

Globalization: Human Development in a New Cultural Context

Lene Arnett Jensen

Abstract

Globalization—the flow across cultures of goods, people, and ideas at unprecedented speed, scope, and quantity—has profound implications for psychological development. In today’s world, children seldom reach adulthood knowing of only one culture. Increasingly, they have interactions with people from diverse cultures, either firsthand or indirectly through various media. Exposure and openness to globalization are particularly pronounced among adolescents and emerging adults, and globalization impacts their development in a wide variety of areas, including moral values, relationships with parents, gender roles, health and body image, language development, and identity. Future research needs to pay more attention to younger children, local circumstances, and diverse responses to globalization.

Key Words: adolescence, culture, emerging adults, family relations, globalization, gender, health, human development, identity, moral values

Introduction

Globalization—the flow across cultures of goods, people, and ideas at unprecedented speed, scope, and quantity—has profound implications for psychological development. In today’s world, children, adolescents, and emerging adults seldom, if ever, reach adulthood knowing of only one culture (Jensen, 2016). Rather, they increasingly have interactions with people from diverse cultures, either firsthand or indirectly through various media. Until fairly recently, this was not the case. It was common to have minimal exposure to other cultures.

Globalization impacts development in a variety of areas, including moral values, relationships with parents, gender roles, health and body image, language development, and identity. In this chapter, each of these areas of development will be addressed. The chapter will also point to future research directions. First, however, a description will be provided of the increasing scope and complexity of globalization, as well as an explanation for the present focus on adolescents and emerging adults.

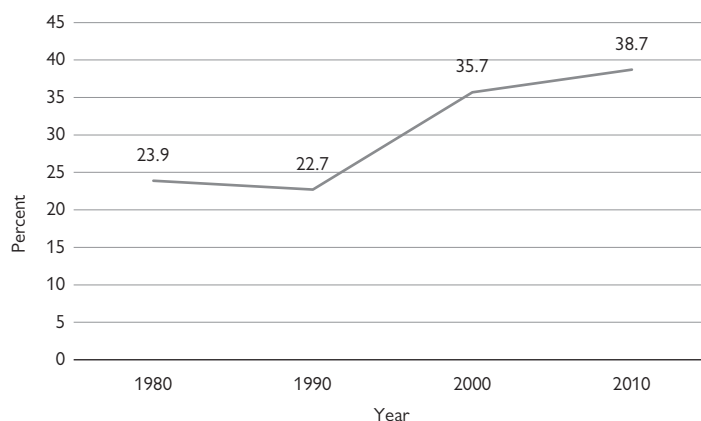


Figure 23.1. Percent of global gross domestic product (GDP) from international trade. Source: Based on data from McKinsey Global Institute (2014).

Globalization: A New Cultural Context

The flow of goods, people, and ideas across cultures is not new, but the global scope and complexity of this flow is unprecedented. In the 1990s, the entry into the global economy of Asia and Eastern European countries and the growth of transnational TV networks were important catalysts of globalization (Chalaby, 2016; McKinsey Global Institute, 2014). Since then, globalization has been accelerating.

A variety of indicators show this acceleration. One is the rapid growth in international trade. In every decade since 1990, as Figure 23.1 shows, there has been a substantial increase in the percent of the worldwide gross domestic product (GDP) that derives from the flow of goods, services, and finance across national borders. For example, the combined value of this flow went from 23% of GDP (US\$5 trillion) in 1990 to 36% of GDP (US\$26 trillion) in 2012.

The complexity of international trade has also changed. In 1990, 54% of all cross-national trade of goods was between economically developed countries. That number fell to 28% in 2012. Increasingly, economically developing countries are involved in international trade (McKinsey Global Institute, 2014). Developing countries trade with developed countries as well as with other developing countries. Trade between developing countries (known as South–South trade) grew from a mere 6% in 1990 to 24% in 2012.

Apart from the increase in international trade, there has also been a rapid growth since about 2000 in the flow of people across borders on a short-term basis (McKinsey Global Institute, 2014). Students enrolling in a foreign university grew by almost 5% every year between 2002 and 2010. During this same time period, short-term travel also increased by about 3.5% every year. In 2010, developing countries and developed countries accounted for 42% and 58%, respectively, of such short-term travel.

While temporary residence and travel to a foreign country have grown since 2000, migration to another country has stayed steady since 1980. Close to 3% of people migrated to another country every year between 1980 and 2010. Developing countries accounted for 65% of all migration in 2010. The proportion of people from developing countries migrating to developed countries rose from 29% in 1980 to 42% in 2010.

The global flow of goods, people, and ideas is in many ways enabled and transformed by the rise in digital technologies. Cross-border trade of digital products, such as entertainment, e-books, news, and blueprints for 3D printing, is much faster and much cheaper than the trade of traditional physical goods. Importantly, digital technologies also make it possible to remain in one's home country while gaining knowledge of other cultures and interacting remotely with people from any part of the world. Global online traffic grew from 84 petabytes a month in 2000 to 122,000 petabytes a month in 2017, and it is projected to rise to about 280,000 petabytes by 2021 (Statista, 2019).

