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Conceptions of Adulthood among Chinese Emerging Adults

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Abstract

With the influence of globalization, Chinese young adults transitioning to adulthood today are cultivated by both traditional Chinese values (e.g., collectivism, Confucian philosophy), as well as Western values (e.g., individualism, independence). The present study aimed to characterize emerging adults' perception of adulthood in China today in terms of: (1) the criteria for adulthood Chinese emerging adults considered important; (2) the relationships between subjective importance of adulthood status and status as a student or nonstudent; (3) gender; and (4) residency status (rural vs urban). Chinese emerging adults aged 17 to 30 (N=7099; 69% college students; 54% female; 57% with rural residency status) completed a cross-sectional survey between October-November 2021. We found that most Chinese emerging adults feel ambivalent about their adulthood status. The findings suggest that cultural and geographical differences exist between emerging Chinese and Western young adults in their perceptions of entering adulthood. Concerning the self-perceived adulthood status and the subjective importance of criteria, several differences were found among Chinese emerging adults based on gender (male vs female), residency status (rural vs urban) and educational status (student vs non-student).

Introduction

Over the past century, the developmental phases of the psychosocial course of life have shifted (Settersten Jr et al., 2015). A new life stage, named "emerging adulthood", was proposed by Arnett (2000) and occurs after adolescence and before full adulthood. The life stage indicates that young people today postpone their entry into adulthood, particularly in post-industrial societies where education, individualism and personal independence are emphasized (Arnett, 1998, 2014). The meanings and markers of adulthood are different from the past (Settersten Jr et al., 2015), and even modern day expectations continuously evolve (Scabini et al., 2007). This constant state of re-evaluating what it means to be an adult can be found cross-culturally. Not only is this trait reflected in Western cultures, such as in North America (e.g., Arnett, 2003), Australia (e.g., Fussell et al., 2007), and European countries (e.g., Buhl & Lanz, 2007), but also reflected in Eastern cultures, including in Malaysia (e.g., Wider et al., 2021), India (e.g., Seiter & Nelson, 2011), and China (e.g., Zhong & Arnett, 2014).

Defining adulthood: traditional vs non-traditional markers

Historically, marriage was the fundamental determinant of entering adulthood (Arnett, 1998, 2014). However, modern day young adults do not equate these traditional markers of age as criteria for becoming an adult. Instead, young adults now adopt more subjective and individualistic qualities as their criteria for adulthood including making independent decisions, becoming financially self-sufficient, and taking responsibility for their own actions (Arnett, 1997, 1998, 2003, 2014; Arnett & Mitra, 2020). This phenomenon is in accordance with the belief that the traditional structure of the entrance into adulthood is no longer emphasized in late-modern societies where people tend to individualize their life trajectories (Côté, 2002).

Measuring the entrance to adulthood

To increase the breadth of knowledge relating to young adults' perceptions of adulthood, Arnett (1994, 1997, 1998, 2001) developed a list of developmental milestones, including the Markers of Adulthood (MoA) scale. The MoA scale seeks to determine societal meanings of adulthood. Originally, there were seven subscales in the MoA scale (Arnett, 1998, 2001, 2003), including Independence, Interdependence, Role Transitions, Norm Compliance, Biological Transitions, Chronological Transitions, and Family Capacities. Based on a 43-item questionnaire developed by Arnett (1997), Badger et al. (2006) validated a revised MoA scale in Chinese and American samples, which consisted of five subscales including role transitions, norm compliance, relational maturity, biological/age-related transitions, and family capacities. Based on comparisons and evaluations of both deductive and inductive evidence, Fosse et al. (2015) found a refined, four-factor scale, including role transitions, norm compliance, relational maturity, and independence. Collectively, these recent validated versions of the MoA have been widely used across cultures, such as in Arica (e.g., Obidoa et al., 2019), and in Germany (e.g., Meckelmann & Peiker, 2013). Conversely, a Chinese version of the MoA scale (Zhong & Arnett, 2014) made several modifications rooted in their local culture. (i.e., items involving smoking or drinking and driving were removed, whereas items relating to caring for one's parents were added.)

Emerging adulthood in China

According to the Civil Code of the People's Republic of China (the Xinhua News Agency, 2020), any person over the age of 18 is legally considered to be an adult. Regardless of this legal stipulation, research conducted in China suggests that age alone is rarely considered as important in subjective views in defining adulthood.

