

Adolescent mental health 3



The new life stage of emerging adulthood at ages 18–29 years: implications for mental health

Jeffrey J Arnett, Rita Žukauskienė, Kazumi Sugimura

Since 1960 demographic trends towards longer time in education and late age to enter into marriage and of parenthood have led to the rise of a new life stage at ages 18–29 years, now widely known as emerging adulthood in developmental psychology. In this review we present some of the demographics of emerging adulthood in high-income countries with respect to the prevalence of tertiary education and the timing of parenthood. We examine the characteristics of emerging adulthood in several regions (with a focus on mental health implications) including distinctive features of emerging adulthood in the USA, unemployment in Europe, and a shift towards greater individualism in Japan.

Lancet Psychiatry 2014;
1: 569–76

This is the third in a *Series* of three papers about adolescent mental health

Clark University, Worcester, MA, USA (J Arnett PhD); Institute of Psychology, Mykolas Romeris University, Vilnius, Lithuania (R Žukauskienė PhD); and Graduate School of Education, Hiroshima University, Hiroshima, Japan (Prof Sugimura)

Introduction

What does it mean to become an adult, and what marks the transition to adulthood? All cultures have an answer of some kind to this question.¹ Furthermore, the answers change over time, as cultures change. Since 1960 in high-income countries, conceptions of the transition to adulthood have shifted from a focus on events such as leaving home to the gradual attainment of psychological markers such as accepting responsibility for one's self and making independent decisions.^{1–3}

One unmistakable cultural change in the past half century is that the transition to adulthood has become longer, and in developed countries happens later in life than previously, as measured by the timing of traditional markers such as the entry to stable work, marriage, and parenthood.⁴ In fact, the period between the end of adolescence (around age 18 years) and the entry to a stable adulthood is so long today in high-income countries that it constitutes not just a brief transition to adulthood but a new life stage between that of adolescence and of young adulthood—emerging adulthood—lasting from age 18 years to about age 29 years.⁵

In high-income countries today, the period from 18 years to 29 years of age is more usefully understood as a life stage of emerging adulthood than as the tail-end of a so-called extended adolescence, or as the early part of a so-called young adulthood that stretches from 18 years to 40 or 45 years of age.^{1,5–7} Although development during the ages of 18–29 years shares many similarities with that of the preceding or following stages, some important features make this period of emerging adulthood distinctive. Unlike adolescents, emerging adults are not going through puberty, are not in secondary school, and are not minors under the law. They have reached physical and sexual maturity, and are highly diverse in their educational and occupational combinations and trajectories. Some are in full-time work, others in tertiary education full-time, and many are combining work and education, especially in their late teens and early twenties. By contrast with young adults in their thirties, most emerging adults have not yet set up the stable

structure of an adult life, with long-term commitments in love relationships and work. Conversely, emerging adulthood is a period of heightened instability, since young people experience a series of love relationships and frequent job changes before making enduring decisions.

Distinguishing emerging adulthood from extended adolescence or young adulthood might be a useful heuristic approach for clinicians and mental health service providers. To treat these individuals as adolescents underestimates their capacities for self-direction, self-reflection, and independent living.⁵ Likewise, it is essential to recognise that because these individuals are emerging adults, not adolescents, they can refuse mental health treatment (because they are no longer minors under the law), in nearly all countries. In the USA, people in the emerging-adult age range disengage from mental health treatment at higher rates than do younger or older people, perhaps because they have reached an age at which they no longer have to accept treatment initiated by their parents.⁸ By contrast, health-care workers who see them as young adults might not recognise how much of the instability and uncertainty they experience is normal to the life stage of emerging adulthood and potentially healthy rather than a symptom of a serious mental health disorder.

Given the prevalence of mental health disorders at age 18–29 years, a distinctive developmental concept of this period is imperative. Although the age of onset of many mental health disorders is most often in adolescence, according to a review⁹ of epidemiological studies in the USA, the 12-month prevalence of any psychiatric disorder is more than 40% in people aged 18–29 years, higher than in people in any other age range, especially for anxiety disorders, mood disorders, and substance misuse. Similarly, in Japan, results from a national epidemiological survey¹⁰ showed anxiety disorders and mood disorders were the most prevalent psychiatric disorders in people aged 20–34 years and in the previous year the incidence of these disorders was higher than in adults aged 35 years or older. An understanding of

Correspondence to:
Jeffrey J Arnett PhD, Department of Psychology, Clark University, 950 Main Street, Worcester, MA 01610, USA
arnett@jeffrearnett.com

emerging adulthood as a normal developmental period with distinctive features in the life course of people in high-income countries has the potential to enhance the effectiveness of mental health approaches.¹¹

In this review we begin with an overview of the demographics of late entry into adult roles in high-income countries compared with that in low-income countries. We examine some of the notable features of emerging adulthood in the USA, Europe, and Japan. This analysis includes the implications for mental health issues in each region. Although the delayed transition to an adult role is taking place worldwide, our focus in this review is on high-income countries, partly because of the space limitations and partly because research on emerging adulthood has been mainly in developed countries.⁴

Demographic transitions: ever later

A half century ago the transition to adulthood was brief.¹² Most people began full-time work in their late teens, immediately after secondary school (if they even finished secondary school). Few people obtained a tertiary education. Marriage typically took place in a person's early twenties, and parenthood about a year afterwards.

