level of identity exploration and experimentation, those in the searching moratorium ego identity group or foreclosure group had a significantly lower level of cynicism than those in the carefree diffusion ego identity status group. When

individuals were experiencing a high level of instability/negativity, those in the moratorium ego identity group (i.e., had experienced a high level of exploration) had a significantly lower level of self-efficacy reduction than those in the foreclosure ego identity status group. In other words, experiencing oneself as in a moratorium group serves as a protection against burnout.

The Socio-developmental Identity Capital Model (Cote, 1996, 1997) can explain the moderating role of ego identity status clusters in the relationship between transition features of emerging adulthood and dimensions of burnout. The model proposes that young people in the transition period are facing developmental challenges. However, they can develop and use the resources necessary to function effectively in either school or work settings. For instance, “individuals can compensate for the instability of current society by investing in identity-related work” (Luyck, Wite, & Goossens, 2011), and this process leads to a set of identity capital acquisitions. Acquisitions of identity capital are related to identity status (Cote & Schwartz, 2002).

Ego identity statuses, such as achievement status (high levels of exploration and commitment), are positively related to identity capital acquisitions, while identity diffusion and carefree statuses are negatively related to identity capital (Cote & Schwartz, 2002; Cote, 2002). Usually, individuals with transition features, such as a higher level of exploration/experimentation (i.e., in the midst of exploring life choices), suffer from emotional exhaustion and cynicism (Arnett, 2007; Luyckx, Klimastr, Duriez, Petegem, Beyers, & Teppers, 2013). When they have tried to make a commitment after enough exploration and are approaching achievement ego identity status, their level of emotional exhaustion may be reduced because they are now better equipped to capitalize on the

restructuring nature by pursuing opportunities that lead to self-improvement and optimal well-being in various life domains. However, for people in the carefree status group (i.e., dislike investing time and energy into identity development), too much experimentation or a drop in the structured characteristics of emerging adulthood, can be debilitating and leads to a gap between individuals' assets and contextual characteristics. Hence, people suffer more emotional exhaustion and experience a higher level of cynicism when they refuse to think about or discuss the future. As Gullotta and his colleagues noted, "how hard would it be to present yourself to others if you have no idea who you are?" (Gullotta, Adams & Markstron, 2000, p 83). For my Chinese sample, it seems that searching moratorium has been identified as the ideal ego identity status, due to the unique cultural settings and age limits (18 to 25 years old) of the sample.

Individuals who had a higher level of exploration (i.e., searching moratorium and moratorium) functioned better than those who had a higher level of commitment (i.e., foreclosure). This result can be explained by the self-determined theory related to career development. People in foreclosure identity status are usually characterized by their acceptance of parents' or teachers' values, rather than by self-determined goals (Beckett & Taylor, 2010). These young people seem to have already achieved adulthood, but in fact they may face big challenges because they are relying on introjection and identification to pursue career development rather than seeking their own identity. Gullotta and his colleagues said that adolescents in foreclosed identity status are immature in terms of social behavior and have relatively constricted personalities. Such adolescents also ignore their future development possibilities, and generally have a difficult time adapting to changing social environments (Gullotta et al., 2000). Those in

searching moratorium or moratorium identity status are also in an uncomfortable position and may be trapped, but they are competent agents who follow their intrinsic motivation to pursue their career development. People who are self-determined and have higher intrinsic motivation are less likely to suffer from negative emotional problems. Shih (2015) conducted research on a group of Taiwanese adolescents and found that individuals who were self-determined had a lower level of burnout. A study of Korean adolescents also found that intrinsic motivation was negatively related to burnout, and that greater extrinsic motivation was positively related to burnout (Chang, Lee, Byeon, Lee, 2015).

The unique Chinese cultural background also supports the moderating role of ego identity development in the relationship between the transition features of emerging adulthood and negative psychosocial functions. Along with the development of economic restructuring in China, the traditional life cycle has gone off course in recent years. Young people have more opportunities and freedom but are able to learn less about life experiences from the previous generation. As a result, the youth of today have become a part of the “lost generation.” Most youth in China suffer from confusion and feeling that they are incapable of being independent for a long time in their twenties. As 24-year-old Mao Ce, who was interviewed by *Time*, said, “I feel that my life is like a wind, blowing quickly and changing direction often; I have no plan for my future, and I don’t want one” (Dundon, 2008). In this highly changeable society, young people who try to explore or make commitments to career development can obtain certain life directions leading to well-developed strategies to cope with stress or burnout. In short, developed and developing ego identity statuses (i.e., searching moratorium, moratorium), as significant

individual capital and potential agents, buffer the detrimental effects on the experiences of transition features during emerging adulthood among Chinese young people. More specifically, the searching moratorium ego identity status reduces the level of emotional exhaustion and cynicism when individuals have a higher level of identity exploration/experimentation; moratorium ego identity status helps individuals to maintain their efficacy when individuals are in a higher level of instability/negativity.

5.6 Limitations and Future Research

An important limitation of the present study is its cross-sectional design. I cannot draw a conclusion about the causal relationship between transition features and burnout. The actual situation may be that individuals who are suffering burnout may exhibit instability and a tendency to think obsessively, or vice-versa. In addition, unique features of Chinese young people cannot be captured by quantitative research alone. Hence, future research should track the transition features of emerging adulthood, identity patterns, and burnout using longitudinal and mixed designs that include a qualitative component.

Another limitation of this study is that life experience rather than place of birth may have been a better way to capture the distinction between urban and rural participants. In China, migration is prevalent and the place of birth may not accurately represent the living situation of young people. In 2006, the net migration rate was 0.39 per 1000 (Singh, 2008). In 2011, there were 252.78 million migrant workers in China (National Bureau of Statistics of China, 2012). Among them, many were born in 1980s, and are referred to as “new-generation” migrants (Hu, 2012). They were born in rural communities but moved to urban areas for education or work. Most have little experience of working in the agricultural economy. Even though they are classified with the group born in rural areas,

they have lost some elements of their local culture and are more influenced by urban and global cultures. The rural “forgotten half,” who spend most of their lives in rural places, should be involved in future research to ensure a more complete picture of emerging adulthood in China.

Yet another limitation to my study is that I have not actually measured culture-related variables (e.g., filial piety, harmony). I made the assumption that current Chinese youth live in a society that involves both traditional and modern cultures. However, I have not provided objective criteria, which can better clarify emerging adulthood in current China, to measure individuals’ values. To obtain a more accurate picture, I will consider involving measures about Chinese values and concepts in my future work.

Finally, although burnout is an appropriate outcome of the transition features of emerging adulthood, examining only one criterion from one direction may lead to an arbitrary conclusion. Hence, future research can include other internalizing and externalizing behavior problems such as depression, suicidal ideation, substance abuse, smoking, and violence. Positive psychosocial functioning such as well-being, self-esteem, positive emotions, and prosocial behaviors should also be considered in future research.

5.7 Conclusions and Implications

Despite its limitations, the present study has provided important information regarding emerging adulthood among Chinese university students and non-students aged 18 to 25 years old. It has incorporated the impact of cultural values and demographic factors including gender, educational status, and presence of siblings. The transition features of emerging adulthood are related to the youth’s cultural values and life experience during

this developmental stage. My study also contributes to the understanding of psychosocial functioning during emerging adulthood. Ego identity status provides me with another research angle from which to further examine the relationship between the transition features of emerging adulthood and negative psychosocial outcomes. Based on the implications related to this study, Chinese young people benefit from opportunities and possibilities afforded to them at the age of 18-25.

My study suggests that young people in China should become more aware that their transition into adulthood may take an extended period of time. The theory of emerging adulthood started in Western society two decades ago. However, this theory is still being developed in Eastern settings. Unlike their parents, who lived during a planned economy, Chinese young people need to slow their pace and spend more time exploring life choices for their future. My research shows that individuals who try either exploration or commitment are less likely to suffer from burnout than those who refuse to even think about ego identity development. Moreover, individuals who are in moratorium status adjust better than those who make a commitment without enough exploration. In order to avoid or reduce negative situations during emerging adulthood, it is beneficial for Chinese young people to gain awareness by first developing their ego identity with exploration and then making a commitment using specific approaches. One of the most convenient and efficient approaches is to appropriately use social media.

Current social media, including webpages, Massive Open Online Courses, Facebook, YouTube, and Twitter, provide a platform for young people to acquire up-to-date knowledge and information, and conveniently communicate with peers. Young people can easily read current theories or take online courses related to emerging

adulthood. Such courses are quite beneficial for them to get to know themselves and learn some social skills to improve their lives. In addition, using social media tools for communicating and discussing also provides a good way for young people to enhance awareness and strategies to transition into adulthood.