While use of digital technologies is growing at amazing rates, a digital divide remains between developing countries and developed countries. Access to digital technologies is considerably lower in developing countries. Within developing countries, rural areas also lag notably behind urban areas in access to digital technologies (Onitsuka et al., 2018).

In sum, globalization is accelerating. It now reaches essentially every developed and developing country in the world. At the same time, however, it is important to recognize that experiences with globalization vary by location and entail differences in power between countries and groups. For example, the movement of migrants is more often from developing to developed countries than the other way around. Ideas and values pertaining to consumerism, however, flow largely from developed to developing countries. Also, globalization is more evident in urban than in rural areas, especially in developing countries.

A Focus on Adolescence and Emerging Adulthood

Psychological research on globalization mostly got underway in the late 1990s and early 2000s (e.g., Hermans & Kempen, 1998). It remains relatively sparse, especially in light of the ubiquitous nature of globalization. In developmental psychology, the primary focus of globalization research has been on adolescents (approximately the ages of 10 to 18) and emerging adults (approximately the ages of 19 to 29).

The psychological impact of globalization may be particularly salient in adolescence and emerging adulthood. Media such as television, movies, music, and the internet contribute to the rapid and extensive spread of ideas across cultures, and adolescents and emerging adults have more of an interest in popular and media culture compared to children or adults (Dasen, 2000; Onitsuka et al., 2018; Schlegel, 2001). For example, market researchers aim to sell to "global teens" because urban adolescents worldwide follow similar consumption patterns and have similar preferences for global brands of music, videos, clothing, and so on (Friedman, 2000).

Furthermore, adolescence and emerging adulthood constitute a time of life with a pronounced openness to diverse cultural beliefs and behaviors. Research has noted that, in many ways, adolescents and emerging adults have not yet settled on particular beliefs and behaviors (Arnett, 2015; Côté, 2006). Research with immigrants to the United States has also shown that adolescents change their behaviors, beliefs, values, and identifications more than adults do (Nguyen & Williams, 1989; Phinney et al., 2000). This phenomenon, also known as dissonant acculturation (Portes, 1997), may apply not only to immigrants but also more generally to adolescents and emerging adults who are exposed to globalization.

On the negative side, research with immigrants suggests that risks for psychological and social problems increase as a person moves from childhood into adolescence (Berry, 1997; Unger, 2011). With globalization, as with immigration, adolescence and emerging adulthood may be vulnerable developmental periods.

Finally, by 2008—for the first time in human history—more people were living in urban areas than in rural ones, and this migration has been led mainly by emerging adults (Hugo, 2005; Population Reference Bureau, 2008). In urban areas, youth encounter the diversity of ideas, products, and peoples promoted by the global economy. The projection is that, by 2050, close to 70% of the world's population will live in cities (United Nations, 2018).

Moral Values

Globalization promotes values pertaining to individual autonomy. For example, field experiments in Ethiopia have examined how the introduction of laptops and Western media influences adolescents' values (Hansen & Postmes, 2013; Hansen et al., 2012). In 2008, the Ethiopian government in collaboration with aid agencies decided to introduce laptops to 6,000 adolescents in schools in different parts of the country. Ethiopia is among the least economically developed countries in the world. In 2008, when the laptop program was started, 0.7% of the population owned a PC and 0.4% had access to the internet. (The comparable figures for the United States at that time were 81% and 74%; World Bank, 2009.) With respect to values, Ethiopian culture emphasizes collectivism and respect for elders. Adolescents, then, typically do not own much—let alone anything as valuable as a laptop. They also are not accustomed to making independent decisions.

Why might the introduction of a laptop into an Ethiopian adolescent's life matter? First, according to Hansen and colleagues, the use of a laptop introduces new information. Second, the use of a laptop requires new knowledge and action that would be foreign to parents and other elders. Third, possessing something as valuable as a laptop represents a radical change from the economic status quo and also a potential upheaval of the social hierarchy. Such a possession clearly distinguishes an adolescent from others.

In one study by Hansen and colleagues (2012), 169 adolescents in grades 7 and 8 were divided into three groups. In one group adolescents had fully functioning laptops; in

another group the laptops had stopped functioning (as a result, for example, of broken parts); and the remaining group had no laptops. After 1 year, the three groups remained similar on interdependence and collectivism. However, the group with the functioning laptops scored significantly higher on independence as well as on individualistic values emphasizing autonomous decision making, achievement, and leadership. The findings indicate that it is not the mere ownership of a laptop that matters, but rather that the use of a laptop changes moral values.

A study of moral reasoning similarly found that globalization is related to autonomy-oriented values and thinking. The study also showed that this is more so for adolescents than adults. Interviews about moral issues were conducted with dyads of adolescents (aged 13 to 18) and parents (aged 35 to 65) who resided in rural and urban communities in Thailand (McKenzie, 2018). Although the two communities were located within 25 miles of one another, they constituted different cultural contexts. In the rural community, inhabitants had minimal exposure to globalization. For example, there were no tourists or restaurants selling foreign foods. Many rural homes did not have internet access, and some homes did not have cell phone reception. The urban community, in contrast, was undergoing rapid globalization. For example, advertisement billboards, typically in both English and Thai, featured such offerings as Western wedding attire, skin-whitening creams, and McDonald's. The urban households also had ready access to media, including televisions and laptops. Urban Thai adolescents and parents reported devoting many hours of their day to the use of a laptop or computer.