Economic changes in recent decades in high-income countries have resulted in a shift from an economy based on manufacturing to one based mainly on services (such as business, health care, and education).¹² The new service industry jobs mostly require people's ability to use information and technology. Consequently, gross enrolment rates in tertiary education are more than 50% in every developed country (figure 1).

The median age of first marriage has also risen steadily across high-income countries, and is now typically around 30 years of age, nearly a decade higher than the age of marriage 50 years ago.¹⁴ However, the median age of first marriage is a somewhat misleading statistic as a cross-national indicator, because the acceptability and incidence of cohabitation and single motherhood varies widely across countries and cultures. In some developed countries (eg, Japan and Italy), marriage still signifies a move from the parental home, and readiness to enter parenthood, whereas in other countries (eg, in northern Europe) marriage usually occurs after a long period of cohabitation and after the birth of one or more children.^{14,15}

Consequently, mother's age of first birth is a better cross-national indicator of changes in the demographic patterns of the transition to adulthood. The change in the timing of first birth in high-income countries has changed greatly since 1970 (figure 2). In young women in every high-income country except the USA, the median age of first birth is close to 30 years of age. In young men, the median age of entry to fatherhood is about 2 years later.

These demographic changes show that a person's twenties, which used to be a time of settling into adult responsibilities in work and family roles, are now something else entirely. By contrast with the settled

young adulthood of the past, the new life stage of emerging adulthood is exceptionally unsettled, with respect to both work and relationships. Instead of entering a stable work path, most young people remain in education or training of some kind into their early twenties then make a transition into the workforce, with frequent job changes punctuated by periods of unemployment or underemployment.¹⁴ Instead of taking on marriage and parenthood in their early or mid-twenties, most young people have a series of intimate relationships, often including at least one period of cohabitation and stretches of having no partner; parenthood usually begins around 30 years of age.¹⁵

Substantial variation exists across high-income countries in terms of how emerging adulthood is experienced. We focus on the forms that emerging adulthood takes in three locations: the USA, Europe, and Japan. Furthermore, we discuss the implications the local features of emerging adulthood have for mental health issues.

USA: five features of emerging adulthood

The USA was the context for the origin of the theory of emerging adulthood, which was based on 300 interviews with people aged 18–29 years in various parts of the country.^{5,6} Arnett^{5,6} proposed five features as distinct (although not unique) to emerging adulthood: identity explorations, instability, self-focus, feeling in-between, and possibilities or optimism.

Identity explorations

Identity explorations entail trying out various possibilities for what kind of person to be and what kind of life to live, specifically in the areas of love relationships, work, and ideology.¹⁸ Traditionally, identity explorations have been associated with adolescence, according to Erikson's lifespan theory of development.¹⁸ However, today identity explorations are deemed by researchers in psychology to occur mainly during the period of emerging adulthood, although they might first arise in adolescence.¹⁹ Specifically, it is during emerging adulthood that most people think seriously about the commitments that will define the structure of their adult lives in love relationships, and work, and they gradually move towards making those commitments at around 30 years of age.

Mental health implications

Identity explorations can be exciting but are often daunting and confusing to the person, especially for emerging adults who find themselves unable to make choices about which paths to explore, or who feel the choices they would like to make in love relationships and work are unattainable. During this period practitioners might find it difficult to distinguish between emerging adults who are having normal identity struggles that will eventually be resolved by around 30 years of age and those who have more serious difficulties that are likely to

hamper their functioning well into adult life. Anxiety disorders and mood disorders are prevalent during the emerging adult years. More generally, feeling anxious or depressed is common during emerging adulthood. In a national survey of 1029 people aged 18–29 years in the USA, 56% of them agreed with the statement, “I often feel anxious”, and 32% of them agreed with the statement, “I often feel depressed”.²⁰

Instability

Emerging adulthood is arguably the most unstable period of the lifespan. It is certainly the time when changes in love relationships and work are most frequent. Most emerging adults experience a series of love relationships from ages 18 to 29 years, with some episodes of casual sex, but mainly in temporary monogamous partnerships.²¹ With respect to work, in the USA the median number of job changes from ages 18 to 29 years is eight,²² much higher than in any other life stage. Emerging adults’ instability in love relationships and work is derived partly from their identity explorations.⁵ However, a substantial amount of their instability is involuntary because their partners might break up with them, and their employers might fire them or lay them off.

Mental health implications

The instability of emerging adulthood can be troubling, especially when changes are involuntary. As noted in the previous section, more half of emerging adults often experience anxiety, and a third report often feeling depressed.²⁰ Instability might partly inspire these pervasive emotions. Also, frequent changes of residence mean that emerging adults might often find themselves without adequate social support. Many of them rely on social media to obtain virtual social support. In a national survey, 51% of people aged 18–29 years agreed with the statement, “I rely a lot on the support I get from friends and family through email, texting, and social networking websites”.²⁰

Self-focus

Emerging adulthood is a self-focused time of life, in the sense that it is the time when people have the fewest daily social roles and obligations to others.⁵ Children and adolescents must respond to the demands of parents and school authorities; adults typically have a marriage partner, children, and a long-term employer to whom they have daily obligations. Emerging adults have obligations, too, but the strength of these obligations might be less than in other life stages. They still have attachments to parents, but parental authority is less than at earlier ages. They might have a romantic partner, but not in a long-term committed partnership. They might have a job, but with so many job changes between ages 18 and 29 years, emerging adults might feel less of a commitment or obligation to their employer than they will later in life, once they begin a long-term occupation.