In 2004, Nelson et al found that 60% of young people in China considered themselves to be "fully" adult; whereas, in a 2014 study, the portion of young Chinese adults defining themselves as fully adult was much lower, 22%. Instead, the majority of this sample (71%) of young Chinese adults identified as being "partially" an adult (Nelson et al., 2013). This change may reflect a tension between Chinese youth's increased exposure to both Western individualistic culture (Nelson et al., 2013), and traditional Confucian cultural values (Nelson et al., 2004; Nelson et al., 2013; Zhong & Arnett, 2014). Moreover, changes have also taken place in Chinese young people's life trajectories. Not only has the typical age of marriage increased, but the age of entering parenthood has also been pushed back. According to the China Population Census Yearbook (2020), from 2010 to 2020, the mean age of marriage has increased by 3.63 for men and the mean age of marriage has increased by 3.95 for women. And more young people pursing higher education and attaining tertiary degrees, (the gross enrollment rate was 57.8% in 2021) (Chinese Education Online, 2022). Indeed, in the past 10 years, the average total number of years of formal education has increased from 9.68 to 10.75 (the Seventh National Census of the State Council, 2021).

Since having been proposed as the unifying ideology by Dong Zhongshu in the Han times (Loewe, 2011), Confucianism has played a pivotal role in influencing Chinese culture and dictating the start of adulthood. Confucianism emphasizes filial piety, which requires children's respect, obedience, and reverence for parents and other family elders (Yeh & Bedford, 2003). The idea of filial piety also influences individuals' perception of themselves and their internal development (Chao & Tseng, 2002). Zhong & Arnett, (2014) found that family obligation is an important part of adult status among migrant women

workers in China. These other-oriented ideas of Confucianism are closely associated with collectivism (Zhang et al, 2005). In collectivist countries like China, the core of an individual's self-concept is based on social embeddedness and interdependence with others in their ingroups (Brewer & Chen, 2007). Such collectivist ideas contribute to young Chinese adults' perception of adult status (Nelson et al., 2004; Nelson et al., 2013). In recent decades, Chinese emerging adults have had new and more frequent opportunities to engage with Western culture and values. Their perception of adult status may therefore have changed subsequently, although to date these perceptual shifts have been largely unexamined.

The current study

In the current study, three major demographic differences in emerging adults' subjective markers of adulthood were investigated: gender (male vs female), residency status (rural vs urban) and educational status (student vs non-student). Firstly, the completion of school education is an important milestone for most emerging adults, which indicates that they are no longer identified as students. After graduation, emerging adults feel added parental and cultural pressures to enter marriage and parenthood. According to Zhang (2006), with increasing age, Chinese emerging adults may become more prone to adhering to traditional ideals. Based on these findings, the first hypothesis is that non-students will be more inclined to traditional Chinese markers of adulthood. In this study, non-students refer to emerging adults aged 18 to 30, who are not studying or enrolled at a school or a university or other educational program, including individuals who dropped out of high school or universities, and individuals who graduated from high schools or universities. Gender differences arise within the criteria for entering adulthood. In traditional Confucian society, women had always been discouraged from pursuing further education, coupled with receiving fewer overall opportunities to cultivate their talents, in comparison to men. And the son preference still remains pronounced in China, especially in rural regions (Hesketh et al., 2011; Lei & Pals, 2011; Wang, 2005). In this case, women were always relegated to a lower social status than their male counterparts (Tu et al., 1992) and gained less educational opportunities (Wang, 2005; Yu & Su, 2006). However, with the progress in the promotion of gender equality in domestic and work life, women now experience more egalitarian opportunities (Tu & Liao, 2005; Zhang, 2006). Based on the inequality women had experienced for centuries, we hypothesized that women may be less likely to endorse traditional markers. With respect to residency status, since the establishment of the household registration system (Chinese name: "Hukou"), Chinese society has been deeply impacted (Wang, 2004). Under this system, there are two residency statuses referred to as rural and urban. Substantial rural-urban disparities favor urban areas, including in household income and property; social welfare and security (e.g., housing allowance and unemployment insurance); and resources (educational resources and medical resources) (Sheehan, 2017). Based on various degrees of modernization, Chinese rural areas may be less inclined to adopt western and individualistic values (Sun & Ryder, 2016), leading to the third hypothesis: emerging adults with rural residency status may put more emphasis on traditional criteria of adulthood status, in comparison to urban societies.

There is lacking recent literature identifying markers in entering Chinese adulthood (Nelson et al., 2013; Zhong & Arnett, 2014). With the recent rapid socioeconomic, demographic, and cultural changes experienced, a new pattern in the trajectories to adulthood is emerging in Chinese context (Wang & Zhao, 2021; Yeung & Hu, 2013). Previous studies, with relatively small sample sizes, were conducted from either the view of college students (Nelson et al., 2004; Nelson et al., 2013) or from the view of workers (Zhong & Arnett, 2014). There is lacking research in comparing students' and nonstudents' perceptions of adulthood within the same study. In addition, the differences between the rural and the urban samples need to be examined. In this way, the current study aims to address the insufficiency of previous studies and carry the research on Chinese emerging adulthood a step forward.