The moral reasoning of the rural and urban adolescents and parents were analyzed in terms of the Ethics of Autonomy, Community, and Divinity (Jensen, 2018). Briefly, the Ethic of Autonomy involves a focus on persons as individuals. Moral reasons within this ethic include the interests, well-being, and rights of individuals (self or other). The Ethic of Community focuses on persons as members of social groups, with attendant reasons such as duty to others, and concern with the customs and welfare of groups. The Ethic of Divinity focuses on persons as spiritual or religious entities, and attendant reasons encompass sacred lessons and laws as well as spiritual purity.

Findings showed that rural adolescents and adults were similar in their use of the three ethics, and they especially reasoned in terms of community consideration (McKenzie, 2018). Compared to the rural dyads, the urban ones reasoned less in terms of the Ethic of Community and more in terms of the Ethic of Autonomy. Globalization appears to have forged a gap between the urban and rural Thai communities in moral reasoning. There was also a gap within the urban dyads. Whereas urban parents used autonomy and community reasoning roughly equally, urban adolescents' moral reasoning was dominated by the Ethic of Autonomy. Thus, although urban adolescents and their parents both lived in a globalizing cultural community, their level of exposure to and developmental openness to experiences of globalization differed, as reflected in their moral reasoning.

A study of emerging adults also documented a change in values due to exposure to globalization. This study followed rural emerging adults in Chiapas, Mexico, who moved to an urban environment to attend university (Manago, 2012). With exposure to globalization through education and urbanization, the students gradually added new values to the traditional ones of respect for elders and obligation to family. Those new values centered on independence, individual exploration, self-fulfillment, and gender equality.

In sum, globalization does not erase the moral values of traditional cultures, although for some people their adherence to some traditional values may attenuate. Certainly, however, globalization introduces a new and notable emphasis on individual autonomy, especially among adolescents and emerging adults.

Relationships With Parents

With globalization, adolescents and emerging adults sometimes come to differ from their parents on views of children's autonomy and parental authority. In traditional cultures where adolescents spend the majority of their time with parents and are integrated into adult groups, adolescents and parents typically share common views of obedience, responsibility, self-reliance, and so forth. With globalization, however, differences of opinion emerge.

Research comparing immigrant adolescents and parents in the United States has shown that adolescents wish to make autonomous decisions about such matters as friends, dating, and leisure activities at an earlier age than what their parents regard as appropriate (Juang et al., 1999). Similarly, studies with immigrant groups in Canada have shown that parents sanction parental authority more than their adolescents, whereas adolescents desire more autonomy than their parents are willing to grant (Kwak & Berry, 2001).

It is not only in immigrant families that experiences with globalization forge a gap between adolescents and parents. As described earlier, Thai adolescents residing in a rapidly globalizing urban city placed more value on autonomy than their parents (McKenzie, 2018). Ethnographic research in Kathmandu, the capital of Nepal, has found that Nepalese adults use the terms "teen" and "teenager" in English, even when speaking Nepali, to refer to young people who are oriented toward Western tastes, especially Western media (Liechty, 1995, 2010). Not all Nepalese young people are "teenagers," even if they are in their teen years—the term is not an age category, but a social category that refers to young people who are pursuing a Western identity and style. Some adults use teenager with less favorable connotations to refer to young people who are disobedient, antisocial, and potentially violent. Their use of the term in this way reflects their view that Western media can have corrupting effects on many of their young people. In Japan, researchers have noted that emerging adults in their 20s who continue to rely on parental support while engaging in various forms of self-exploration and postponing marriage are termed "parasite singles" by their parents and older generations—a term that is hardly flattering (Naito & Gielen, 2002).

Taken together, these findings suggest that a division opens up between parents and their adolescents and emerging adults as they cease to share one traditional culture and instead are exposed to globalization. This division pertains to views and behaviors that revolve around autonomy and authority.

The extent to which this difference between parents and their children has negative repercussions on their relationship seems to be an open question. Some scholars have proposed that parents resent the division that globalization creates between themselves and their children (Friedman, 2000). However, with regard to the aforementioned study on Japanese “parasite singles,” the researchers reported that, while parents clearly had some misgivings about their emerging adult children, some parents simultaneously expressed admiration for their children’s self-assertiveness. Moreover, research has found that only 10% to 20% of Japanese adolescents report that their parents understand them, but at the same time 80% to 90% describe their family life as “fun” or “pleasant” and say that they communicate with their parents on a “fairly regular” basis (Stevenson & Zusho, 2002).

Among immigrant families, there has been a lot of research on the extent of conflict between adolescents and their parents, but findings are inconsistent (Jensen & Dost-Gozkan, 2015). Some studies report more conflict among immigrants than nonimmigrants; some find no differences; and some report less conflict among immigrants. Furthermore, very little of this research has attempted to demonstrate that division between adolescents and parents in views of authority and autonomy is predictive of higher levels of conflict.