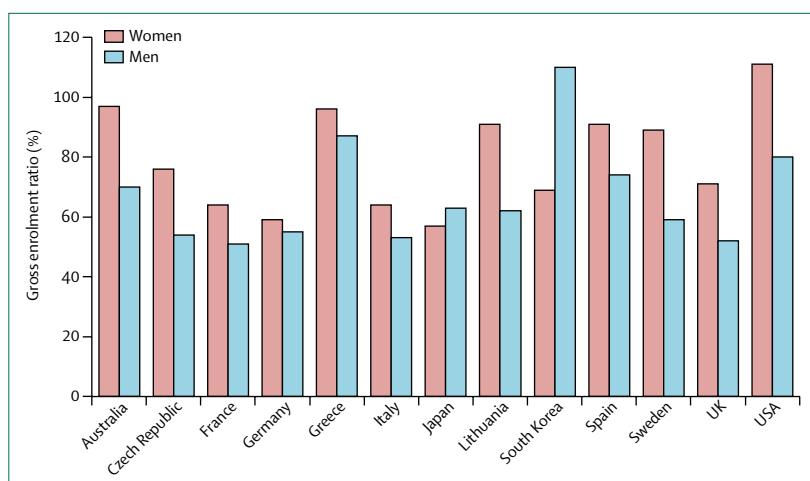


Figure 1: Gross enrolment ratio in tertiary education in selected developed countries

The gross enrolment ratio is the number of students enrolled in tertiary education divided by the number of people aged 18–22 years in the population. Some individuals in tertiary education may be outside this age range. Data derived from UNESCO.¹³

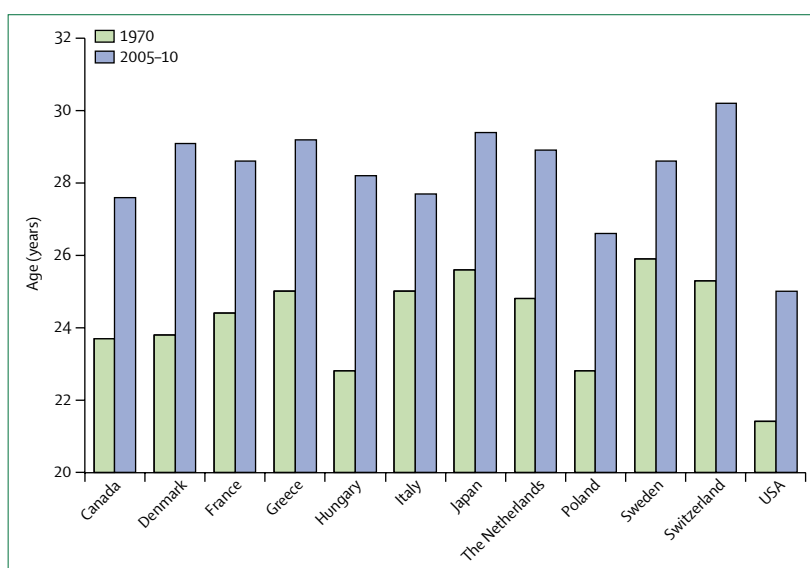


Figure 2: Age of mothers at first childbirth in 1970 and in 2005–10 in selected high-income countries

Most recent year available ranged from 2005 to 2010. Data derived from Central Intelligence Agency US,¹⁶ and Mathews and Hamilton.¹⁷

Mental health implications

Emerging adults in the USA often thrive on their self-focused independence. 73% of people aged 18–29 years agreed with the statement, “At this time of my life, I have a great deal of freedom”, and 83% agreed, “This time of my life is fun and exciting”.²⁰ Furthermore, these responses were consistent across social classes, as assessed by mother’s educational attainment.²⁰ However, being self-focused might be accompanied by low social support and consequent depression. For example, in a longitudinal study of people from 21 to 30 years of age, Pettit and colleagues²³ reported an inverse relation

between depression and social support in this period. Specifically, depressive symptoms were highest in people in their early twenties, and gradually waned; perceptions of social support were lowest in people in their early twenties and gradually increased.

Feeling in-between

Emerging adults tend to view themselves as being neither adolescents nor adults but somewhere in-between, on the way to adulthood but not there yet.³ The feeling of being in-between adolescence and adulthood might be derived from the criteria that emerging adults view as most important in adulthood, which tend to be gradual and psychological: “accepting responsibility for one’s self” and “making independent decisions”.^{3,6} These markers are achieved not in a single event but gradually, over time, so the sense of becoming an adult also takes place slowly.

Mental health implications

Feeling in-between might elicit feelings of depression and anxiety in some emerging adults, especially those who believe they should feel more adult at their current age than they actually are. In response to the question, “Do you feel that you have reached adulthood?” the statistical relation between the response, “no”, or, “in some ways yes, in some ways no”, and reports of feelings of anxiety and depression was significant.²⁰

Possibilities and optimism

Although emerging adulthood is often a time of struggle and mixed emotions, nearly all emerging adults in the USA believe their future is bright. 89% of 1029 Americans 18–29 years of age agreed with the statement, “I am confident that eventually I will get what I want out of life”.²⁰ Furthermore, 77% of them agreed with the statement, “I believe that, overall, my life will be better than my parents’ lives have been”. These responses were consistent across social classes, as assessed by mother’s educational attainment.²⁰ Notably, this survey was done in 2012, in the aftermath of a severe global economic recession. Emerging adults worldwide experienced the brunt of this recession, with respect to the decrease in wages and employment prospects.¹⁴ Nevertheless, for emerging adults in the USA, their personal optimism remained resilient.