I recommend that policymakers do things to help reduce the negative uncertainty associated with emerging adulthood: they can create new job opportunities, offer affordable housing, and so on. Many young people are living in unstable environments. If they can get some supports from the government to find jobs or solve their living problems, they are less likely to suffer from negative psychological experiences such as burnout, depression and anxiety. Such supports will give young people the opportunity to explore their futures and begin making commitments.

In addition, I suggest that policymakers provide more opportunities for young people, especially non-students, to learn about themselves and explore choices in career development. In China, most students have been supported by both educational institutions and the government. For example, most Chinese universities offer career-related workshops and individual consultations. In March 2015, the Ningxia provincial government developed a new employment plan, “2+5,” for recent graduates of local universities (Chen, 2015, Mar). However, governments have provided little support for non-students. The present study suggests that local communities and the government should also establish corresponding policies to support those who enter the labor market after high school, to help with the transition from adolescence to adulthood.

To provide further direction about psychosocial development among young people, it is strongly recommended that more specific topics of research, such as ego identity

developmental paths, be investigated. The present study found that ego identity status played a moderating role in the relationship between the transition features of emerging adulthood and burnout. The next step in learning about emerging adulthood should be to examine how to facilitate the development of ego identity. For example, Cote (2010) described two distinct ego identity developmental paths: default individualization, which means individuals develop their identity by passive acceptance; and developmental individualization, which refers to individuals who more actively pursue personal growth using strategic approaches. To provide more directions to develop young people's ego identity, it is beneficial in future studies to differentiate between these two developmental paths and identify, which is more appropriate for Chinese young people. Emerging adults can develop their ego identity using either method and try to foster a favorable balance in their own cultural settings. Parents, teachers, and local communities can explore ways to help young people to choose developmental paths that are unique to them, and those paths fit their individual needs.

The implications of my study for practitioners (e.g., psychologists, teachers, social workers, counselors, and doctors) are two-fold. First, it is recommended that practitioners be more sensitive to culture, gender, educational attainment, and family structure (e.g., siblings' relationship). Young people's perceptions of adulthood and emerging adulthood are influenced by the culture in which they live, which is usually different from mainstream culture and changes with time. Thus, practitioners are encouraged to enhance their cultural awareness from a historical perspective. Second, practitioners need to consider demographic variables as factors that can significantly influence young people's perceptions and need for services. The barriers that individuals face when transitioning

into adulthood will depend on their social backgrounds. Some barriers will be disproportionately higher than others. Thus, services in education, labor, family planning, and health need to be provided according to the needs of different groups of people. For example, different transition programs should be developed to fit university students and non-students.

5.8 Personal Reflection

The doctoral study is a long and sometimes quite painful journey. When the dissertation is coming to the end, the stress did not leave away due to its. New stress is coming along with the new start. However, the doctoral study will be my most memorable time not only because it is such a special program but also a particular life period in my life.

When I just started my doctoral program, I was 25 years old which is the life stage labeled as “emerging adulthood”. At that time, I have the best expectations about my future, even I moved quite often from the south to the north and sometimes lack of money. In the following five and half years, I lived with a challenged but also exciting life. Within these around five years, I could not remember how many times I cried in the washroom after the lectures because I could not understand even a word. I also could not remember how long I worked during the whole night to figure out which would be the best fit model. I was confused and even suffering from burnout due to bad performance in the academic study. At the same time, I was offered multiple opportunities in this period. I had my first time to present my study in a conference symposium. I also got some chances to work with local communities. And I also tried to learn how to make drinks as a bartender. By these experiences, I gradually find out what are my real interests.

Without this uncertain and full of possibilities period, I could not image who I am

and where should I go. I may still follow my parents or others' life without thinking by myself. I am so lucky to get through emerging adulthood with this special study experience and looking forward to the next step of my life. As Arnett stated that "emerging adults develop skills for daily living, gain a better understanding of who they are and what they want from life and begin to build a foundation for their lives (Arnett, 2004)". I really appreciate what I have been given from the doctoral study in my emerging adulthood. I would like to end by Gump's saying "Life was like a box of chocolates. You never know what you are gonna get."

References

- Arias, D.F., & Hernandez, A.M. (2007). Emerging Adulthood in Mexican and Spanish youth: theories and realities. *Journal of Adolescent Research*, 22, 476-503.
- Arnett, J. J. (1994). Are college students adults? Their conceptions of the transition to adulthood. *Journal of Adult Development*, 1, 213-224.
- Arnett, J. J. (1997). Young people's conceptions of the transition to adulthood. *Youth & Society*, 29, 1-23.
- Arnett, J. J. (1998). Learning to stand alone: The contemporary American transition to adulthood in cultural and historical context. *Human Development*, 41, 295-315.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.
- Arnett, J. J. (2003). Conceptions of the transition to adulthood among emerging adults in American Ethnic Groups. *New Directions of Child and Adolescent Development*, 100: 63-75.
- Arnett, J. J. (2004). *Emerging adulthood: the winding road from late teen's through the twenties*. New York: Oxford University Press.
- Arnett, J. J. (2005). The developmental context of substance use in emerging adulthood. *Journal of drug issues*, 35(2), 235-254.
- Arnett, J. J. (2006). The psychology of emerging adulthood: what is known, and what remains to be known? In Arnett, J. J., Tanner, J. L. (Ed.), *Emerging adults in America: Coming of age in the 21st century* (pp. 21-55). Washington, DC: American Psychological Association.
- Arnett, J. J. (2007a). Emerging adulthood: What is it, and what is it good for? *Child development perspectives*, 1(2), 68-73.

- Arnett, J. J. (2007b). Suffering, selfish, slackers? Myth and reality on emerging adults. *Journal of Youth and Adolescence*, 36, 23–29.
- Arnett, J. J. (2007c). Socialization in emerging adulthood: From the family to the wider world, from socialization to self-socialization In J. Grusec & P. Hastings (Eds.), *Handbook of socialization* (pp. 208–231). New York: Guilford.
- Arnett, J. J. (2010). Oh, grow up? Generational grumbling and the new life stage of emerging adulthood—commentary on Trzesniewski & Donnellan (2010). *Perspectives on Psychological Science*, 5, 89-92.
- Arnett, J. J. (2011). Emerging adulthood(s): The cultural psychology of a new life stage. In Jensen, L. A. (Eds.), *Bridging cultural and developmental approaches to psychology: New syntheses in theory, research, and policy*, (pp. 255-275). New York, NY: Oxford University Press.
- Arnett, J. J., & Tanner, J. L. (2006). *Emerging adults in America: Coming of age in the 21st century*. Washington, DC: American Psychological Association.
- Arnett, J. J., Tanner, J. L. (2011). Themes and variations in emerging adulthood across social classes. In Arnett, J. J., Kloep, M., Hendry, L.B. Tanner, J. L. (Eds.), *Debating emerging adulthood: stage or process?* (pp. 31-52). New York, NY: Oxford University Press.
- Asendorpf, J. B., Borkenau, P., Ostendorf, F., & Van Aken, M. A. (2001). Carving personality description at its joints: Confirmation of three replicable personality prototypes for both children and adults. *European Journal of Personality*, 15(3), 169-198.
- Atak, H. (2011). Gradual transition to adulthood: is emerging adulthood the only main

- road? *Elementary Education Online*, 10, 51-67. Retrieved from <http://ilkogretim-online.org.tr/vol10say1/v10s1m5.pdf>
- Atak, H., & Çok, F. (2008). The Turkish version of Inventory of the Dimensions of Emerging Adulthood (The IDEA). *International Journal of Humanities and Social Sciences*, 2, 148-154.
- Badger, S., Nelson, L. J., Barry, C. M. (2006). Perceptions of the transition to adulthood among Chinese and American emerging adults. *International Journal of Behavioral Development*, 30, 84-93.
- Baggio, S., Iglesias, K., Studer, J., Dupuis, M., Daeppen, J. B., & Gmel, G. (2015). Is the relationship between major depressive disorder and self-reported alcohol use disorder an artificial one?. *Alcohol and alcoholism*, 50(2), 195-199.
- BBC. (2015, Nov). China two-child policy not valid until March, government says. Retrieved from <http://www.bbc.com/news/world-asia-china-34697016>.
- Beckett, C., & Taylor, H. (2010). *Human growth and development*. California, United States: Sage.
- Bell, S., & Lee, C. (2008). Transitions in emerging adulthood and stress among young Australian women. *International journal of behavioral medicine*, 15(4), 280-288.
- Bergman L. R. & Magnusson, D. (1997). A person-oriented approach in research on developmental psychopathology. *Development and Psychopathology*, 9, 291-319.
- Berman, S. L., You, Y. F., Schwartz, S., Teo, G., & Mochizuki, K. (2011). Identity exploration, commitment, and distress: A cross national investigation in China, Taiwan, Japan, and the United States. *Child Youth Care Forum*, 40, 65-75.
- Bynner, J. (2005). Rethinking the youth phase of the life-course: the case for emerging