Method

Participants and Procedure

The study was conducted from October to November 2021. Participants were recruited from two settings and provided electronic consent before participating. For the student sample, a total of 4,899 undergraduates, between the ages of 18 to 30 years old, volunteered to participate in our study by completing the MOA via an online survey tool (Questionnaire Star). The non-student sample was recruited on Credamo, an online survey platform. A total of 2200 non-student participants completed the study voluntarily and were compensated for their participation (10 RMB each). The final sample was 7,099 Chinese emerging adults (Table 1). Demographic information (e.g., age, gender, residency status, and educational attainment) was collected. All descriptive information of each sample is presented in Table 1. There were significant differences in age (t = 77.3, p < .001, Cohen's d = 1.74) and sex ($\chi 2 = 50.7$, df = 1, p < .001) between the two samples. The non-student sample was older and more weighted toward females.

Measures

The revised MoA

Translation of MoA into Simplified Chinese. The back-translation technique was adopted in this study, which is a widely used cross-cultural translation method (Jones et al., 2001). It entailed the blind backward translation of a translated questionnaire back into the original language, followed by the subsequent comparison of the two translated versions of the instrument and then the final version of the instrument in the target language was produced after ambiguities and discrepancies had been resolved (Brislin, 1970). The first Chinese version of MoA was translated by three bilingual individuals, including two psychologists and one postgraduate student. Next, this version of MoA was translated back from Chinese to English by an English professor. A group of experts compared the second version of MoA with the original, and made several modifications on the first Chinese version of MoA. Moreover, the second Chinese version of MoA was initially sent to 12 participants to determine if it was comprehensible. At last, according to several suggestions made by these participants, the final version of Chinese-language MoA was slightly modified and then confirmed.

Subjective importance of markers of adulthood. To examine which markers of adulthood participants consider as important, 43 items of criteria for adulthood were presented (See Table 2). The revised 43-item MoA was based on the original form proposed by Arnett (2001;2003). As suggested, the MoA may need novel items according to the local culture (Norman et al., 2021). As a result, several modifications were made to take the Chinese cultural context into account.

Considering the legal age of marriage in China is 20 for women and 22 for men, item "Reached age 20 (women); reached age 22 (men)" was added, while original item "Reached age 21" was dropped, as age 21 has little meaning related to chronological transitions in China. The item "Capable of supporting parents financially" was added in accordance with the traditional emphasis on filial piety. The item "Avoid using illegal drugs" was transformed into "Avoid using forbidden objects" for concern that drugs are a sensitive topic in China. Participants were asked to rate each criterion on a 4-point Likert scale, ranging from "not at all important" (1) to "very important" (4). There were six subscales, revised from a 43-item questionnaire developed by Arnett (1997): "Biological/chronological transitions", "Role transitions", "Family capacities", "Individualism", "Relational maturity", and "Norm compliance". The values of Cronbach's alpha for six subscales and MoA between college students and non-college students are presented in Table 2. At the end of the questionnaire, participants were asked to write down their three most important markers of adulthood. They could choose from the 43 criteria previously provided or give their own ideas.

Self-perception of adulthood status in different contexts. Participants were asked the question "Do you feel like you have reached adulthood?" to examine their self-perceived adulthood status. As in previous studies, three options were given: "Yes"; "No"; "In some ways yes, in some ways no". In addition, to further investigate their views of their adulthood status in different relational contexts, participants were asked how adult they feel when they are with different people, including "Father", "Mother", "Brother or sister (including cousins)", "Friends", "Romantic partner", "Boss or teacher", or "Co-worker or classmate". Four options were given for the question above: "Hard to tell (if you don't have such relation)" (scored 0), "Not at all adult" (scored 1), "Partly adult" (scored 2), "Fully adult" (scored 3). Higher scores indicated that an individual felt more like an adult. Participants who chose the option "Hard to tell" were left out of the results in the relevant analysis.

Results

Self-perceived adulthood status

Participants' response to the question "Do you feel like you have reached adulthood?" reflected their views of their adulthood status. Results showed that for college students, 16% of them responded "Yes", 12% responded "No", and 72% of them replied "In some ways yes, in some ways no"; 29% of the non-students responded "yes", 12% responded "no", and 59% of them replied "in some ways yes, in some ways no".

Subjective importance of markers for adulthood

The participants were also asked to rate the importance of each adulthood criterion (Table 3). The three markers that were rated with the highest frequency for college students were, (1) "Avoid committing petty crimes like shoplifting and vandalism" (2) "Accept responsibility for the consequences of your actions", (3) "Learn always to have good control of your emotions". Within the non-student sample, the three markers were, (1) "Accept responsibility for the consequences of your actions", (2) "Avoid committing petty crimes like shoplifting and vandalism", and (3) "Learn always to have good control of your emotions". The three markers in the college sample that were ranked as least important included, (1) "Have at least one child", (2) "Married", and (3) "Have had sexual intercourse"; whereas, for the non-student sample, (1) "Grow to full height" (2) "Allowed to smoke cigarettes" (3) "Allowed to drink alcohol" were deemed as least important.