In sum, extant research indicates that, with globalization, divisions can arise between parents and their adolescents and emerging adults in views of parents’ authority and children’s autonomy. The consequences of such divisions, however, require further research. Some findings suggest that resentment and conflict between parents and youth ensue. But findings also intimate that sometimes both parents and youth recognize the necessity or even desirability of their differences of opinion in a globalizing world. Finally, even as parents and their children come to differ in some areas due to globalization, they may continue to share views on interdependence, respect, and familial harmony (Jensen & Dost-Gozkan, 2015).

Gender Roles

Globalization contributes to changes in gender roles, including toward greater gender equality. Traditionally in many cultures around the world, girls and women have been subordinate to boys and men, and they have faced discrimination and inequality in many areas of life. Although inequality is still prevalent, today there is a global trend toward greater gender equality.

Evidence for the impact of globalization on gender roles comes from a variety of sources. Anthropologists and cultural psychologists have documented how global media promotes new views of gender in traditional cultures (Condon, 1988, 1995; Manago, 2012). One

vivid and detailed illustration comes from ethnographic work in Morocco conducted over several decades (Davis & Davis, 1989, 1995, 2007, 2012). In the past, Moroccan culture, like many traditional cultures, had strictly defined gender roles (Arnett & Jensen, 2019). Marriages were arranged by parents primarily on the basis of economic considerations. Female—but not male—virginity at marriage was considered essential, and adolescent girls were forbidden to spend time in the company of adolescent boys. These gender differences continue to be part of Moroccan culture today, particularly in rural areas (Davis & Davis, 2007, 2012).

For both adolescent girls and boys, however, exposure to media is changing the way they view gender roles. The TV programs, songs, and movies they are exposed to are produced not only in Morocco and other Islamic countries but also in France (Morocco was once a French colony) and the United States. From these various sources, Moroccan adolescents are seeing portrayals of gender roles quite different from what they see among their parents, grandparents, and other adults around them. In the media that the adolescents use, romance and passion are central to female–male relationships. Love is the central basis for entering marriage, and the idea of accepting a marriage arranged by parents is either ignored or portrayed as something to be resisted. Young women are usually portrayed not in traditional roles but in professional occupations and as being in control of their lives and unashamed of their sexuality.

Young people in Morocco—and other places—are using these conceptions of gender to construct gender roles quite different from the traditional conceptions in their culture. Media are “used by adolescents in a period of rapid social change to reimagine many aspects of their lives, including a desire for more autonomy, for more variety in heterosexual interactions, and for more choice of a job” (Davis & Davis, 1995, p. 578).

Perhaps the trend toward greater gender equality is most evident in the area of education. Until recent decades, countries all over the world had customs and policies that favored boys’ education over girls’, for example, by discouraging or forbidding girls from obtaining education beyond primary school and by barring young women from entry to most colleges and universities.

In the majority of countries in the world today, however, girls and young women are equal to boys and young men in educational enrollment. The United Nations (UN) calculates the Gender Parity Index (GPI) to assess the extent to which educational attainment is equal for boys and girls. The GPI is calculated as a ratio of the value for females to that of males. A GPI value of 1.00 indicates parity between the sexes. Values below 1.00 indicate disparity in favor of boys, whereas values above 1.00 indicate disparity in favor of girls.

Table 23.1 shows the GPI for school enrollment rates in 1990 and 2016 for primary and secondary school in different regions of the world (World Bank, 2018). In 1990, there was a gender disparity in favor of boys for both primary and secondary education across large parts of the world. However, this gap between girls and boys has been closing.

Geographic Region	Primary 1990	Primary 2016	Secondary 1990	Secondary 2016
World	0.88	1.01	0.85	0.99
Arab states	0.82	0.94	0.79	0.93
Central Europe and Baltics	0.99	1.00	0.99	0.99
East Asia and Pacific	0.93	0.99	0.90	1.00
European Union	1.00	1.00	1.00	1.00
Latin America and Caribbean	0.99	0.98	1.02	1.02
North America	0.99	1.00	1.00	1.01
South Asia	0.73	1.10	0.68	1.05
Sub-Saharan Africa	0.83	0.95	0.81	0.92

Source: Based on data from the World Bank (2018).

By 2016, girls had essentially reached parity with boys in all parts of the world, except the Arab states and Sub-Saharan Africa.

For enrollment in tertiary education, the picture is more complex. The numbers in Table 23.2, which shows the GPI for tertiary education in 1990 and 2017, indicate that there are two main regions of the world where females lag behind males in enrollment: South Asia and Sub-Saharan Africa (World Bank, 2018). For all other regions and on a worldwide scale, females now surpass males among students who reach the tertiary level of education.

There are two ways in which greater gender equality in education may be in part a consequence of globalization. First, in the global economy education is increasingly rewarded. The global economy is based mainly on information, technology, and services, and as this

Geographic Region	Tertiary 1990	Tertiary 2017
World	0.90	1.12
Arab states	0.60	1.09
Central Europe and Baltics	1.20	1.41
East Asia and Pacific	0.65	1.16
European Union	0.97	1.23
Latin America and Caribbean	0.95	1.32
North America	1.27	1.35
South Asia	0.48	0.96
Sub-Saharan Africa	0.45	0.73

Source: Based on data from the World Bank (2018).

economy spreads around the world it promotes social and cultural change. Families that may previously have viewed it as in their economic interest to keep girls at home working in the fields instead of sending them to school may now find it more advantageous to educate them so that they can take advantage of opportunities to participate in the global economy.