- adulthood?. *Journal of youth studies*, 8(4), 367-384.
- Canadian statistics (2011). Living arrangements of young adults aged 20 to 29. Retrieved September 7, 2015, from https://www12.statcan.gc.ca/census-recensement/2011/as-sa/98-312-x/98-312-x2011003_3-eng.cfm
- Canadian statistics. (2013). What has changed for young people in Canada. Retrieved September 7, 2015, from <http://www.statcan.gc.ca/pub/75-006-x/2013001/article/11847-eng.htm>
- Chang, E., Lee, A., Byeon, E., & Lee, S. M. (2015). Role of motivation in the relation between perfectionism and academic burnout in Korean students. *Personality and Individual Differences*, 82, 221-226.
- Chang, L. T. (2010). *Factory girls: Voices from the heart of modern China*. London, UK: Pan Macmillan.
- Chang, M. (2007). Cultural differences in parenting styles and their effects on teens' self-esteem, perceived parental relationship satisfaction, and self-satisfaction (Doctoral dissertation). Dietrich College, Carnegie Mellon University. United States.
- Cheung G. W., Rensvold, R. B. (2002) Evaluating goodness-of-fit indexes for testing measurement invariance. *Structure Equation Model*, 9, 233–255.
- Chen, X. (2015, Mar). “2+5” employment plan to help university students in NingXia [宁夏实施就业创业计划帮助大学生就业]. Retrieved on Sep 30, 2015 from http://www.jyb.cn/job/jyzc/201503/t20150327_617173.html
- Cheng, M., & Berman, S. L. (2012). Globalization and identity development: A Chinese

- perspective. *New directions for child and adolescent development*, 138, 103-121.
- China National Bureau of Statistics Official Report (2007). China Minister of Education Annual Reports. Retrieved from China Education and Research Network Home Page via access database http://www.edu.cn/ni07_06_4_8955/20091201/t20091201426494.shtml
- Chung, T., & Mallery, P. (1999). Social comparison, individualism-collectivism, and self-esteem in China and the United States. *Current Psychology*, 18(4), 340-352.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. California, United States: Academic press.
- Côté, J. E. (1996). Sociological perspectives on identity formation: The culture–identity link and identity capital. *Journal of adolescence*, 19(5), 417-428.
- Côté, J. E. (1997). An empirical test of the identity capital model. *Journal of Adolescence*, 20(5), 577-597.
- Côté, J. E. (2002). The role of identity capital in the transition to adulthood: The individualization thesis examined. *Journal of youth studies*, 5(2), 117-134.
- Côté, J. E., & Bynner, J. (2008). Changes in the transition to adulthood in the UK and Canada: the role of structure and agency in emerging adulthood. *Journal of Youth Studies*, 11(3), 251-268.
- Côté, J. E., & Levine, C. G. (2002). *Identity formation, agency, and culture: A social psychological synthesis*. Mahwah, NJ: Lawrence Erlbaum.
- Côté, J. E., & Schwartz, S. J. (2002). Comparing psychological and sociological approaches to identity: Identity status, identity capital, and the individualization process. *Journal of adolescence*, 25(6), 571-586.

- Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008). Identity formation in early and middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of Youth and Adolescence*, 37(8), 983-996.
- Crocetti, E., Luyckx, K., Scrignaro, M., & Sica, L. S. (2011). Identity formation in Italian emerging adults: A cluster-analytic approach and associations with psychosocial functioning. *European Journal of Developmental Psychology*, 8(5), 558-572.
- Dickson, J. M., & MacLeod, A. K. (2006). Dysphoric adolescents' causal explanations and expectancies for approach and avoidance goals. *Journal of adolescence*, 29(2), 177-191.
- Douglass, G. B. (2007). From Duty to Desire: Emerging adulthood in Europe and its consequences. *Child Development Perspectives*, 1, 101-108.
- Douvan, E., & Adelson, J. (1966). The adolescent experience. New York: Wiley.
- Dundon, R. (2008, July). China's lost generation, *Time*. Retrieved July 07, 2008 from <http://www.time.com/time/world/article/0,8599,1820796,00.html>
- Erikson, E. H. (1963). *Childhood and society*. New York: Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton & Company.
- Facio, A. & Micocci, F. (2003). Emerging adulthood in Argentina, *New Directions for Child and Adolescent Development*, 100, 21-31.
- Facio, A., Resett, S., Micocci, F., & Mistrorigo, C. (2007). Emerging Adulthood in Argentina: An age of diversity and possibilities. *Child Development Perspectives*, 1, 115-118.
- Fang, S., Jing, S., Jing, C., Wang, L. (2010). 独生子女和非独生子女心理健康状况分析[Analysis on mental health state of adolescent in only child and non-only

- Child]. *Chinese Journal of Clinical Rational Drug Use*. 3 (10), 16-23.
- Farber, B. A. (1991). *Crisis in education: Stress and burnout in the American teacher*. San Francisco, CA, US: Jossey-Bass.
- Ferriman, K., Lubinski, D., & Benbow, C. P. (2009). Work preferences, life values, and personal views of top math/science graduate students and the profoundly gifted: Developmental changes and gender differences during emerging adulthood and parenthood. *Journal of personality and social psychology*, 97(3), 517-532.
- Field, A. (2009). *Discovering statistics using SPSS*. California, United States: Sage publications.
- Fink, A. (2003). *The survey handbook* (2nd ed.). Thousand Oaks, CA: Sage.
- Forsythe, M. (2015, Nov). China ends one-child policy, allowing families two children. The New York Times. Retrieved from http://www.nytimes.com/2015/10/30/world/asia/china-end-one-child-policy.html?_r=0.
- Fuligni, A. J. (2007). Family obligation, college enrollment, and emerging adulthood in Asian and Latin American families. *Child Development Perspectives*, 1(2), 96-100.
- Galambos, N. L., Barker, E. T., & Krahn, H. J. (2006). Depression, self-esteem, and anger in emerging adulthood: seven-year trajectories. *Developmental psychology*, 42(2), 350-365.
- Goldscheider, F. and Goldscheider, C. (1999). *The Changing Transition to Adulthood: leaving and Returning Home*. Thousand Oaks: Sage Publications.
- Glick, J. E., Ruf, S. D., White, M. J., & Goldscheider, F. (2006). Educational engagement

- and early family formation: differences by ethnicity and generation. *Social Forces*, 84(3), 1391-1415.
- Greene, A. L., Wheatley, S. M., & Aldava, J. F., IV. (1992). Stages on life's way: Adolescents' implicit theories of the life course. *Journal of Adolescent Research*, 7, 364-381.
- Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2004). *Survey methodology*. Hoboken, N.J.: John Wiley & Sons, Inc.
- Gullotta, T. P., Adams, G. R., & Markstrom, C. A. (2000). *The adolescent experience* (4th ed.). New York: Academic Press.
- Hadjigeorgiou, C., Tornaritis, M., Savva, S., Solea, A., Kafatos, A. (2012). Secular trends in eating attitudes and behaviours in children and adolescents aged 10–18 years in Cyprus: A 6-year follow-up, school-based study. *Public Study*, 126 (8), 690-694.
- Haines, R. (2011, Feb). Getting married later in life is a modern trend. *China Daily*. Retrieved Feb 21, 2011 from http://www.chinadaily.com.cn/life/2011-02/21/content_12048369.htm
- Halperin, S., Melaville, A., & Taylor, A. (1988). The forgotten half: Non college youth in America. *Washington, DC: William T. Grant Foundation Commission on Work, Family and Citizenship*.
- Hamilton, S., Hamilton, M.A. (2006). School, work, and emerging adulthood. In Arnett, J. J., Tanner, J. L. (Ed.), *Emerging adults in America: Coming of age in the 21st century*, (pp. 257-277). Washington, DC: American Psychological Association.
- Harlow, M. & Laurence, R. (2002). *Growing up and growing old in ancient Rome: a life course approach*. New York: Routledge.