A one-way within-subjects ANOVA was used to explore the importance of each set of markers, categorized by six subscales including "Biological/chronological transitions", "Role transitions", "Family capacities", "Individualism", "Relational maturity", and "Norm compliance". The results showed that the observed F value was statistically significant for both samples: for the college sample, F (4, 4899) = 6.404, p < .001; for the non-student sample, F (4, 2200) = 7.134, p< .001. Bonferroni pairwise comparison tests (p < .05) were conducted for both samples, and the results are shown in Table 4.

Self-perceived adulthood status in different relational contexts

To determine emerging adults' self-perceived adulthood status in all seven relational contexts, participants were asked how adults they feel when they are with a certain person (Table 5). A repeated measures ANOVA with LSD post-hoc follow-up analyses (controlling for age) were conducted (for college sample, F (6, 4899) = 38.179, p < .05, partial η^2 = .008; for non-student sample, F (6, 2200) = 110.73, p < .05, partial η^2 = .048). There was a significant relationship context by age interaction. As results showed, Chinese emerging adults felt most like an adult when they were interacting with a boss or a teacher (for college sample, *M* = 2.37, *SD* = 0.73; for non-student sample, *M* = 2.58, *SD* = 0.62), followed by with their father (for college sample, *M*=2.28, *SD*=0.81; for non-student sample, *M* = 2.42, *SD* = 0.68), and then with their mother (for college sample, *M* = 2.27, *SD* = 0.81; for non-student sample, *M* = 2.43, *SD* = 0.68). They felt least adult with a romantic partner (for college sample, *M*= 1.53, *SD*= 1.09; for non-student sample, *M*= 1.98, *SD*= 1.13), followed by with a brother or a sister (including cousins) (for college sample, *M*= 1.95, *SD*= 0.83; for non-student sample, *M*= 1.98, *SD*= 0.80), with friends (for college sample, *M*= 2.04, *SD*= 0.63; for non-student sample, *M*= 2.16, *SD*= 0.56), and with co-workers or classmates (for college sample, *M*= 2.08, *SD*= 0.64; for non-student sample, *M*= 2.27, *SD*= 0.57).

Age, parenthood or marital status as predictor variable for adulthood status

To explore the influence of age on college students' self-perceived adulthood status, binary logistic regression was applied. In this case, concerning the adulthood status, the participants' response "Yes" was coded 0 and the response "In some ways yes, in some ways no" was coded 1, while the participants who answered "No" was not included in this analysis. Results (Table 6) show that age is positively associated with the likelihood that college students view themselves as adults.

To examine whether parenthood or marriage status impacts how emerging adults perceive their adulthood status, binary logistic regression was applied in the non-student sample (n = 2200), as most of college students haven't reached marriage or parenthood. In this case, concerning marital status, participants' response "single" was coded 0 and "married" and "divorced" were coded 1. If a participant did not have a child, their response was coded as 0. If they had more than one child, their response was coded as 1. Results (Table 7 & 8) show that the experience of marriage and childbearing can positively influence the likelihood that nonstudents consider themselves as adults, with age as the control variable.

Gender, urban-versus-rural, student-nonstudent comparisons on importance of criteria for adulthood.

Independent-samples T test was applied to examine the gender difference, as well as discrepancies between living in urban versus the rural settings in both student and non-student sample. Results (showed in Table 4) revealed that in both student and non-student samples, men tended to rate "Biological/chronological transitions," "Role transitions" and "Relational maturity" more important than women; The rural participants tended to rate "Biological/chronological transitions" more important than the urban participants. In the student sample, the rural participants tended to rate "Individualism", "Relational maturity", and "Norm compliance" less important than the urban participants, while there were no significant differences among the three items between the rural and the urban participants in the non-student sample. Moreover, in non-student sample, "Role transitions" and "Family capacities" were rated more important by the rural than the urban participante. "Norm compliance" was rated more important by men than women, while such significant difference were not found in the student sample.

Discussion

The prominence of ambiguity of adulthood status

The most notable finding of the current study is that more than half of participants (72% of college students; 59% of nonstudents) regarded themselves as only partly adults. They no longer identify as adolescents, yet they do not perceive themselves as having reached adulthood, finding themselves in-between, which is one of five features characterizing emerging adulthood in Arnett's theory (Arnett, 2000). Notably, more college students feel the ambiguity of adulthood status than non-students. This finding is in accordance with previous research. Carruthers (2018) found that 66.9% of undergraduate students felt partially adult and 54.1% of graduate students felt in-between, while only 49.3% of non-student participants felt the same.

These clear differences in self-perceived adulthood status amongst college students and nonstudents may be influenced by age, marital status, and parenthood. As shown in Table 6-8, these three variables are all positively correlated with the likelihood that emerging adults perceive themselves as adults. There were significant differences in age between non-students and college students. In other words, the older participants may identify more as an adult. An increasing number (20.2%, including married 19.8%, divorced 0.3%) of non-students are married, in comparison to college students (only 0.3% married). Similarly, 18.4% of non-students have children, while none of college students have. Based on these statistics, experiencing marriage and parenthood may make emerging adults feel more adult. Previous research (Zhong & Arnett, 2014) confirms that women who are married and/or have children are more likely to identify as an adult.