Mental health implications

The optimism of emerging adults in the face of dire economic conditions could be argued as being misplaced, especially for those in the lower end of the socioeconomic spectrum who face the prospect of low wages and high unemployment in their adult lives. However, it is also possible to see their optimism as a psychological resource during what is often a stressful and difficult decade of life.²⁴ Indeed, the small proportion of emerging adults who do not have confidence that their lives will turn out well in adulthood might be at high risk of depression and anxiety.

A negative correlation was shown between agreement with the statement, “I often feel depressed”, and agreement with the statement, “At this time of my life, it still feels like anything is possible”, in people aged 18–29 years.²⁰

Emerging adulthood is a new theory, and whether the five features proposed as characteristic of emerging adults in the USA are also prevalent in other high-income countries is unknown. However, the same demographic changes that have taken place in all high-income countries have opened up the space for a life stage of emerging adulthood that is unlike either the puberty-intensive adolescence that precedes it or the more settled and stable young adulthood that follows. We focus on entry into the workforce and its consequence on mental health because successful entry into the workforce is an essential part of the transition from emerging adulthood to adulthood.

Europe: struggle amidst prosperity

Currently, Europe is one of the most affluent and healthy societies in human history.²⁵ In the Human Development Index²⁶ compiled yearly by the UN, which rates countries worldwide on a combined measure of health, education, and wealth, countries in Europe dominate the list with six in the top ten, and 11 in the top 20. However, emerging adults in most countries in Europe face serious barriers to entering the workforce. Although true for many years, the difficulties have increased in the aftermath of the 2007–08 global economic recession.

For people in all developed countries, before and since the economic recession entry into the workforce has become prolonged and problematic. Across developed countries in Europe youth unemployment (aged 15–24 years) has been consistently at least twice as high as overall unemployment.²⁷ Currently, youth unemployment is higher than 10% of people aged 15–24 years in most developed countries (figure 3), and higher than 50% in some countries in southern Europe, the region that has had the worst economic recession and the slowest recovery.

Unemployment is especially high in young people who have little education. Because the economies of high-income countries have shifted from manufacturing to service industry, the rewards for obtaining a tertiary education are growing, and people with less education struggle more to find adequate jobs than they did previously. This trend, has been exacerbated by the recession. For example, a study in Spain, in 2007, just before the recession began, showed that 14% of people aged 25–29 years with only primary education were unemployed, as were 11% of those with tertiary education credentials; by 2010, the gap had widened, with 30% of those with only primary education and 18% of those with tertiary education unemployed.²⁸

Even for people with tertiary education, the entry into the workforce presents some issues. University graduates have better success at finding a job than do their less-educated peers, but they are often underemployed, in

jobs that are not commensurate with the education they have received. According to one recent report,²⁹ 19% of persons across 27 European countries were overqualified for their jobs, and the percentage was highest among those who had obtained university education.

Increasingly, emerging adults in Europe who are able to find a job are hired on temporary contracts rather than on permanent contracts. 42% of workers aged 15–24 years are on temporary contracts, and this proportion has risen steeply in recent decades.²⁸ Thus, young workers are susceptible to employment instability even when they are able to find a job.

Mental health implications

In both Europe and the USA, unemployment has been associated with increased risk of depression, especially for emerging adults who do not have strong parental support.^{30–34} Research on the mental health consequences of underemployment and temporary contracts is scarce, but plausibly many emerging adults have anxiety and frustration as a consequence of these circumstances.

One might reasonably ask, why European emerging adults have not organised more angry protests, especially in countries where youth unemployment has been close to 50% for nearly a decade. In 2011 in Spain, a social movement called 15-M arose, which involved many young people protesting about their economic conditions.²⁸ However, the movement waned quickly, although youth unemployment rates remain high. Possibly, the depressive symptoms elicited by unemployment have sapped the energies of people that might have been devoted to organising a protest movement. However, the reason for few protests might lie in the strengths of European social organisation. Even amidst the recession and its aftermath, governments in northern Europe have supplied young people with unemployment benefits, job training, and access to education. In southern Europe, the tradition of intergenerational support means that emerging adults have a family home to live in and their parents' emotional support, even if they spend much of their twenties fruitlessly looking for a job.²⁸ In eastern Europe a troublesome present might nevertheless compare well to a Communist past many remember as grim.³⁵ Overall, people in Europe remain remarkably affluent, safe, and healthy. Nevertheless, it might be that if the economic downturn continues, the patience of youth could become exhausted and turn angry, especially in southern Europe, the most economically troubled region.