The second way in which globalization promotes gender equality in education (and other areas) is through international pressure on countries with customs and policies promoting discrimination. As described earlier, the United Nations publishes the GPI. The United Nations also calculates a yearly Gender Inequality Index (GII) for about 160 countries that combines statistics on educational attainment, women's economic and political participation, and female-specific health issues (such as maternal mortality). Indices such as the GPI and the GII are used by the United Nations and other organizations to lobby countries to improve their policies relating to girls and women. The explicit purpose of these kinds of indices is to make countries aware of international pressure to relieve gender discrimination and to promote greater equality.

In sum, girls and women continue to be subordinate to boys and men on a variety of measures across a wide swath of the globe. Globalization, however, appears to promote more egalitarian gender roles. Media and international aid organizations, for example, indirectly and directly promote equal educational aspirations and attainment for girls and boys.

Health and Body Image

As globalization makes foods available far from their original locales, changes to health and body image follow. While cuisines from every corner of the globe increasingly permeate the American and European food markets, the flow of foods also moves in the other direction. A rapid increase in the availability of Western—mainly American—fast foods and drinks is occurring in the developing world.

The global changes to diet have health effects. One such effect is the worldwide obesity epidemic, which the World Health Organization (2018) attributes primarily to economic growth and the globalization of food markets. Between 1975 and 2016, the proportion of 5- to 19-year-olds who were overweight rose from 4% to 18%, and the proportion who were obese rose from less than 1% to 7%. This dramatic rise has occurred similarly among boys and girls.

Rising obesity rates are pronounced among children and adolescents, who may be most likely to be attracted to unhealthy Western food. For example, research with early adolescents in Jamaica has shown that those who consume the most American media are also the most likely to be overweight and obese (Ferguson & Bornstein, 2015; Ferguson et al., 2018). The researchers argue that globalization prompts “remote acculturation.” In other words, youth acquire behaviors based on indirect and intermittent exposure to foreign cultures. In this case, Jamaican adolescents acquire a taste for American fast foods based

on exposure to American media featuring those foods, for example, in advertisements and product placements in films.

The promotion of unhealthy foods and drinks also occurs through other processes of globalization than media exposure and remote acculturation. Recent findings have documented that large fast food and beverage companies seek to influence research and public policy in developing countries to protect and increase their market share. For example, they seek to diminish attention to the role of unhealthy foods and drinks in obesity and instead advocate for research and policies focused on other factors such as exercise.

In China, for example, national efforts to address its rising rates of overweight and obesity largely center on exercise, without mentioning the prominent contribution of nutrition. One example is the Happy 10 Minutes program that encourages schoolchildren to exercise for 10 minutes a day (Greenhalgh, 2019a, 2019b). How did this focus on exercise come about? The program and others like it are supported by the International Life Sciences Institute in China (ILSI-China). ILSI-China is a branch of ILSI, a worldwide nonprofit organization founded by Coca-Cola and headquartered in Washington, DC. ILSI is funded by many of the largest food and drink corporations such as Coca-Cola, Nestlé, McDonald's, and PepsiCo. Created to promote ILSI's interests, ILSI-China emerged as the country's leading sponsor of research activities and policies on obesity beginning in the late 1990s. In fact, ILSI-China became so central to the nation's activities on obesity that it is housed inside the government's Center for Disease Control and Prevention in Beijing.

Recent quantitative and qualitative analyses of ILSI-China's newsletters and interviews with Chinese obesity specialists show that Chinese obesity science and policy shifted toward a predominant focus on exercise between 1999 and 2015 (Greenhalgh, 2019a, 2019b). Obesity activities sponsored by ILSI-China that focused exclusively on exercise rose significantly from 0% in 1999–2003 to 37% in 2004–2009 to 60% in 2010–2015. Over the course of this same time period, activities focused on nutrition fell from 42% in 1999–2003 to 23% in 2010–2015. Activities addressing both exercise and nutrition were consistently uncommon. This shift that has taken place in China's obesity research and policies aligns with Coca-Cola's message that exercise, not diet, is important to combat obesity. The author of the analyses concludes that “In putting its massive resources behind only one side of the science, and with no parties sufficiently resourced to champion more balanced solutions that included regulation of the food industry, the [Coca-Cola] company, working through ILSI, re-directed China's chronic disease science, potentially compromising the public's health” (Greenhalgh, 2019a, p. 1).

With sweetened beverage consumption on the decline in Europe and the United States, Coca-Cola as well as other large food and beverage corporations regard developing countries as key to maintaining and increasing their profits. ILSI not only has a branch in China but also has 16 other branches, most of them in developing countries such as India, Brazil, and Mexico (Jacobs, 2019).