- Heinz, W. R. (2009). Youth transitions in an age of uncertainty. In A. Furlong (Ed.), *Handbook of youth and young adulthood* (pp.3-13). New York: Routledge.
- Hendry, L. B., Kloep, M. (2007). Conceptualizing emerging adulthood: inspecting the emperor's new clothes? *Child Development Perspectives*, 1, 74-79.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Hu, Q., & Schaufeli, W. B. (2009). The factorial validity of the Maslach burnout inventory-student survey in China. *Psychological Reports*, 105(2), 394-408.
- Hu, X. (2012, Jan). China's young rural-to-urban migrants: in search of fortune, happiness, and independence. Retrieved from <http://www.migrationpolicy.org/article/chinas-young-rural-urban-migrants-search-fortune-happiness-and-independence>
- IBM Corp. Released 2013. IBM SPSS Statistics for Windows, Version 22.0. Armonk, NY: IBM Corp.
- Jacka, T., Kipnis, A. B., & Sargeson, S. (2013). *Contemporary China: Society and Social Change*. Cambridge University Press.
- Ji, B. & Ma, C. (2013, April). Free choice of major at college comes no easy way. Retrieved September 9, 2015 from http://www.chinadailyasia.com/focus/2013-04/28/content_15073459.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2010). *Monitoring the Future: National Survey Results on Drug Use, 1975-2009*. Bethesda, Maryland: National Institute of Health.

- Johnson, M. K., Berg, J. A., & Sirotzki, T. (2007). Differentiation in self-perceived adulthood: Extending the confluence model of subjective age identity. *Social Psychology Quarterly*, 70(3), 243-261.
- Jones, G., C& Ramdas, K. (2004). Untying the Knot: ideal and reality in Asian Marriage. Singapore: UNS press.
- Kaltiala-Heino, R., Marttunen, M., Rantanen, P., & Rimpelä, M. (2003). Early puberty is associated with mental health problems in middle adolescence. *Social science & medicine*, 57(6), 1055-1064.
- Kiuru, N., Aunola, K., Nurmi, J. E., Leskinen, E., & Salmela-Aro, K. (2008). Peer group influence and selection in adolescents' school burnout: A longitudinal study. *Merrill-Palmer Quarterly*, 54(1), 23-55.
- Konstam V. (2007). *Emerging and young adulthood: multiple perspectives, diverse narratives*. Springer: New York.
- Kroger, J. (2007). Identity development: Adolescence through adulthood (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Kroger, J., & Marcia, J. E. (2011). The identity statuses: Origins, meanings, and interpretations. In Handbook of identity theory and research (Eds). In Seth J. S., Koen, K., Vivian, L. V. Handbook of Identity Theory and Research (pp. 31-53). New York, United States: Springer.
- Lapsley, D. K., & Hill, P. L. (2010). Subjective invulnerability, optimism bias and adjustment in emerging adulthood. *Journal of youth and adolescence*, 39(8), 847-857.
- Legge, J. (2009). *The Confucian analects, the great learning, and the doctrine of the*

- mean*. New York: Cosimo Classics.
- Lewis, H. L. (2003). Differences in ego identity among college students across age, ethnicity, and gender. *Identity: An International Journal of Theory and Research*, 3(2), 159-189.
- Li, W.. (2007). Family Background, Financial Constraints and Higher Education Attendance in China. *Economics of Education Review*, 26, 725-735.
- Li, X., (2001). The three cardinal guides and the five constant virtues and Chinese traditional politics. *Journal of Beijing Normal University (Social Science Edition)*, 2, 25-31.
- Lian, Z. (2013). 浅议当代大学生就业情况与教育教学改革的关系. [A discussion on the relationship between employment situation and reforms in education and teaching among contemporary university students]. *People Tribune*, 13. Retrieved from http://paper.people.com.cn/rmlt/html/2013-05/11/content_1250334.htm?div=-1#
- Lisha, N. E., Grana, R., Sun, P., Rohrbach, L., Spruijt-Metz, D., Reifman, A., & Sussman, S. (2014). Evaluation of the psychometric properties of the Revised Inventory of the Dimensions of Emerging Adulthood (IDEA-R) in a sample of continuation high school students. *Evaluation & the health professions*, 37(2), 156-177.
- Liu, F. (2011). *Urban Youth in China*. New York, United States: Routledge.
- Liu, H. Qin, B., Mu, Y. (2010). 中国青年人群常见心理问题与应对. [Popular mental health problems and coping strategies among Chinese young people]. *Chinese Journal of Health management*, 4(4), 239-241.
- Liu, S. (2008). Review and Reflection on China's employment system three decades

- Reform. *Social Sciences*. 3, 11-19.
- Liu, X., & Ye, J. (2014). 青少年独生子女家庭关系功能特点分析[The investigation on the characteristics of family relationship function among young adolescents]. *People, Resources and Environment in China*, 2, 23-30.
- Liu, X., & Zhang, W. (2010). China's three decades of economic reforms. London: Routledge
- Luyckx, K., De Witte, H., & Goossens, L. (2011). Perceived instability in emerging adulthood: The protective role of identity capital. *Journal of Applied Developmental Psychology*, 32(3), 137-145.
- Luyckx, K., Duriez, B., Klimstra, T. A., & De Witte, H. (2010). Identity statuses in young adult employees: Prospective relations with work engagement and burnout. *Journal of Vocational Behavior*, 77(3), 339-349.
- Luyckx, K., Goossens, L., & Soenens, B. (2006). A developmental contextual perspective on identity construction in emerging adulthood: Change dynamics in commitment formation and commitment evaluation. *Developmental Psychology*, 42, 366–380.
- Luyckx, K., Goossens, L., Soenens, B., & Beyers, W. (2006). Unpacking commitment and exploration: Preliminary validation of an integrative model of late adolescent identity formation. *Journal of adolescence*, 29(3), 361-378.
- Luyckx, K., Klimstra, T. A., Duriez, B., Van Petegem, S., & Beyers, W. (2013). Personal identity processes from adolescence through the late 20s: Age trends, functionality, and depressive symptoms. *Social Development*, 22(4), 701-721.
- Luyckx, K., Klimstra, T. A., Schwartz, S. J., & Duriez, B. (2013). Personal identity in college and the work context: Developmental trajectories and psychosocial

- functioning. *European Journal of Personality*, 27(3), 222-237.
- Luyckx, K., Schwartz, S. J., Berzonsky, M. D., Soenens, B., Vansteenkiste, m., Smits, I., & Goossens, L. (2008). Capturing ruminative exploration: Expending the four-dimensional model of identity formation in late adolescence. *Journal of Research in Personality*, 42, 58-82.
- Luyckx, K., Schwartz, S. J., Goossens, L., Pollock, S., (2008), Employment, sense of coherence, and identity formation: contextual and psychological processes on the pathway to sense of adulthood. *Journal of Adolescent Research*. 23, 566-591.
- Luyckx, K., Schwartz, S. J., Goossens, L., Soenens, B., Beyers, W., (2008). Development typologies of identity formation and adjustment in female emerging adults: A latent class growth analysis approach. *Journal of Research on Adolescence*, 18, 595-619.
- Luyckx, K., Seiffge-Krenke, I., Schwartz, S. J., Crocetti, E., & Klimstra, T. A. (2014). Identity configurations across love and work in emerging adults in romantic relationships. *Journal of Applied Developmental Psychology*, 35(3), 192-203.
- Luyckx, K., Soenens, B., Goossens, L., Beckx, K., Wouters, S., (2008). Identity exploration and commitment in late adolescence: correlates of perfectionism and mediating mechanisms on the pathway to well-being. *Journal of Social and Clinical Psychology*, 27, 336-361.
- Mahmoud, J. S. R., Staten, R. T., Hall, L. A., Lennie, T. A. (2012). The relationship among young adult college students' depression, anxiety, stress, demographics, life satisfaction, and coping styles. *Issues in Mental Health Nursing*, 33, 149-156.
- Malanchuk, O., Messersmith, E. E., & Eccles, J. S. (2010). The ontogeny of career

- identities in adolescence. *New Directions for Child and Adolescent Development*, 130,97-110.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, 3(5), 551-558.
- Marcia, J. E. (1993). The ego identity status approach to ego identity. In James, E. M., Alan, S. W., Waterman, D. R., Latteson, S. A. Jacob, L. O. (Eds). *Ego identity* (pp. 3-21). New York: Springer.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of occupational behavior*, 2(2), 99-113.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: how organization cause, personal stress and what to do about it*. San. Francisco: Jossey-Bass.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422.
- Mayseless, O., & Scharf, M. (2003). What does it mean to be an adult? The Israeli experience. In J. J. Arnett & N. Galambos (Eds.), *New directions for child and adolescent development: Cultural conceptions of the transition to adulthood* (pp. 5–20). San Francisco, CA: Jossey-Bass.
- Ministry of Education of the People’s Republic of China (2014). Gross Enrolment Rate of Education by Level. Retrieved from <http://old.moe.gov.cn/publicfiles/business/htmlfiles/moe/s8493/201412/181724.html>
- Ministry of Education of the People’s Republic of China, (2015), 中华人民共和国高等教育法 [Higher Education law of People’s Republic of China]. Retrieved from