Japan: movement towards individualism

Similar to other high-income countries, Japan has had demographic changes in the latter half of the 20th century and first decades of the 21st century that suggest the rise of a new life stage of emerging adulthood, especially with respect to the length of education, and the timing of marriage and parenthood. The rate of entry into university was 56% of 18 year old men and

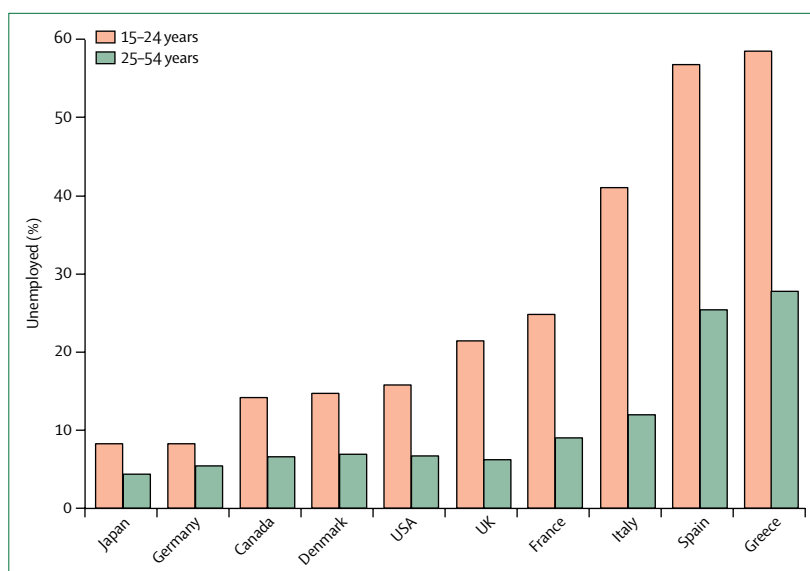


Figure 3: Unemployment in selected developed countries in 2013

Percentage of people aged 15–24 years and aged 25–54 years who are unemployed. Data derived from OECD (2014).²⁷

46% of 18 year old women in 2011, compared with 14% of men and 3% of women in 1960.³⁶ Also, the mean age of a woman's first childbirth increased from 26 years in 1960 to 29 years in 2010.³⁶ Thus, many young people in Japan do not take on full adult roles until their thirties.

The demographic changes share similarities between Japan, Europe, and the USA, but what about the aspirations and experiences of emerging adults in Japan? From a viewpoint of cultural psychology, Arnett⁴ has proposed four cultural beliefs that underlie the period of emerging adulthood in high-income countries: the value of attaining independence and self-sufficiency before making adult commitments; the goal of finding a so-called soul mate in marriage who will complement one's own identity; the search for work that will be experienced as an expression of one's own identity; and a view of this period of life as one of self-focused fun. Together, these beliefs indicate that the transition from emerging adulthood into adulthood is increasingly an individualistic project, in which young people concentrate on developing independence, agency, and identity. Are these beliefs prevalent in emerging adults in a Japanese culture that has traditionally emphasised collectivistic values?

This question should be addressed in the context of recent Japanese history. After World War 2, Japan was rebuilt, and by the 1980s had one of the most developed economies in the world. Furthermore, Japan was held to be an exception to modernisation theory, which proposes that increased individualism goes hand in hand with economic development.³⁷ Japan seemed to achieve economic success while maintaining traditional societal values of collectivism and interdependence.³⁸ Traditional values of filial piety, social obligations, and social harmony remain important to young people in Japanese society.³⁷

Nevertheless, Japanese culture has become substantially more individualistic in the latter half of the 20th century and first decades of the 21st century, even though it is still less individualistic than the USA or Europe. Cross-temporal studies indicate that the perceived value of promoting the independence of the child has increased, and the value of tradition has decreased.³⁷ A strong indication of demographic change, particularly relevant to emerging adulthood, has been the decrease in the number of arranged marriages.³⁹ In the 1950s, more than half of marriages in Japan were arranged by parents or senior colleagues at work. However, by the early 21st century, so-called love marriages based on individual choice had become the overwhelming norm, with only 5% of new marriages arranged.

Other evidence shows that individualism in emerging adults is prevalent in contemporary Japan. Contrary to claims that young people in Japan avoid conflict with their parents to maintain harmonious relationships in their family,⁴⁰ emerging adults increasingly concentrate on the task of being independent from their parents as they progress towards adulthood.⁴¹ This emphasis on individualism is shown in educational policy. Japan's education council has revised the teaching guidelines for schools to emphasise the development of agency and individuality in children and adolescents in the era of economic globalisation.⁴²

The search for a so-called love marriage partner has grown more pervasive in Japan, but is currently in conflict with traditional expectations with respect to gender roles in marriage. Most emerging adults enjoy single life in their twenties and focus on improving their own academic and occupational prospects rather than seeking a marriage partner.⁴³ However, for young women, the desire for an extended single life also highlights the resistance to traditional gender roles in married life, such as the expectation that they will quit their job to run a household and care for children.⁴⁴ Many young women do quit their jobs when they get married, in line with social expectations, but others delay marriage or avoid marrying at all so as not to be cast out of the workplace and forced to abandon their career goals.⁴³

Looking for work that is personally satisfying is an individualistic ideal that is growing in Japan as it has done in other high-income countries. A study⁴⁵ on the career development of Japanese university students reported that the majority aspire to, "a job which will make me say 'This is it'", and prefers to find work that allows them, "to do only the things I like". The older generation in Japan might view these beliefs as unrealistic or even selfish, because they had devoted themselves to building Japan's social and economic systems after the defeat of Japan in World War 2 and during the period of high economic growth that followed. Yet, the goal of finding a so-called perfect

occupation has been shown to motivate job searching in contemporary youths rather than being a barrier.⁴⁶

Mental health implications

If Japanese society is becoming more individualistic, how might this trend influence the mental health of emerging adults as they pass through their twenties and find their way to becoming adults in long-term work and marriage? Data to answer this question are scarce, but some studies provide evidence.