With globalization comes not only a risk of becoming overweight but also an ideal of slimness. Studies have concluded that adolescent girls in developing countries have been influenced by Western media to develop a negative body image. Assessing themselves by the Western standard represented by models in advertisements and by actors on TV and in films, they conclude that their local norms of physical attractiveness are obsolete and seek to emulate the Western image they admire. For example, an interview study with adolescent girls in the Caribbean islands of Trinidad and Barbados found that 68% were concerned with their eating habits and extremely fearful of becoming fat (Bhugra et al., 2003). Based on their analyses, the authors concluded that the girls' anxieties about food and their weight were motivated by their aspiration to emulate Western ideals of slimness.

Related, research on the island nation of Fiji has documented the influence of global media on girls' body image. Traditionally the Fiji ideal body type for women was rounded and curvy. However, television was first introduced in 1995, mostly with programming from the United States and other Western countries, and subsequently the incidence of eating disorders rose substantially (Becker et al., 2007). Interviews with adolescent girls on Fiji showed that they admired the Western television characters and wanted to look like them, and that this goal in turn led to higher incidence of negative body image, preoccupation with weight, and purging behavior to control weight (Becker, 2004).

Eating disorders occur primarily in cultures that emphasize physical slimness. Until recently, this was mostly an ideal in Western countries, especially for White middle- to upper-middle-class females. By now, however, eating disorders occur worldwide (Pike & Dunne, 2015). A recent review of research, for example, documented the rise of eating disorders across Asian countries, including China, India, Japan, Malaysia, Pakistan, South Korea, Taiwan, and Thailand. The authors' analysis indicates that "Westernization" is a cause, and also that Western influence interacts in varied ways with urbanization and industrialization depending on the country. Their conclusion highlights the need for research to parse globalization processes between different cultures, a point discussed in the future directions section later.

In sum, globalization is contributing to changes in people's health across the world. Obesity is rising so rapidly that the World Health Organization has labeled it an "epidemic" (World Health Organization, 2019). Simultaneously, a slim physical ideal has become globally popular, and consequently eating disorders now afflict female youth across the world.

Language Development

In a globalizing world where the United States is the most influential economic power, English is increasingly an international language. As more and more people come into contact with each other, the need to communicate in a common language grows. The widespread presence and growth of English goes hand in hand with the diffusion of popular culture and technology and the expansion of international trade. Two children from

Japan and France teaming up in an online game are likely to communicate in English. At the Intel International Science and Engineering Fair (INSEF), the world's largest international science fair for high school students, with participation from more than 70 countries, all presentations are in English (Student Science, 2019). When emerging adults migrate to a different country in search of better job opportunities, they often use English to bridge the divide between their native language and the language of their country of destination.

Currently, English is the first language of about 400 million people and is spoken fluently by 500 million to 1 billion people worldwide (English Language, 2019). By the year 2050, the projection is that at least half of the world's population will be proficient English speakers. In part, this projection is based on the fact that children learn English in school in more and more countries. School systems increasingly seek to teach children English to enhance their ability to participate in the global economy. In China, for example, all children now begin learning English in primary school (Chang, 2008). In the European Union, more than 90% of students learn English in school (Rubenstein, 2017). In addition, students worldwide are increasingly seeking admission to universities in countries that teach in English.

Research has also shown that globalization is leading adolescents from around the world to incorporate English into their slang. One study of a group of Japanese adolescent girls found that they often created a Japanese–English hybrid language, for example, saying “*ikemen getto suru*” (I wanna get a cool dude; Miller, 2004). A study of Bulgarian 10th-grade adolescents also found frequent familiarity with and use of American English slang (Charkova, 2007). Common slang terms involved swear words, terms for sexual activities and body parts, derogatory terms for men and women, and positive terms for men and women. The adolescents reported that they primarily learned the terms and expressions from movies, television, and song lyrics. They also reported gaining prestige among their peers from knowing English slang. As one Bulgarian 10th-grade boy explained: “I want to learn English slang because when I tell my friends a new word or a phrase that they do not know, they look at me with respect and consider me an expert on a topic related to music, songs, movies, and so on” (Charkova, 2007, p. 401). Like the Japanese adolescent girls, the Bulgarian adolescents also often created a hybrid language interweaving Bulgarian and English (as in “*Toi e istinski asshole*”).

Language is a vehicle of communication, but it also influences beliefs and ways of thinking. For example, it seems plausible that the export of English slang is about more than new words, but also about new thoughts regarding gender, body image, and sexuality, for example.

Research indicates that language even affects something as basic as spatial cognition. Spatial cognition may be differentiated between two broad types. An egocentric frame of reference is where the location of an object is determined in relation to the location of the self (e.g., “The cat is to the left of the house” from the perspective of the self). An

allocentric frame of reference is where the object is located either in relation to another object (e.g., “The cat is by the front door of the house”) or based on cardinal direction type systems (e.g., “The cat is on the west side of the house”). Some languages such as the Namibian language of ≠Akhoe Hai||om primarily use an allocentric frame of reference, whereas other languages such as English and Dutch provide an egocentric frame of reference. Research has found that children between the ages of 3 and 5 commonly utilize allocentric spatial cognition. Older children and adults, however, vary according to their language. For example, 8-year-olds and adults who speak ≠Akhoe Hai||om use allocentric reasoning, whereas Dutch 8-year-olds and adults use egocentric spatial reasoning (Haun et al., 2006).