- http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_619/200407/1311.html
- Moreno, A. (2012). The Transition to Adulthood in Spain in a Comparative Perspective
The Incidence of Structural Factors. *Young*, 20(1), 19-48.
- Mortimer, J. & Larson, R. (2002). Microstructural trends and the reshaping of
adolescence. In J. Mortimer and R. Larson (Eds), *The changing adolescent
experience: social trends and the transition to adulthood* (pp.1-17). Cambridge,
M.A: Cambridge University Press.
- Muthén, L.K. and Muthén, B.O. (1998-2012). *Mplus User's Guide*. Seventh Edition. Los
Angeles, CA: Muthén & Muthén
- Muthén, B., & Muthén, L. K. (2000). Integrating person-centered and variable-centered
analyses: Growth mixture modeling with latent trajectory classes. *Alcoholism:
Clinical and experimental research*, 24(6), 882-891.
- National Bureau of Statistics of China. (2012). Statistical Communiqué on the 2011
National Economic and Social Development. Retrieved from
[http://www.stats.gov.cn/was40/gjtjj_en_detail.jsp?searchword=migrants&channel
id=9528&record=3](http://www.stats.gov.cn/was40/gjtjj_en_detail.jsp?searchword=migrants&channelid=9528&record=3)
- Negru, O., Subtirica, A., Opre, A. (2011). The dynamics of aspirations in emerging
adulthood. *International Conference on Education and Educational Psychology*,
12, 205–210.
- Nelson, L. J. (2009). An examination of emerging adulthood in Romanian college
students. *International Journal of Behavioural Development*, 33(5), 402-411.
- Nelson, L. J., Badger, S. & B. (2004). The influence of culture in emerging adulthood:

- perspectives of Chinese college students. *International Journal of Behavioral Development*, 28, 26-36.
- Nelson, L.J., & Barry, C.M. (2005). Distinguishing features of emerging adulthood: The role of self-classification as an adult. *Journal of Adolescent Research*, 20, 242–262.
- Nelson, L.J. & Chen, X. (2007). Emerging adulthood in China: the role of social and cultural factors. *Child Development Perspectives*, 1, 86-91.
- Nelson, L. J., Duan, X., Padilla-Walker, L. M., & Luster, S. S. (2013). Facing Adulthood Comparing the Criteria That Chinese Emerging Adults and Their Parents Have for Adulthood. *Journal of Adolescent Research*, 28(2), 189-208.
- Pang, W. (2010). An exploration of the experience of Chinese emerging adults—university students transitioning to mature adulthood. (Master Thesis). Retrieved from University of Ottawa
http://www.ruor.uottawa.ca/en/bitstream/handle/10393/20432/Pang_Wuji_2011_Thesis.pdf?sequence=3
- Park, M. J., Mulye, T. P., Adams, S. H., Brindis, C. D., & Irwin, C. E. (2006). The health status of young adults in the United States. *Journal of Adolescent Health*, 39(3), 305-317.
- Pearce, M. J., Boergers, J., Prinstein, M. J. (2012). Adolescent Obesity, Overt and Relational Peer Victimization, and Romantic Relationships. *Obesity Research*, 10 (5), 386-393.
- Porfeli, E. J., Lee, B., Vondracek, F. W., & Weigold, I. K. (2011). A multi-dimensional measure of vocational identity status. *Journal of Adolescence*, 34(5), 853-871.

- Project Atlas (2015). China's students overseas. Retrieved from
<http://www.iie.org/Services/Project-Atlas/China/Chinas-Students-Overseas>
- Qu, X. (2008). 高中学生独生子女与非独生子女心理状况比较[The comparison on mental health situation between single children and children with siblings]. *China Journal of Health Psychology*, 16(7), 781-783.
- Rainey, L. D. (2010). Confucius & Confucianism: The Essentials. Oxford: Wiley-Blackwell.
- Reifman, A., Arnett, J. J., & Colwell, M. J. (2007). Emerging adulthood: Theory, assessment and application. *Journal of Youth Development*. Retrieved from
http://www.nae4ha.org/directory/jyd/jyd_issue.aspx?id=b9439d29-0ed1-4b89-a3ae-5aa2189b8153
- Robbins, A., & Wilner, A. (2001). *Quarter life crisis: The unique challenges of life in your twenties*. London: Penguin.
- Rosenberger, N. (2007). Rethinking Emerging Adulthood in Japan: Perspectives From Long-Term Single Women. *Child Development Perspectives*, 1(2), 92-95.
- Salmela-Aro, K., Kiuru, N., Leskinen, E., & Nurmi, J. E. (2009). School burnout inventory (SBI) reliability and validity. *European Journal of Psychological Assessment*, 25(1), 48-57.
- Salmela-Aro, K., Tolvanen, A., & Nurmi, J. E. (2011). Social strategies during university studies predict early career work burnout and engagement: 18-year longitudinal study. *Journal of Vocational Behavior*, 79(1), 145-157.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor

- analytic approach. *Journal of Happiness studies*, 3(1), 71-92.
- Schlegel, A., & Barry H. III, (1991). *Adolescence: An anthropological inquiry*. New York: Free Press.
- Schulenberg, J. E., Sameroff, A. J., & Cicchetti, D. (2004). The transition to adulthood as a critical juncture in the course of psychopathology and mental health. *Development and psychopathology*, 16(04), 799-806.
- Schulenberg, J. E., & Zarrett, N. R. (2006). Mental Health During Emerging Adulthood: Continuity and Discontinuity in Courses, Causes, and Functions. In Jensen A. J., Lynn T. J. (eds). *Emerging adults in America: coming of age in the 21st century* (pp. 135-172). Washington DC, US: American Psychological Association.
- Schwartz, S. J., Adamson, L., Ferrer-Wreder, L., Dillon, F. R., & Berman, S. L. (2006). Identity status measurement across contexts: Variations in measurement structure and mean levels among White American, Hispanic American, and Swedish emerging adults. *Journal of Personality Assessment*, 86(1), 61-76.
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: implications for theory and research. *American Psychologist*, 65(4), 237-251.
- Schwartz, S. J., Zamboanga, B. L., Luyckx, K., Meca, A., & Ritchie, R. A. (2013). Identity in emerging adulthood reviewing the field and looking forward. *Emerging Adulthood*, 1(2), 96-113.
- Seiter, L. N., Nelson, L. J. (2011). An examination of emerging adulthood in college students and nonstudents in India. *Journal of Adolescent Research*, 26,506-536.
- Sheng, L. (2012).Overall economic development was stable in the first half of 2012.

- National Bureau of Statistic of China, Retrieved from:
http://www.stats.gov.cn/was40/gjtj_en_detail.jsp?searchword=migrants&channelid=9528&record=3.
- Shih, S. S. (2015). An investigation into academic burnout among Taiwanese adolescents from the self-determination theory perspective. *Social Psychology of Education*, 18(1), 201-219.
- Shoon, I. & Silbereisen (2009): Transitions from school to work, Cambridge: Cambridge University Press.
- Singh, C. H. (2008). South Asia Defence and Strategic Year Book. New Delhi, India: Pentagon Press.
- Skorikov, V., & Vondracek, F. W. (2007). Positive career orientation as an inhibitor of adolescent problem behaviour. *Journal of adolescence*, 30(1), 131-146.
- Spencer, M.S., Fitch D., Grogan-Kaylor A, McBeath, B (2005). The equivalence of the Behavior Problem Index across U.S. ethnic groups. *Journal of Cross Cultural Psychology*, 36, 573–589.
- State Statistical Bureau. (2006). China Statistical Yearbook. Beijing: Statistics Press.
- Stockman, N. (2000). Understanding Chinese society. Cambridge: Polity Press.
- Streitmatter, J. (1997). An exploratory study of risk-taking and attitudes in a girls-only middle school math class. *The Elementary School Journal*, 15-26.
- Tang, J. (2012, Sep). A suicide case of a young male architect. Yahoo News. Retrieved Sep 5, 2012 from <http://news.cn.yahoo.com/ypen/20120905/1292454.html>
- Tanner, J. L. (2006). Recentering during emerging adulthood: A critical turning point in life span human development. In Arnett, J. J., Tanner, J. L. (Ed.), *Emerging adults in*