Two distinctive features of mental health problems in emerging adults in Japan merit special attention. One is the suicide rate in people aged 20–39 years, which is higher than in older or in younger age groups and is the leading cause of death in people aged 20–39 years (ie, about 50% of deaths), according to a national report.^{47,48} This report^{47,48} concluded that a key reason for suicide is the failure to find a job, which has been increasing in people between 20 and 29 years of age since the global recession began in 2007. In Japan, the increase in suicide since the 1990s has been greater in people aged 20–29 years than in any other age group. Although this increase might relate to increasing individualism, it probably also portrays growing difficulty in the entry to the workforce during Japan's persistent economic stagnation.^{47,48}

Another mental health problem that has increased in recent years and might be linked to individualism is acute social withdrawal, called hikikomori.⁴⁹ The Japanese Government reported that 1.8% of young people aged 15–39 years have this syndrome.⁵⁰ They withdraw into their homes to avoid failure in making the transition to adulthood and minimise their social contact. Some investigators have proposed that this syndrome is another indicator of young people's difficulties in navigating the transition from adolescence to adulthood in an affluent but complex society of shifting values from collectivism to individualism.⁵¹ In a comprehensive analysis of the origins of hikikomori, Furlong⁵² concluded that its sources lay not just in the rise of individualism but also in individualisation, a sociological term referring to the way that the economies in high-income countries need young people to chart their own course through a workforce of baffling complexity, without the support and security from traditional roles and social structures. Notably, nearly all cases of hikikomori are in young people in their late teens or their twenties, which coincides with their entry to the workforce. Furthermore, the incidence of hikikomori seems to have increased since the 1980s, as individualism (and individualisation) increased and the period of economic stagnation began.

Conclusions

As this review shows, the way people experience the ages 18–29 years has changed greatly compared with 50 years ago. Rather than a time when a stable adult life is

established, this period has become one of extraordinary instability, in love relationships, work, and habitation. Rather than a time of deepening commitments to adult roles, during these years, the entry into marriage, parenthood, and stable employment has been postponed for most young people, sometimes through their own desire to try various possibilities before making commitments, sometimes due to the elusiveness of the choices they would prefer. Together, these characteristics of young people aged 18–29 years in developed countries make a compelling argument for conceptualising this period as a new life stage in between adolescence and young adulthood.

Because the stage of emerging adulthood is so new, mental health systems have mostly not yet adapted to the developmental differences between people aged 18–29 years and people in other life stages.¹¹ Emerging adults usually are not treated in the child or adolescent mental health system, because they are no longer minors under the law. So, for example, their parents or school authorities cannot require them to receive mental health treatment.⁸ However, the challenges emerging adults face, such as making the transition from living with, to living apart from, parents, obtaining education or training, making their way into the workforce, and finding a life partner, differ from the typical challenges faced by people in late adulthood. Yet these developmental differences are seldom recognised by the various mental health systems.

Similarly, although some mental health researchers recognise developmental differences between the teenage years and the twenties,⁵³ others neglect the crucial differences between 18–29 year-olds and people in other life stages, by either extending adolescence into the twenties or including people aged 18–29 years with adults in their thirties, forties, and beyond.¹¹ Findings from various longitudinal and cross-sectional studies^{9,10,54–56} have shown the incidence of mental health disorders change from the teenage years to the twenties and again from the twenties to the thirties. The developmental basis for these patterns of change is not well understood, and might be informed by a distinction between the most prominent developmental challenges in adolescence, emerging adulthood, and young adulthood.

In this review we have not been able to comprehensively cover the medical literature about mental health problems and treatments relevant to people aged 18–29 years of age. Our goal has been to introduce the concept of emerging adulthood to a readership with mental health interests, in the hope that the understanding that young people aged 18–29 years have distinctive developmental characteristics might prove useful to address their mental health concerns. For readers interested in exploring this topic further, more detailed reviews are available.⁵⁷ Research on the developmental stage of emerging adulthood is burgeoning, and a Society for the Study of Emerging

Search strategy and selection criteria

We identified articles with googlescholar.com, PubMed, and PsycINFO using the search terms “mental health”, and “emerging adulthood”, or “young adulthood”, or “transition to adulthood”. We drew mainly on the authors’ combined decades of experience in this area. The reviewers drew our attention to additional articles.

Adulthood (SSEA) has been recently established (<http://www.ssea.org>), including a Topic Network on Mental Health Issues. The rapid growth of the SSEA and the specialty of emerging adulthood offers the prospect that much more will be learned in the years to come to address the distinct mental health problems of people aged 18–29 years.

Contributors

RZ wrote the section on Europe in the first draft, and KS wrote the section on Japan in the first draft. JJA wrote the rest of the first draft of the review and all of the revisions.

Declaration of interests

We declare no competing interests.

Acknowledgments

RZ was funded by the European Social Fund under the Global Grant measure and KS was supported by the Japan Society for the Promotion of Science, Grant-in-Aid for Scientific Research (C), 24530823.