In sum, more and more children, adolescents, and emerging adults across the world speak, read, and write English. They learn English in school and at work, through media, and in interactions with peers. As children, adolescents, and emerging adults learn English, they are also increasingly learning to see the world, others, and themselves in ways that are embedded in the English language.

Identity

Since the middle of the 20th century, when Erik Erikson (1950, 1968) first proposed the idea, developmental psychologists have examined identity formation. Erikson’s focus was on how adolescents make choices about ideology, love, and work to arrive at an independent and unique sense of self *within* the culture in which they live. In a globalizing world, however, a new developmental identity task has arisen. It is the psychological task of forming a “cultural identity” (Jensen, 2003, in press; Jensen et al., 2011).

Whereas the Eriksonian identity formation task centers on deciding how one is distinct as an individual from the members of one’s cultural community, forming a cultural identity involves deciding on the cultural communities to which one will belong. Forming a cultural identity becomes mainly a conscious process and decision when one has exposure to more than one culture. In today’s world, most children are familiar with more than one culture. Even if they do not travel to or have the experience of living in more than one culture, the worldwide diffusion of media means that children are familiar with their local culture as well as being aware of the events, practices, styles, and information that are part of the global media culture.

It seems likely that the task of forming a cultural identity, just like the task of forming an individual identity, is most likely to arise in the course of adolescence and to continue into emerging adulthood. In societies that afford young people a stage of emerging adulthood, it is now generally accepted among scholars that this is the time when many of the most important steps in identity development take place (McLean & Syed, 2016; Schwartz et al., 2015).

There are multiple developmental pathways for forming a cultural identity. One model that has been used to understand how globalization promotes diverse cultural identities is

the acculturation model, which was originally formulated to account for the experiences of immigrants. This acculturation model aimed to address the question of “What happens to individuals, who have developed in one cultural context, when they attempt to live in a new cultural context?” (Berry, 1997, p. 6). With respect to globalization, the question has been rephrased as “What happens in the identity development of adolescents and emerging adults when they are presented with multiple cultural contexts, including their local culture and other cultures they may come into contact with via globalization?” (Jensen et al., 2011, pp. 290–291).

The acculturation model comprises four possible pathways. *Integration* involves the original cultural identity being combined with elements of the new culture. *Assimilation* is where persons do not wish to maintain their original cultural identity; instead, they reject it and embrace their new culture as the basis of an entirely new cultural identity. The reverse, *separation* is where persons place value on holding onto their original culture and avoid contact with people in the new culture to which they have immigrated. *Marginalization* occurs when persons have little interest in maintaining their original culture but also reject or are rejected by the new culture.

While reviews of the literature have shown that all four pathways apply to adolescents’ and emerging adults’ experiences with globalization (Jensen & Arnett, 2012), integration and marginalization have received the most attention. An example of integration can be seen in India. India has a growing, vigorous high-tech economic sector, led largely by young people. However, even the better-educated young people who have become full-fledged members of the global economy still tend to prefer to have an arranged marriage, in accordance with Indian tradition (Verma & Saraswathi, 2002). They also generally expect to care for their parents in old age, again in accordance with Indian tradition. Thus, they have one identity for participating in the global economy and succeeding in the fast-paced world of high technology, and another identity, rooted in Indian tradition, that they maintain with respect to their families and their personal lives. These two identities are integrated in the daily lives of this segment of the Indian population.

In the process, new hybrid cultural practices also arise, such as “semiarranged” marriages, where parents no longer have sole or primary authority over the choice of a young person’s spouse, but instead it is a mutual decision. Furthermore, the decision is no longer mainly based on socioeconomic considerations, as in traditional arranged marriages, but also involves romantic attraction. In short, integration preserves both local and global aspects of culture in one’s identity. Moreover, integration may result in hybridization, where local and global cultures are merged to produce something new altogether (Hermans, 2015).

Marginalization may take place among people whose local culture is being rapidly altered by globalization. They may see their local culture changing beyond recognition, so that they no longer feel connected to it, but at the same time they may feel that the global culture has no place for them. There is some evidence that marginalization is related to problems such as substance abuse, prostitution, and suicide. In a study drawing on

multiple data sources from the period between 1980 and 1991, researchers reported increases in suicide, drug abuse, and female and male prostitution in Ivory Coast youth aged 16 to 20 (Delafosse et al., 1993). The researchers attributed the increase in problems to the alienation that young people experienced from both the values of their traditional cultures and the values of the West.

Increases in recent decades, sometimes steep, in rates of suicide and suicide attempts have also been reported by a considerable number of researchers working in Pacific societies, parts of Sri Lanka, and Native American cultures (Booth, 1999; Hezel, 1987; Johnson & Tomren, 1999; Kearney & Miller, 1985; MacPherson & MacPherson, 1987; Novins et al., 1999; Reser, 1990; Robinson, 1990; Rubinstein, 1983). At a general level, researchers have attributed the increases in suicide to youth feeling alienated from both local and global values.