- America: Coming of age in the 21st century (pp. 21-55). Washington, DC: American Psychological Association.
- Tanner, J. L., Reinherz, H. Z., Beardslee, W. R., Fitzmaurice, G. M., Leis, J. A., & Berger, S. R. (2007). Change in prevalence of psychiatric disorders from ages 21 to 30 in a community sample. *The Journal of nervous and mental disease*, 195(4), 298-306.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. California, United States: Sage Publications Inc.
- The Associated Press. (2013 July). China to require children to visit aging parents as elderly care poses problem for nation. Retrieved from <http://www.nydailynews.com/life-style/health/chinese-law-require-children-visit-elderly-parents-article-1.1386891>
- The Central People's Government of the People's Republic of China (2005). Law of the People's Republic China on protection of the rights and interests of the elderly. Retrieved from http://www.gov.cn/banshi/2005-08/04/content_20203.htm
- The National People's Congress of the People's Republic of China (2003). Explanation: the adjustment of birth. Retrieved from http://www.npc.gov.cn/npc/flsyywd/shehui/2003-09/11/content_321085.htm
- The World Bank (2014). Rural population (% of total population). Retrieved from <http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS/countries>
- Tien, H. Y. (1983). Age at Marriage in the People's Republic of China. *The China Quarterly*. 93, 90-107.
- Tinsley, H. E., & Brown, S. D. (2000). *Handbook of applied multivariate statistics and*

- mathematical modeling. California, United States: Academic Press.
- Triandis, H. C. (1995). Individualism & collectivism. Boulder, CO, US: Westview press.
- Triandis, H. C. (2001). *Individualism-collectivism and personality*. Journal of Personality, 69, 908-924.
- Tuominen-Soini, H., Salmela-Aro, K., & Niemivirta, M. (2008). Achievement goal orientations and subjective well-being: A person-centred analysis. *Learning and Instruction*, 18(3), 251-266.
- Twenge, J.M. (2006). *Generation Me: Why today's young Americans are more confident, assertive, and entitled—and more miserable than ever before*. Free Press, New York
- United Nations. (2005). Births, deaths and life expectancy by country or area. International Program. Retrieved from <http://www.census.gov/population/international/>
- U.S. Census Bureau. (2011). Current population survey: March and annual social and economic supplement. Xls. Retrieved from <http://www.census.gov/hhes/socdemo/marriage/>
- Verma, S., & Saraswathi, T. S. (2002). Adolescence in India. *The World's Youth Adolescence in Eight Regions of the Globe*, 105-140.
- Wang (2011, Jan). Ault NEET children exists in over 60% of Chinese families: Study. People's Daily Online. Retrieved Jan 30, 2011 from <http://english.peopledaily.com.cn/90001/90782/90872/7277071.html>
- Wang, S., Hu, A., & Ding, Y. (2002). 最严重的警告：经济繁荣背后的社会不稳定[The most serious warning: Social instability behind the economic prosperity]. *Strategy*

- and Management*, 3, 26-33.
- Wu, B. (2011). Self-perception of adulthood and cultural and social influential factors among Chinese young adults in China (unpublished doctoral dissertation). University of Wisconsin-Madison, United States.
- Xin, B., (2003). 中国资产阶级真相——面目模糊的中产阶级. [the truth of middle class in China—a blurred appearances.]. *Capital China*, 6, 24-29.
- Xinhuan. (2015, Nov). China denies immediate validity of two-child policy. Retrieved from http://news.xinhuanet.com/english/2015-11/02/c_134774830.htm.
- Yang, F., & Tamney, J. (Eds.). (2011). *Confucianism and spiritual traditions in modern China and beyond.*, Leiden, The Netherlands: Koninklijke Brill.
- Yue, X. D., & Cheung, C. K. (2000). Selection of favourite idols and models among Chinese young people: A comparative study in Hong Kong and Nanjing. *International Journal of Behavioral Development*, 24(1), 91-98.
- Zhang, J. & Liu, E. (2012). Confucianism and youth suicide in rural china. *Review of Religion Research*, 54, 93-111.
- Zhang, K. (2012, Sep.) China's inequality Gini out of the bottle. China Real Time Report. Retrieved from <http://blogs.wsj.com/chinarealtime/2012/09/17/chinas-inequality-gini-out-of-the-bottle/>
- Zheng, L., Hou, Y., Liu, Y. (2014). 家庭规模与儿童教育发展的关系研究[An empirical study on the relationship between family size and child educational development]. *Educational Research*. 4, 59-69.
- Zhang, Y. P. (2008). Gender-Based Employment and Income Differences in Urban China:

Considering the Contributions of Marriage and Parenthood. *Social Forces*, 86,
1529-1560.

Appendix A-1: Survey Consent Form

Participant Survey Consent Form

Dear Student,

Thank you for choosing to be a part of my dissertation project entitled “An examination of emerging adulthood in China among students and non-students.” This project is being undertaken by a research team of graduate students supervised by two professors from the Department of Educational Psychology at the University of Alberta.

If you choose to take part in the study, you will complete a paper survey (~30 minutes) that will ask you a variety of questions regarding your perspectives on adulthood, psychological features of emerging adulthood, and identity development in work and love domains. The survey results will be collated and analyzed; only the research team (myself as the primary graduate student, and my supervisor) will have access to the raw data collected in the project. Neither your name nor any identifying information will appear in any part of this research.

I, _____ consent to participate in the research project

Name (please print)

entitled “An examination of emerging adulthood in China among students and non-students.” This project is being supervised by Dr. Robert Klassen.

In giving my consent I acknowledge that:

1. I have read the information letter and I am allowed to ask any questions about the project.
2. I am aware that this discussion will be digitally audio recorded.
3. I am aware that I can leave the group at any time without any penalty.
4. I am aware that my name and my identity will not be revealed in any reports of the project.
5. I will not share with others the information of people in the group or present information that would reveal someone's identity.

The plan for this study has been reviewed for its adherence to ethical guidelines by the Research Ethics Board (REB2) at the University of Alberta. If you have any questions or concerns about your rights as a participant or how this study is being conducted, you may contact the Research Ethics Office at 780-492-9429. The Research Ethics Office is not directly affiliated with the study investigators. Thank you for your participation in this research project. If you have any additional questions about the research being conducted, please email Xiaozhou Zhang at xzhang15@ualberta.ca.

Participant Signature: _____

Date: _____

Researcher Signature: _____

Date: _____

Appendix A-2: Survey Consent Form (Chinese Version)

被试个人访谈知情同意书

感谢你选择参与题为“中国文化背景下成年准备期：学生与非学生群体为样本”的博士论文项目。该项目由加拿大阿尔伯塔大学教育心理系博士研究生负责设计设施，并在该系教授指导下完成。

本问卷目的在于探讨中国文化背景下的成年准备期，包括成年概念和个人经历。完成该问卷大约需要30分钟，问卷题目将围绕成年准备期展开，没有对错好坏，只涉及个人的观点。数据资料仅供研究小组查看、使用。

我, _____ 同意参与本研究项目, 项目名称为“中国文化背景下的成年准备
姓名

期研究：以学生和非学生群体为样本”。该项目在 Dr.Robert Klassen 指导下实施。根据知情同意书，我知道如下内容：

1. 我已经阅读了研究的相关信息，并且知道我可以询问有关该研究的任何问题。
2. 我清楚我可以随时要求无条件中止访谈。
3. 我清楚我的名字和我的其他相关信息不会出现在任何一份研究报告上。
4. 我不会跟其他无关人员泄漏有关其他被试的个人信息或者其他可以被识别的信息。

该研究计划已经通过阿尔伯塔大学的伦理道德委员会的审核。如果你有任何有关被试权利的问题或者疑问，你可以跟研究伦理道德办公室取得联系，联系方式为780-492-2615。该办公室与研究没有任何隶属关系。感谢你的参与。如果你对该研究有任何问题或者疑问，请直接与研究取得联系，联系方式为 email: xzhang15@ualberta.ca

被试签名: _____ 日期: _____

研究者签名: _____ 日期: _____

Appendix B-1: Survey on Emerging Adulthood in China

Hello,

Thank you for choosing to be a part of my dissertation research project, “An examination of emerging adulthood in China among students and non-students.” The goal is to conduct research involving young people aged 18 to 25 years old who are university students or non-students in Mainland China. This survey is designed to explore perceptions of adulthood, psychological features and experiences of emerging adulthood, and identity development in work and love domains among students and non-students in Mainland China.

I am a graduate student at the University of Alberta. I will be conducting the research, supervised by my advisor, Dr. Robert Klassen, a professor in the Department of Educational Psychology. Your answers to this survey are confidential and will not be revealed to anyone outside of the research team. By completing and returning the questionnaire you are consenting to participate in this project.

Sincerely,

Xiaozhou Zhang

For more information, contact: xzhang15@ualberta.ca

Demographic Information:

Please fill the blank or choose one of the responses of each question by “√”.