References

- 1 Arnett JJ. Learning to stand alone: the contemporary American transition to adulthood in cultural and historical context. *Human Dev* 1998; 41: 295–315.
- 2 Modell J. Into one's own: from youth to adulthood in the United States, 1920–1975. Berkeley: University of California Press, 1998.
- 3 Nelson LJ, Luster SS. “Adulthood” by whose definition? The complexity of emerging adults’ conceptions of adulthood. In: Arnett JJ, ed. Oxford handbook of emerging adulthood. New York: Oxford University Press (in press).
- 4 Arnett JJ. Emerging adulthood(s): the cultural psychology of a new life stage. In: Jensen LA, ed. Bridging cultural and developmental approaches to psychology: new syntheses in theory, research, and policy. New York: Oxford University Press, 2011: 255–75.
- 5 Arnett JJ. Emerging adulthood: the winding road from the late teens through the twenties, 2nd edn. New York: Oxford University Press, 2014.
- 6 Arnett JJ. Emerging adulthood: a theory of development from the late teens through the twenties. *Am Psychol* 2000; 55: 469–80.
- 7 Syed M. Emerging adulthood: developmental theory, stage, or nonsense? In: Arnett, JJ ed. Oxford handbook of emerging adulthood. New York: Oxford University Press, 2014.
- 8 Stroud C, Mainero T, Olson S. Improving the health, safety, and well-being of young adults. Washington, DC: National Academies Press, 2013.
- 9 Kessler RC, Birnbaum H, Demler O, et al. The prevalence and correlates of nonaffective psychosis in the National Comorbidity Survey Replication (NCS-R). *Biol Psychiatry* 2005; 58: 668–76.
- 10 Kessler RC, Wang PS. The descriptive epidemiology of commonly occurring mental disorders in the United States. *Annu Rev Pub Health* 2008; 29: 115–29.
- 11 Tanner JL, Arnett JJ. Approaching young adult health and medicine from a developmental perspective. *Adolesc Med State Art Rev* 2013; 24: 485–506.
- 12 McGill B, Bell P. The Big Picture. *National Journal* 2013; pp 14–15 (accessed May 30, 2014).
- 13 United Nations Educational, Scientific and Cultural Organization Institute for Statistics. <http://data.uis.unesco.org/?ReportId=167> (accessed June 2, 2014).