Endorsed adulthood status in different contexts

Social context contributes to whether young people feel adult or not. The results suggest that both students and non-students feel most like an adult when they are with a boss or teacher, followed by with a parent. In the presence of a romantic partner, sibling, friend, classmate, or co-worker, however, they identify less with adult status. Confucianism's emphasis on hierarchy and filial piety promotes the principle of respecting the superior (Yeh, 2003; Yeh & Bedford, 2003). Therefore, when emerging adults are with an elder, or someone in a position of power (e.g., boss, teacher or their parents), they feel their need to defer to these superiors (Hwang, 1987). Moreover, in such orderly social relations with superiors, individuals should obey a series of social norms so that they will not offend the superior and be considered impolite or untutored (Zhou, 2008). Such submissive relationships push emerging adults to be more aware of their words and actions during these interactions with. On the other hand, the intimacy of relationships also influences how emerging adults perceive their adulthood status. Compared to situations involving superiors, emerging adults feel least like an adult with their peers, as fewer social norms exist among peers. The role of intimacy and friendship makes young adults feel less like an adult with significant others or friends. Such as, they feel less adult with their parents than boss or coworkers who are not related to them by blood. Also, they feel less adult with siblings than with their friends or classmates or coworkers. And they feel least adult with their romantic partners whom they establish intimate relationships with.

Subjective importance of markers of adulthood

For both college students and non-students, they consider "Avoid committing petty crimes like shoplifting and vandalism", "Accept responsibility for the consequences of your actions" and "Learn always to have good control of your emotions" as three most important markers of adulthood, which belong to three major domains of MoA: "Norm compliance", "Individualism" and "Relational maturity" respectively. However, "Have at least one child", "Married", and "Have had sexual intercourse" are the three least important criteria for adulthood for college students, among which two items belong to the "Biological/chronological transitions" subscale and one item belongs to the "Role transitions" subscale; and for non-student sample, "Grow to full height", "Allowed to smoke cigarettes", and "Allowed to drink alcohol" are the three least important criteria, which all belong to the "Biological/chronological transitions" by both samples. Taken together, the current study found that in China today, emerging adults favor more intangible, psychological and individualistic criteria of adulthood rather than formal role transitions like biological or chronological transitions (Arnett, 2014; Aronson, 2008; Badger et al., 2006).

Moreover, compared to the top three criteria (accepting responsibility for self, being able to make decisions independently, and becoming less financially independent) rated by emerging adults in America (Arnett, 2014), Chinese emerging adults identify more with norm compliance (e.g., avoid committing petty crimes like shoplifting and vandalism) and favor more on relational maturity (e.g., learn always to have good control of your emotions). The widely shared belief of the Chinese people that harmony is valued (lp, 2014) is reflected in the emphasis on norm abiding behaviors and relational maturity concerning the markers of adulthood. Reasons behind it can be traced back to the emphasis on harmony in Confucianism (Xiaohong & Qingyuan, 2013).

Gender and residency status difference on self-perception of criteria for adulthood

In both student and non-student samples, "Biological/chronological transitions", "Role transitions" and "Relational maturity" were rated more important by men than women; and only in the nonstudent sample, "Norm compliance" was rated more important by men than women. In other words, men may pay more attention to traditional criteria of adulthood. This may be associated with social expectations on different gender roles. Traditionally, men adopt a more instrumental role, including making discipline with children and serving as role models in employment and achievement, while women play a more socioemotional and expressive role, including dealing with emotions of others (Bussey, 2011; Bussey & Bandura, 1999). According to social cognitive theory, males and females internalize these gender stereotypes, which then influences their self-perceptions and behaviors (Bussey, & Bandura, 1999). Besides, several studies in China (Rongxian et al., 2001; Liu et al, 2011; Wu et al, 2022; Wang, 2005) have found that males' perceptions of gender roles are more influenced by traditional ideas. Maybe this is the reason why men are in more favor of traditional markers of adulthood, such as "Biological/chronological transitions" and "Role transitions". It's worth noting that men consider "Relational maturity" more important than women who are normally viewed as more expressive and affective. One possible reason is that relational maturity that "signifies a level of maturity in reference to relationships and associating with others" (Badger et al., 2006) is also viewed as an important aspect of success, especially in a collectivist country like China, where relational harmony and group interests are emphasized (Ip, 2014; Lau, 1992; Xiaohong & Qingyuan, 2013). Therefore, relation maturity may be seen as one of factors that contribute to men's perceived societal expectations as the instrumental role.