1. Which year you were born: _____
2. Your gender:
1) male 2) female
3. Ethnic:
1) Han 2) Minorities
4. Birthplace:
1) Urban 2) Sub-urban 3) Rural
5. How many siblings do you have
1) 0 2) 1 3) more than one
6. Religions:
1) No religion; 2) Buddhism; 3) Christian; 4) Islamism; 5) other____
7. Work identity:
1) Student; 2) full-time job; 3) part-time job; 4) unemployment and not a student; 5) other____
8. Intimate relationship status:
1) Single, not dating; 2) dating casually; 3) dating seriously; 4) dating monogamously; 5) living with partner, not married; 6) married; 7) divorced/separated/widowed
9. Educational level you have completed
1) Primary school; 2) middle school; 3) secondary school; 4) college; 5) university 1st year; 6) university 2nd year; 7) university 3rd year; 8) university 4th year; 9) other____
10. Father's educational level
1) No school experience; 2) elementary school; 3) middle school; 4) high

school; 5) undergraduate; 6) graduate; 7) other_____

11. Mother's educational level

1) No school experience; 2) elementary school; 3) middle school; 4) high school; 5) undergraduate; 6) graduate; 7) other_____

12. Residence status:

1) Living with parents; 2) living with your partner (rent or own); 3) living with roommates but not your partner (rent or dormitory); 4) other_____

13. Do you think that you have reached adulthood?

1) No; 2) in some respects yes, in some respects no; 3) yes

Views of Life Survey

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. In short, you should think about a roughly five-year period, with the present time right in the middle.

For each phrase shown below, please place a check mark in one of the columns to indicate the degree to which you agree or disagree that the phrase describes this time in your life. For example, if you "Somewhat Agree" that this is a "time of exploration," then on the same line as the phrase, you would put a "√" in the column headed by "Somewhat Agree" (3). Be sure to put only one check mark per line.

	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
1. Time of many possibilities?	1	2	3	4
2. Time of exploration?	1	2	3	4
3. Time of confusion?	1	2	3	4
4. Time of experimentation?	1	2	3	4
5. Time of personal freedom?	1	2	3	4
6. Time of feeling restricted?	1	2	3	4
7. Time of responsibility for yourself?	1	2	3	4
8. Time of feeling stressed out?	1	2	3	4
9. Time of instability?	1	2	3	4
10. Time of optimism?	1	2	3	4
11. Time of high pressure?	1	2	3	4
12. Time of finding out who you are?	1	2	3	4
13. Time of settling down?	1	2	3	4
14. Time of responsibility for others?	1	2	3	4
15. Time of independence?	1	2	3	4
16. Time of open choices?	1	2	3	4
17. Time of unpredictability?	1	2	3	4
18. Time of commitments to	1	2	3	4

others?				
19. Time of self-sufficiency?	1	2	3	4
20. Time of many worries?	1	2	3	4
21. Time of trying out new things?	1	2	3	4
22. Time of focusing on yourself?	1	2	3	4
23. Time of separating from parents?	1	2	3	4
24. Time of defining yourself?	1	2	3	4
25. Time of planning for the future?	1	2	3	4
26. Time of seeking a sense of meaning?	1	2	3	4
27. Time of deciding your own beliefs and values?	1	2	3	4
28. Time of learning to think for yourself?	1	2	3	4
29. Time of feeling adult in some ways but not others?	1	2	3	4
30. Time of gradually becoming an adult?	1	2	3	4
31. Time of being unsure whether you have reached full adulthood?	1	2	3	4

Burnout: The following statements pertain to attitudes or situations you may be experiencing in your daily work or study. Please choose one of the degree of each situation by “√”.

	Never	One time for each year or less	One time for each month or less	Several time a month	One time for each week	Several time a week	Everyday
1. I feel emotionally drained by my work/studies.	1	2	3	4	5	6	7
2. I feel use up at the end of a day at work/university.	1	2	3	4	5	6	7
3. I feel tired when I get up in the morning and I have to face another day at	1	2	3	4	5	6	7

	work/university.							
4.	Working/studying or attending a class is really a strain for me.	1	2	3	4	5	6	7
5.	I feel burnout out from my work/studies.	1	2	3	4	5	6	7
6.	I have become less interested in my work/studies since my enrollment at the workplace/university.	1	2	3	4	5	6	7
7.	I have become less enthusiastic about my work/studies.	1	2	3	4	5	6	7
8.	I have become more cynical about the potential usefulness of my work/studies.	1	2	3	4	5	6	7
9.	I doubt the significance of my work/studies.	1	2	3	4	5	6	7
10.	I can effectively solve the problem that arise in my work/studies.	1	2	3	4	5	6	7
11.	I believe that I make an effective contribution to the work/classes that I attended.	1	2	3	4	5	6	7
12.	In my opinion, I am a good employer/student.	1	2	3	4	5	6	7
13.	I feel stimulated when I achieve my work/study goals.	1	2	3	4	5	6	7
14.	I have learned many interesting things during the course of my work/studies.	1	2	3	4	5	6	7
15.	During work/class I feel confident that I am effective in getting things done.	1	2	3	4	5	6	7

Identity Development: Career development

The following statements pertain to attitudes or situations you may be experiencing in your career development. Please indicate the degree to which you agree or disagree that the phrase describes this time in your career life. Please choose one of the responses of each question by “√”.

	Strongly Disagree	Somewhat Disagree	Not Sure	Somewhat Agree	Strongly Agree
1. Decided on the direction I want to follow in life	1	2	3	4	5
2. Know what I want to do with my future	1	2	3	4	5
3. A clear view of my future	1	2	3	4	5
4. Made a choice concerning some of my plans for the future	1	2	3	4	5
5. Know what I want to achieve in my life	1	2	3	4	5
6. Plans for the future offer me a sense of security	1	2	3	4	5
7. Future plans give me self-confidence	1	2	3	4	5
8. Because of the path of life I have mapped out, I feel certain about myself	1	2	3	4	5
9. Sense that the direction I want to take in life will really suit me	1	2	3	4	5
10. Value my plans for the future very much	1	2	3	4	5
11. Think about the direction I want to take in my life	1	2	3	4	5
12. Think a lot about how I see my future	1	2	3	4	5
13. Regularly try to figure out which lifestyle would suit me	1	2	3	4	5
14. Think about what to do with my life	1	2	3	4	5
15. Try to find out which lifestyle would be good for me	1	2	3	4	5
16. Think about the future	1	2	3	4	5

plans I have made					
17. Talk regularly with other people about the plans I have made for the future	1	2	3	4	5
18. Work out for myself if the goals I put forward in life really suit me	1	2	3	4	5
19. Try to find out regularly what other people think about the specific direction I want to take in my life	1	2	3	4	5
20. Think a lot about the future plans I strive for	1	2	3	4	5
21. Keep looking for the direction I want to take in my life	1	2	3	4	5
22. Doubtful about what I really want to achieve in life	1	2	3	4	5
23. Keep wondering which direction my life should take	1	2	3	4	5
24. Worry about what I want to do with my future	1	2	3	4	5
25. Hard to stop thinking about the direction I want to follow in life	1	2	3	4	5

Thank you so much!

Appendix B-2: Survey on Emerging Adulthood in China (Chinese Version)

中国人成年准备期间卷

你好！

欢迎参加由加拿大阿尔伯塔大学组织的“中国文化背景下的成年准备期”研究项目。本研究的主要负责人为阿尔伯塔大学博士候选人张晓洲，指导者为该生的博士生导师，Robert Klassen，就职于阿尔伯塔大学教育心理学系。

该研究的目标群体为 18 到 25 岁的中国大学生和已经进入职场的年轻人。该研究目的包括探索该阶段人群有关成年的概念，该阶段的心理特征，有关职业、感情方面的自我认同发展现状。本问卷不记名，答案也无对错和好坏之分，除研究人员外，任何人都不会看到您填写的内容，请放心作答。您的回答将严格遵守保密原则，所有回答将只用于研究项目。请在问卷填写完成后，将其返还给研究人员。

您的回答对我们的研究具有重要价值，请认真作答，不要遗漏任何问题，非常感谢您的合作！

加拿大阿尔伯塔大学

教育心理系

博士生张晓洲

Email: xiaozhouzhang108@gmail.com

Tel: 15001046399/qq: 240493534

2013/06/01

第一部分：个人基本信息

请在空格内填写或者在相应的数字选项上划“√”

1. 出生年月: _____
2. 性别: (1) 男 (2) 女
3. 民族: (1) 汉族 (2) 少数民族
4. 出生地: (1) 城市 (2) 城郊 (3) 农村
5. 有几个兄弟姐妹
 a) 独生子女 (2) 1 个 (3) 2 个或者以上
6. 宗教信仰:
 (1) 无宗教信仰; (2) 佛教; (3) 基督教; (4) 伊斯兰教; (5) 其他
7. 目前的身份:
 (1) 学生; (2) 全职工作; (3) 兼职工作; (4) 非学生, 找工作中; (5) 其他
8. 目前的情感状态:
 (1) 没约会没恋爱; (2) 有感兴趣的对象, 还没开始约会; (3) 没有确定恋爱关系, 约会中; (4) 确定恋爱关系; (5) 与恋爱对象同居; (6) 结婚; (7) 离婚/分居/丧偶
9. 最高受教育水平
 (1) 小学; (2) 初中; (3) 高中; (4) 中专; (5) 大专; (6) 大一; (7) 大二; (8) 大三; (9) 大四; (10) 其他
10. 父亲受教育水平
 (1) 没上过学; (2) 小学; (3) 初中; (4) 高中; (5) 本科; (6) 研究生; (7) 其他
11. 母亲受教育水平
 (1) 没上过学; (2) 小学; (3) 初中; (4) 高中; (5) 本科; (6) 研究生; (7) 其他
12. 居住状态:
 1) 长期居住在父母家; (2) 与伴侣居住 (租房或购房); (3) 与其他同伴居住

(宿舍或者租房);

(4) 自己居住 (租房或购房); (5) 其他

13. 你认为自己已经是成年人了吗?