- 14 Moreno Mínguez A. The transition to adulthood in Spain in a comparative perspective: the incidence of structural factors. *Yg Nord J Youth Res* 2012; **20**: 19–48.
- 15 Douglass CB. From duty to desire: emerging adulthood in Europe and its consequences. *Child Dev Pers* 1: 101–08.
- 16 Central Intelligence Agency US. World factbook: mother's mean age at first childbirth. <https://www.cia.gov/library/publications/the-world-factbook/fields/2256.html> (accessed June 4, 2014).
- 17 Mathews TJ, Hamilton BE. Delayed childbearing: more women are having their first child later in life. *NCHS Data Brief* 2009; **21**: 1–8.
- 18 Erikson EH. *Childhood and society*. New York: Norton, 1950.
- 19 Schwartz SJ, Zamboanga BL, Luyckx K, Meca A, Richie R. Identity. In: Arnett JJ, ed. *Oxford handbook of emerging adulthood*. New York: Oxford University Press, 2014.
- 20 Arnett JJ, Schwab J. The Clark University poll of emerging adults: thriving, struggling, and hopeful. 2012. <https://www.clarku.edu/clark-poll-emerging-adults/pdfs/clark-university-poll-emerging-adults-findings.pdf> (accessed Aug 8, 2014).
- 21 Shulman S, Connolly J. The challenge of romantic relationships in emerging adulthood: reconceptualization of the field. *Emerg Adulthood* 2013; **1**: 27–39.
- 22 US Department of Labor. (2012). Number of jobs held, labor market activity, and earnings growth among the youngest Baby Boomers: results from a longitudinal survey summary. Economic News Release, Table 1. <http://www.bls.gov/news.release/nlsoy.nro.html> (accessed June 20, 2014).
- 23 Pettit JW, Roberts RE, Lewinsohn PM, Seeley JR, Yaroslavsky I. Developmental relations between perceived social support and depressive symptoms through emerging adulthood: blood is thicker than water. *J Fam Psychol* 2011; **25**: 127–36.
- 24 Masten AS, Obradovic J, Burt KB. Resilience in emerging adulthood: developmental perspectives on continuity and transformation. In: Arnett JJ, Tanner JL, eds. *Emerging adults in America: coming of age in the 21st century*. Washington, DC: American Psychological Association Press, 2006: 173–90.
- 25 Arnett JJ. The long and leisurely route: coming of age in Europe today. *Curr Hist* 2007; **106**: 130–36.
- 26 United Nations Development Programme. Human Development Report 2013. The rise of the South: human progress in a diverse world. http://hdr.undp.org/sites/default/files/reports/14/hdr2013_en_complete.pdf (accessed June 15, 2014).
- 27 OECD (2014). OECD.statextracts. Short-term labor market statistics: unemployment rates by age and gender. Retrieved from <http://stats.oecd.org/index.aspx?queryid=36499> (accessed June 15, 2014).
- 28 Moreno Mínguez A, López Peláez, A, Sánchez-Cabezudo, SS. The transition to adulthood in Spain: economic crisis and late emancipation. Barcelona, Spain: La Caixa Foundation, 2012.
- 29 Eurostat European Commission. Youth in Europe a statistical portrait. 2009. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-09-920/EN/KS-78-09-920-EN.PDF (accessed May 6, 2014).
- 30 Axelsson L, Ejlertsson G. Self-reported health, self-esteem and social support among young unemployed people: a population-based study. *Int J Soc Welfare* 2002; **11**: 111–19.
- 31 Bjarnason T, Sigurdardottir TJ. Psychological distress during unemployment and beyond: social support and material deprivation among youth in six Northern European countries. *Soc Sci Med* 2003; **56**: 973–85.
- 32 Hämäläinen J, Poikolainen K, Isometsa E, et al. Major depressive episode related to long unemployment and frequent alcohol intoxication. *Nord J Psychiatry* 2005; **59**: 486–91.
- 33 Mossakowski KN. The influence of past unemployment duration on symptoms of depression among young women and men in the United States. *Am J Public Health* 2009; **99**: 1826–32.
- 34 Dooley D, Prause J, Ham-Rowbottom KA. Underemployment and depression: longitudinal relationships. *J Health Soc Behav* 2000; **41**: 421–36.
- 35 Macek P, Bejcek J, Vanickova J. Contemporary Czech emerging adults: generation growing up in the period of social changes. *J Adol Res* 2007; **22**: 444–75.
- 36 National Institute of Population and Social Security Research. Population Statistics of Japan. <http://www.ipss.go.jp/p-info/e/psj2012/PSJ2012.asp> (accessed Aug 26, 2014).
- 37 Hamamura T. Are cultures becoming individualistic? A cross-temporal comparison of individualism-collectivism in the United States and Japan. *Pers Soc Psychol Rev* 2012; **16**: 3–24.
- 38 Kitayama S, Cohen D. *Handbook of cultural psychology*. New York, NY: Guilford, 2007.
- 39 National Institute of Population and Social Security Research. The Fourteenth Japanese National Fertility Survey in 2010: Marriage Process and Fertility of Japanese Married Couples. Tokyo, Japan, 2009. http://www.ipss.go.jp/site-ad/index_english/nfs14/Nfs14_Couples_Eng.pdf (date accessed Aug 26, 2014).
- 40 Rothbaum F, Pott M, Azuma H, Miyake K, Weisz J. The development of close relationships in Japan and the United States: paths of symbolic harmony and generative tension. *Child Dev* 2000; **71**: 1121–42.
- 41 Sugimura K, Phinney JS, Yamazaki M, Takeo K. Compliance, negotiation, and self-assertion in Japanese adolescents' disagreements with parents. *Int J Behav Dev* 2009; **33**: 77–87.
- 42 Central Council for Education. 21seiki wo tenbou shita wagakuni no kyouiku no arikata ni tsuite (Dai ichiji tounshin). 1996. http://www.mext.go.jp/b_menu/shingi/chuuou/tounshin/960701.htm (accessed August 26, 2014).
- 43 Rosenberger N. Rethinking emerging adulthood in Japan: perspectives from long-term single women. *Child Dev Pers* 2007; **1**: 92–95.
- 44 Ministry of Health, Labour and Welfare. Heisei 23 nen ban Harataku jyoseino jitsujyo. 2013. <http://www.mhlw.go.jp/stf/houdou/2r9852000002ea8h-att/2r9852000002ea3.pdf> (accessed Aug 26, 2014).
- 45 Adachi T. The career consciousness among youth and career development support: a study focusing on university students. *Jap Labor Rev* 2006; **3**: 28–42.
- 46 Shirai T, Shimomura H, Kawasaki T, Adachi T, Wakamatsu Y. Job search motivation of part-time or unemployed Japanese college graduates. *Int J Educ Vocat Guidance* 2013; **13**: 95–114.
- 47 Cabinet Office. White paper on suicide prevention in Japan. Chapter 1. 2012. <http://www8.cao.go.jp/jisatsutaisaku/whitepaper/en/w-2012/pdf/chap1-1.pdf> (accessed Aug 26, 2014).
- 48 Cabinet Office. White paper on suicide prevention in Japan. Chapter 2. 2012. <http://www8.cao.go.jp/jisatsutaisaku/whitepaper/en/w-2012/pdf/chap2-sp.pdf> (accessed Aug 26, 2014).
- 49 Kato TA, Shinfuku N, Sartorius N, Kanba S. Are Japan's hikikomori and depression in young people spreading abroad? *Lancet* 2011; **378**: 1070.
- 50 Cabinet Office. White paper on children and young people. 2012. <http://www8.cao.go.jp/youth/english/whitepaper/pdf/2012abridged.pdf> (accessed Aug 26, 2014).
- 51 Furuhashi T, Tsuda H, Ogawa T, et al. État des lieux, points communs et différences entre des jeunes adultes retirants sociaux en France et au Japon (Hikikomori). *L'évolution Psych* 2013; **78**: 249–66.
- 52 Furlong A. The Japanese hikikomori phenomenon: acute social withdrawal among young people. *Sociol Rev* 2008; **56**: 309–25.
- 53 Sawyer SM, Rima AA, Bearinger LH, et al. Adolescence: a foundation for future health. *Lancet*, 2012; **379**: 1630–40.
- 54 Moran P, Coffey C, Romaniuk H, et al. The natural history of self-harm from adolescence to young adulthood: a population-based cohort study. *Lancet* 2012; **379**: 198–99.
- 55 Patton GC, Coffey C, Romaniuk H, et al. The prognosis of common mental health disorders in adolescents: a 14-year prospective cohort study. *Lancet* 2012; **379**: 1404–11.
- 56 Andrews JA, Westling E. Substance use in emerging adulthood. In: Arnett JJ, ed. *Oxford handbook of emerging adulthood*. New York: Oxford University Press, 2014.
- 57 Tanner JJ. Mental health challenges of emerging adulthood. In: Arnett JJ, ed. *Oxford handbook of emerging adulthood*. New York: Oxford University Press, 2014.