For both samples, participants from rural areas tended to rate "Biological/chronological transitions" as more important than urban participants. In the student sample, "Individualism", "Relational maturity", and "Norm compliance" were rated less important by the rural than the urban students. In the non-student sample, the rural participants tended to rate "Role transitions" and "Family capacities" as more important than the urban participants did. In China, the rural-urban disparities are not only manifested in a variety of resources (e.g., educational and medical resources), but also in conceptions and ideas. There are many people who want to have a son to carry on the family name in rural families; therefore the "Biological/chronological transition" markers reflect rural participants' emphasis on traditional ideas. In addition, psychosocial factors of entrance to adulthood are more valued in urban students than in their rural peers. Living in the city may provide emerging adults with more opportunities to absorb and incorporate ideas from other cultures into their way of thinking. Filial piety also makes individuals shoulder additional responsibilities, especially for those graduated from school. Previous research (Wei & Zhong, 2016) shows that with a more complete social security system, urban elders can get benefits from pension insurance, while due to institutional disparities, the elderly in rural areas rely more on their children or other family members to get financial support and daily assistance. These family capacities may contribute to added pressures on emerging adults living in rural areas, explaining why rural nonstudents identify with "Role transitions" and "Family capacity" markers at higher rates than urban inhabitants.

Limitations and future research

Several limitations exist within the current research. At first, the use of self-report scales may make responses inherently biased by subjects' feelings or social desirability bias. Second, this cross-sectional research adopts quantitative methods, resulting in a lack of qualitative studies pursuing participants' self-perception of adulthood status. Third, the revised MoA scale used in the study is based on the original version developed from the western perspective, rather than an MoA scale based on Chinese culture. At last, just like the previous research (Zhong & Arnett, 2014) on Chinese non-student sample (migrant women workers), the internal consistency reliabilities for subscale "Individualism" (Cronbach's alpha= 0.49) and "Relation maturity" (Cronbach's alpha = 0.55) in non-student sample were low in the current research so that the interpretation of the results concerning these two subscales should be used with caution. Therefore, future research can combine information from several sources and methods (e.g., combing both quantitative and qualitative methods) to increase the generalizability of the results.

Conclusion

Under the background of globalization, this study provides a significant insight into emerging adults' ideas of entrance to adulthood in a non-western and developing country. Through quantitative research, the current study found that on the one hand, Chinese emerging adults' self-perceptions of adulthood status reflects individualistic and non-traditional thoughts as well as collectivist and Confucian values; on the other hand, male, rural and non-student emerging adults' subjective importance of criteria to adulthood are more influenced by traditional ideas. Taken together, the findings reflect that the perception of Chinese emerging adults on adulthood status appear to combine both traditional and western values.

Declarations

Ethical Statement

This study was approved by the Ethics Committee of Shenzhen University in China (NO.PN-2021-048). Participants were assured that personal identities would not be disclosed in subsequent research reports.

Declarations of conflict of interest

The authors declared that they had no conflict of interest.

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Tables

| | Total sampl | e (n=7099) | College samp | College sample (n=4899) | | ample(n=2200) |
|--------------------------------|-------------|------------|--------------|-------------------------|------|---------------|
| | М | SD | М | SD | М | SD |
| Age | 20.52 | 2.96 | 19.18 | 1.55 | 23.5 | 3.162 |
| | | | | | | |
| | Ν | % | Ν | % | Ν | % |
| Gender | | | | | | |
| Male | 3286 | 46.3 | 2406 | 49.1 | 880 | 40.0 |
| Female | 3813 | 53.7 | 2493 | 50.9 | 1320 | 60.0 |
| Residency status | | | | | | |
| Rural area | 4043 | 57.0 | 2907 | 59.3 | 1136 | 51.6 |
| Urban area | 3056 | 43.0 | 1992 | 40.7 | 1064 | 48.4 |
| marital status | | | | | | |
| single | 6640 | 93.5 | 4884 | 99.7 | 1756 | 79.8 |
| married | 451 | 6.6 | 14 | 0.3 | 437 | 19.9 |
| divorced | 8 | 0.0 | 1 | 0 | 7 | 0.3 |
| parenthood | | | | | | |
| no child | 6695 | 94.3 | 4899 | 100 | 1796 | 81.6 |
| one child or more | 404 | 5.7 | 0 | 0 | 404 | 18.4 |
| Educational attainment | | | | | | |
| received college education | 6478 | 91.2 | 4899 | 100 | 1579 | 71.8 |
| not received college education | 621 | 8.7 | 0 | 0 | 621 | 28.2 |

 Table 1 Descriptive statistics of participants for each sample

Table 2. The internal consistency reliabilities (Cronbach's alpha coefficients) for each subscale and total scale of the MoA

| | college student | non-student |
|--------------------------------------|-----------------|-------------|
| | (n=4899) | (n=2200) |
| Biological/chronological transitions | 0.87 | 0.83 |
| Role transitions | 0.76 | 0.70 |
| Family capacities | 0.90 | 0.76 |
| Individualism | 0.75 | 0.49 |
| Relational maturity | 0.79 | 0.55 |
| Norm compliance | 0.84 | 0.74 |
| total scale | 0.95 | 0.87 |