(1) 完全不是; (2) 有些地方是, 有些地方不是; (3) 完全是的

第二部分: 生活状态

该部分用来测试人们对自己生活状态的判断, 答案没有对错之分。首先, 请先思考现在、过去的以及未来的几年, 时间跨度大约为 5 年。然后判断自己的生活状态, 依次评定下列每个描述。在相应的数字选项上划“√”。每个题目只选择一个答案, 请不要多选或漏选。

	非常 不赞同	一定程度 上不赞同	一定程度 上赞同	非常 赞同
1. 有很多机会	1	2	3	4
2. 不断探索	1	2	3	4
3. 迷茫	1	2	3	4
4. 不断尝试	1	2	3	4
5. 自由	1	2	3	4
6. 感觉受到限制	1	2	3	4
7. 需要承担责任	1	2	3	4
8. 感到有压力	1	2	3	4
9. 不稳定	1	2	3	4
10. 乐观	1	2	3	4
11. 高压	1	2	3	4
12. 已经知道你是谁	1	2	3	4
13. 稳定	1	2	3	4
14. 对他人负责	1	2	3	4
15. 独立	1	2	3	4
16. 需要做出个人选择	1	2	3	4
17. 不可预测	1	2	3	4
18. 对他人有承诺	1	2	3	4
19. 自负	1	2	3	4
20. 有很多担心	1	2	3	4

21. 尝试新鲜事物	1	2	3	4
22. 专注自我	1	2	3	4
23. 独立于父母	1	2	3	4
24. 定义自我	1	2	3	4
25. 计划未来	1	2	3	4
26. 寻找生活意义	1	2	3	4
27. 决定自我信仰和价值	1	2	3	4
28. 学着为自己考虑	1	2	3	4
	非常 不赞同	一定程度 上不赞同	一定程度 上赞同	非常 赞同
29. 在某些方面感觉自己是成年人, 某些方面不是	1	2	3	4
30. 逐渐变成一个成年人	1	2	3	4
31. 还不太确定自己是否已经进入成年期	1	2	3	4

第三部分：工作/学习感受

请仔细阅读下面每一个题目，根据您最近一个月的真实感觉，在最合适的数字上打“√”，每个题目只选择一个答案，请不要多选或漏选。

题目	从来没有	一年几次或更少	一个月一次或更少	一个月几次	一周一次	一周几次	每天
1. 我觉得工作/学业使我在情感上变得枯竭。	1	2	3	4	5	6	7
2. 每一天工作/学校生活结束后，我都感到筋疲力尽。	1	2	3	4	5	6	7
3. 早上起床时我总感到疲倦，但又不得不面对新一天的生活。	1	2	3	4	5	6	7

4. 工作/学习和上课对我而言实在是个负担。	1	2	3	4	5	6	7
5. 我觉得工作/学习已经快让我的精力耗干了。	1	2	3	4	5	6	7
6. 工作/入学以来, 我的兴趣日渐消退。	1	2	3	4	5	6	7
7. 我对工作/学习不再那么有热情了。	1	2	3	4	5	6	7
8. 我对工作/学习的意义产生了质疑。	1	2	3	4	5	6	7
9. 我比以前更加怀疑自己的工作/学业对将来能有什么用处。	1	2	3	4	5	6	7
10. 我能有效得解决工作/学习当中出现的问题。	1	2	3	4	5	6	7
11. 我相信自己可以在工作中/课堂上有效地完成任务。	1	2	3	4	5	6	7
12. 在我看来, 我是一个好员工/学生。	1	2	3	4	5	6	7
13. 当我实现自己的工作/学习目标时会觉得很受鼓舞。	1	2	3	4	5	6	7
14. 我在工作/学习过程中学到了很多有趣的东西。	1	2	3	4	5	6	7
15. 我认为自己在工作/课堂上的表现是出色的。	1	2	3	4	5	6	7

第四部分：自我同一性发展

职业方面:以下描述是有关职业发展可能的态度或状况, 请根据自己的情况在相应的数字选项上划“√”。每个题目只选择一个答案, 请不要多选或漏选。

	非常 不赞 同	一定程度 上 不赞同	不 确 定	一定程度 上赞 同	非常 赞同
1. 有关职业发展方面, 我已经决定了我将来发展的方向	1	2	3	4	5
2. 有关职业发展方面, 我已经知道了我未来想做什么	1	2	3	4	5
3. 有关职业发展方面, 我很清楚自己的未来	1	2	3	4	5
4. 有关职业发展方面的未来计划, 我已经做了决定	1	2	3	4	5

5.	有关职业发展方面，我已经知道我想要达成什么目标	1	2	3	4	5
6.	有关职业发展的计划可以为我提供安全感	1	2	3	4	5
7.	有关职业发展的计划可以为我提供自信	1	2	3	4	5
8.	因为已经规划了有关职业发展的途径，我感觉对自己很确定	1	2	3	4	5
9.	有关职业发展方面，我认为我选定的未来生活方向很适合我	1	2	3	4	5
10.	有关职业发展方面，我对自己未来的计划评价很高	1	2	3	4	5
11.	有关职业发展方面，我考虑过自己将来的生活方向	1	2	3	4	5
12.	有关职业发展方面，关于如何看待未来我思考了很多	1	2	3	4	5
13.	有关职业发展方面，我经常尝试搞清什么样的生活方式适合我	1	2	3	4	5
14.	有关职业发展方面，我思考过关于自己的生活我要做些什么	1	2	3	4	5
15.	有关职业发展方面，我尝试寻找哪种生活方式可能有益于我	1	2	3	4	5
16.	有关职业发展方面，我考虑过我所制定的未来生活计划	1	2	3	4	5
17.	有关职业发展方面，我经常与其他人讨论我的未来生活计划	1	2	3	4	5
18.	有关职业发展方面，如果我制定的生活目标真的适合我，我就想办法实现	1	2	3	4	5
19.	有关职业发展方面，对于生活方向的细节，我会经常尝试搞清其他人对此的想法	1	2	3	4	5
20.	有关职业发展方面，对于我未来的奋斗计划，我会思考很多	1	2	3	4	5
		非常不赞同	一定程度上不赞同	不确定	一定程度上赞同	非常赞同
21.	有关职业发展方面，我一直在寻找我想要的生活方向	1	2	3	4	5

22. 有关职业发展方面，我会怀疑我究竟想要什么	1	2	3	4	5
23. 有关职业发展方面，我一直在想要选择什么样的生活方向	1	2	3	4	5
24. 有关职业发展方面，我担心关于未来要做什么	1	2	3	4	5
25. 有关职业发展方面，我很难停止思考要选择什么样的生活方向	1	2	3	4	5

谢谢参与！

Appendix C: Ethics Approval Letter

Notification of Approval

Date: June 7, 2013
Study ID: Pro00039164
Principal Investigator: [Xiaozhou Zhang](#)
Study Supervisor: [Robert Klassen](#)
Study Title: **A Mixed Methods Examination of Emerging Adulthood Among College Students and Non-students in Mainland China**
Approval Expiry Date: June 6, 2014

Approved Form:	Consent	Approval Date	Approved Document
		07/06/2013	Interview Consent Form.docx
		07/06/2013	Survey Consent Form.docx

Sponsor/Funding Agency: Robert Klassen

Thank you for submitting the above study to the Research Ethics Board 2 . Your application has been reviewed and approved on behalf of the committee.

A renewal report must be submitted next year prior to the expiry of this approval if your study still requires ethics approval. If you do not renew on or before the renewal expiry date, you will have to re-submit an ethics application.

Approval by the Research Ethics Board does not encompass authorization to access the staff, students, facilities or resources of local institutions for the purposes of the research.

Sincerely,

Dr. Stanley Varnhagen

Chair, Research Ethics Board 2

Note: This correspondence includes an electronic signature (validation and approval via an online system).