 Table 3. Means of how important each marker is for adulthood and percentages of participants viewing a marker as very important

| | | College s | ample | Non-st | udent sample |
|---------------------------------------------------------------------|-----|-----------|------------|--------|--------------|
| Markers of adulthood | | Mean | Percentage | Mean | Percentag |
| Biological/chronological transitions | | | | | |
| Reached age 18 | 3.1 | 31.6 | 3.0 | | 31.5 |
| Reached age 20 (women); reached age 22 (men) | 3.0 | 27.7 | 2.8 | | 22.2 |
| Obtained driver's license and can drive an automobile | 3.1 | 31.7 | 2.8 | | 21.2 |
| Grow to full height | 2.5 | 13.3 | 1.9 | | 3.6 |
| Become biologically capable of bearing children (women) | 2.8 | 21.9 | 2.7 | | 20.0 |
| Become biologically capable of bearing children (men) | 2.9 | 24.3 | 2.7 | | 22.1 |
| Allowed to drink alcohol | 2.7 | 15.7 | 2.2 | | 7.7 |
| Allowed to smoke cigarettes | 2.5 | 14.5 | 2.0 | | 7.0 |
| Completed military service (males) | 2.7 | 15.2 | 2.5 | | 10.2 |
| Have had sexual intercourse | 2.4 | 13.1 | 2.2 | | 9.1 |
| Role transitions | | | | | |
| Married | 2.3 | 9.5 | 2.3 | | 9.6 |
| Have at least one child | 2.3 | 8.3 | 2.1 | | 8.6 |
| Settled into a long-term career | 3.3 | 41.1 | 3.5 | | 56.3 |
| Employed full-time | 3.1 | 28.8 | 3.2 | | 35.6 |
| Finished with education | 3.4 | 45.4 | 3.5 | | 55.5 |
| Purchased a house | 3.1 | 32.3 | 3.1 | | 33.6 |
| Family capacities | | | | | |
| If a man, become capable of keeping family physically safe | 3.5 | 51.0 | 3.6 | | 65.7 |
| If a woman, become capable of keeping family physically safe | 3.2 | 32.3 | 3.1 | | 26.4 |
| If a man, become capable of caring for children | 3.2 | 32.6 | 3.2 | | 29.3 |
| If a woman, become capable of caring for children | 3.1 | 25.8 | 3.0 | | 24.6 |
| If a man, become capable of running a household | 3.3 | 36.1 | 3.3 | | 36.5 |
| If a woman, become capable of running a household | 3.2 | 29.7 | 3.2 | | 32.4 |
| If a man, become capable of supporting a family financially | 3.5 | 48.9 | 3.6 | | 60.7 |
| If a woman, become capable of supporting a family financially | 3.1 | 28.5 | 3.1 | | 24.8 |
| Capable of supporting parents financially | 3.4 | 43.2 | 3.4 | | 42.5 |
| Individualism | | | | | |
| Financially independent | | 3.4 | 43.9 | 3.6 | 62.2 |
| Not deeply tied to parents emotionally | | 3.2 | 30.4 | 3.1 | 29.8 |
| Make independent decisions | | 3.4 | 44.8 | 3.5 | 55.1 |
| Accept responsibility for the consequences of your actions | | 3.5 | 53.0 | 3.8 | 75.4 |
| Establish a relationship with parents as an equal adult | | 3.3 | 38.1 | 3.4 | 44.2 |
| No longer living in parents' household | | 2.7 | 13.6 | 2.6 | 14.3 |
| Relational maturity | | | | | |
| Learn always to have good control of your emotions | | 3.5 | 52.4 | 3.7 | 66.8 |
| Become less self-oriented, develop greater consideration for others | | 3.4 | 40.2 | 3.3 | 39.1 |
| Committed to a long-term love relationship | | 3.4 | 43.4 | 3.4 | 47.4 |
| Make life-long commitments to others (family commitments) | | 3.3 | 37.3 | 3.2 | 34.9 |

| Avoid committing petty crimes like shoplifting and vandalism | 3.5 | 55.7 | 3.7 | 67.3 |
|-------------------------------------------------------------------------|-----|------|-----|------|
| Use contraception if sexually active and not trying to conceive a child | 3.4 | 46.9 | 3.4 | 46.8 |
| Avoid drunk driving | 3.5 | 52.2 | 3.6 | 61.5 |
| Avoid using forbidden drugs | 3.4 | 48.2 | 3.5 | 58.9 |
| Drive an automobile safely and close to the speed limit | 3.4 | 45.8 | 3.4 | 47.3 |
| Have no more than one sexual partner | 2.9 | 28.7 | 2.7 | 23.1 |
| Avoid becoming drunk | 3.1 | 29.5 | 3.0 | 23.7 |
| Avoid using profanity/vulgar language | 3.2 | 30.5 | 3.0 | 22.9 |

Table 4. Student-nonstudent comparisons on importance of criteria for adulthood

| | student(n=489 | 9) | non-student(n=2200) | | | | | |
|--------------------------------------|---------------|---------------|---------------------|---------------|---------------|----------|------------|---------------|
| | men(n=2406) | women(n=2493) | | rural(n=2907) | urban(n=1992) | | men(n=880) | women(n=1320) |
| | M(SD) | M(SD) | t | M(SD) | M(SD) | t | M(SD) | M(SD) |
| Biological/chronological transitions | 2.85(0.58) | 2.67(0.54) | 11.31** | 2.79 0.55 | 2.71 0.59 | 4.58** | 2.65(0.51) | 2.38(0.51) |
| Role transitions | 3.00(0.54) | 2.86(0.44) | 10.01** | 2.93 0.48 | 2.92 0.51 | 1.01 | 3.07(0.47) | 2.87(0.46) |
| Family capacities | 3.27(0.48) | 3.28(0.45) | -0.255 | 3.27 0.45 | 3.28 0.48 | -0.90 | 3.28(0.35) | 3.27(0.37) |
| Individualism | 3.24(0.44) | 3.24(0.39) | 0.33 | 3.21 0.41 | 3.28 0.42 | '-6.27** | 3.32(0.34) | 3.33(0.32) |
| Relational maturity | 3.41(0.48) | 3.35(0.45) | 3.85** | 3.36 0.46 | 3.41 0.48 | '-3.51** | 3.45(0.39) | 3.34(0.41) |
| Norm compliance | 3.30(0.48) | 3.30(0.44) | 0.07 | 3.28 0.45 | 3.32 0.48 | '-2.74** | 3.31(0.40) | 3.26(0.41) |
| | | | | | | | | |

Note: *p< .05; **p< .01

Table 5. Perceived adulthood by student status.

| | Adulthood status (%) | | | | | | | | |
|---------------------------------------|----------------------|---------------|------------|--------------|----------------------|--------------|------------|--------------|--|
| | College stud | lent (n=4899) | | | Non-student (n=2200) | | | | |
| The person they are with | Fully adult | Partly adult | Not at all | Hard to tell | Fully adult | Partly adult | Not at all | Hard to tell | |
| Father | 46.4 | 38.4 | 11.5 | 3.7 | 51.5 | 40.1 | 7.3 | 1.1 | |
| Mother | 46.5 | 37.6 | 12.6 | 3.3 | 52.5 | 38.3 | 8.5 | 0.7 | |
| Brother or sister (including cousins) | 24.8 | 52.8 | 15.0 | 7.5 | 23.5 | 57.9 | 11.5 | 7.1 | |
| Friends | 19.8 | 66.6 | 11.3 | 2.2 | 24.5 | 67.5 | 7.4 | 0.5 | |
| Romantic partner | 18.1 | 44.6 | 8.9 | 28.3 | 21.1 | 43.9 | 4.8 | 30.2 | |
| Boss or teacher | 49.9 | 40.1 | 7.3 | 2.6 | 64.1 | 30.5 | 4.5 | 0.9 | |
| Co-worker or classmate | 22.3 | 66.1 | 8.9 | 2.7 | 32.0 | 63.6 | 3.4 | 0.9 | |

Table 6. Age as a predictor variable for adulthood status in college sample (n=4899)

| | | | | | 95.0%Cl f | for Exp(B) |
|-----------|-------|--------|--------------|--------|-----------|------------|
| Predictor | В | Wald | Significance | Exp(B) | Lower | Upper |
| Age | 177 | 59.22 | < .001 | 0.84 | 0.80 | 0.88 |
| Constant | 4.902 | 120.03 | < .001 | 134.61 | | |

Table 7. Age and marital status as a predictor variable for adulthood status in non-student sample (n=2200)

| | | | | | 95.0%Cl fc | or Exp(B) |
|----------------|-------|--------|--------------|--------|------------|-----------|
| Predictor | В | Wald | Significance | Exp(B) | Lower | Upper |
| Marital status | -1.48 | 85.08 | < .001 | 0.23 | 0.17 | 0.31 |
| Age | 22 | 85.86 | < .001 | 0.80 | 0.77 | 0.84 |
| Constant | 6.40 | 131.55 | < .001 | 603.71 | | |

 Table 8. Age and parenthood as a predictor variable for adulthood status in non-student sample (n=2200)

| | | | | | 95.0%Cl for Exp(B) | |
|------------|-------|--------|--------------|--------|--------------------|-------|
| Predictor | В | Wald | Significance | Exp(B) | Lower | Upper |
| Parenthood | -1.61 | 100.07 | < .001 | 0.20 | 0.15 | 0.27 |
| Age | -0.23 | 104.74 | < .001 | 0.79 | 0.76 | 0.83 |
| Constant | 6.64 | 154.17 | < .001 | 761.58 | | |