It should be added, however, that researchers working in different locations vary in their more specific explanations as to the ways that globalization and marginalization relate to suicide. The different specific emphases that researchers have highlighted include changing family roles, the irreconcilability of increased economic expectations and decreased opportunities, and the loss of traditional pathways of adolescent socialization.

Furthermore, a recent review of research found that an index measure of globalization (created by the authors) was associated both with increased suicide rates in Asia and Eastern Europe and with decreased suicide rates in Scandinavia (Milner et al., 2012). Thus, it is not globalization in and of itself that is related to suicide, but more likely the severe marginalization that some youth in some cultures experience from both local and global cultures.

Among some individuals, marginalization may also increase the risk of their showing hostility and aggression toward others. In the early 1990s, for example, researchers attributed increases in armed aggression by youth in the Ivory Coast to experiences of internal conflict between local and global values (Delafosse et al., 1993). On a broader level, some scholars have argued that “problems of identity” occur in some parts of Africa, South Asia, and the Middle East, where frustration with locally corrupt or unresponsive governments, coupled with alienation from global cultural values, leads to “rage” and sometimes violence, either locally or directed toward the West (Lieber & Weisberg, 2002). Thus, there is an empirical and theoretical basis for concern that globalization, marginalization, and serious internalizing and externalizing problems are connected. However, the specific nature of the connections and how they might manifest in different locales requires further research.

In sum, the developmental task of forming a cultural identity has become widespread with the advent of globalization. There is more than one pathway toward a cultural identity. Also, different kinds of cultural identities may be adaptive depending on local circumstances, and some identities, such as integration, may lead to entirely new hybrid

cultural forms. Marginalization, however, seems fraught with risks to both individuals and communities.

Future Research

Research on the developmental implications of globalization is recent and somewhat sporadic. More research is needed altogether (Jensen, 2011). Nonetheless, there is a particularly notable dearth of research with younger children. Whereas adolescents and emerging adults may be in the eye of the globalization storm, many young children also cross borders and have extensive exposure to media. The developmental implications for this age group are essentially unknown.

Future research would also benefit from addressing globalization from different perspectives. For example, as noted, parents and their adolescents and emerging adults may not view and respond to globalization in the same ways. Research that takes multiple perspectives into account would be enlightening.

A related point is that globalization research needs to delve into local cultural contexts. The nature and extent of globalization varies widely from one group to another, or from one part of the world to another. Whereas some generalizations about globalization may sometimes be warranted, research that applies to local circumstances is also needed. Globalization is a multifaceted phenomenon and how it manifests in local contexts varies, depending, among other things, on the degree of urbanization and industrialization.

Conclusion

The last few decades likely represent only the beginnings of globalization. For example, China and India each have more than a billion people, of whom only a minority have fully entered the global economy and culture. The future, then, is likely to hold quite dramatic changes for even larger groups of children, adolescents, and emerging adults on a worldwide scale.

Future research on globalization not only will aid in our understanding of the phenomenon and its profound psychological implications but also holds the potential to help children develop new skills—the kinds of skills necessary for a world in which they increasingly interact with people from diverse cultures.

References

- Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties* (2nd ed.). Oxford University Press.
- Arnett, J. J., & Jensen, L. A. (2019). *Human development: A cultural approach* (3rd ed.). Pearson.
- Becker, A. E. (2004). Television, disordered eating, and young women in Fiji: Negotiating body image and identity during rapid social change. *Culture, Medicine & Psychiatry*, 28, 533–559.
- Becker, A. E., Fay, K., Gilman, S. E., & Striegel-Moore, R. (2007). Facets of acculturation and their diverse relations to body shape concern in Fiji. *International Journal of Eating Disorders*, 40, 42–50.
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *International Journal of Applied Psychology*, 46, 5–34.

- Bhugra, D., Mastrogiani, A., Maharajh, H., & Harvey, S. (2003). Prevalence of bulimic behaviors and eating attitudes in schoolgirls from Trinidad and Barbados. *Transcultural Psychiatry*, 40, 408–428.
- Booth, H. (1999). Gender, power and social change: Youth suicide among Fiji Indians and Western Samoans. *Journal of the Polynesian Society*, 108, 39–68.
- Chalaby, J. K. (2016). Television and globalization: The TV content global value chain. *Journal of Communication*, 66, 35–59.
- Chang, L. (2008). *Factory girls: From village to city in a changing China*. Spiegel & Grau.
- Charkova, K. D. (2007). A language without borders: English slang and Bulgarian learners of English. *Language Learning*, 57(3), 369–416.
- Condon, R. G. (1988). *Inuit youth: Growth and change in the Canadian Arctic*. Rutgers University Press.
- Condon, R. G. (1995). The rise of the leisure class: Adolescence and recreational acculturation in the Canadian Arctic. *Ethos*, 23, 47–68.
- Côté, J. (2006). Emerging adulthood as an institutionalized moratorium: Risks and benefits to identity formation. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 85–116). American Psychological Association Press.
- Dasen, P. (2000). Rapid social change and the turmoil of adolescence: A cross-cultural perspective. *International Journal of Group Tensions*, 29, 17–49.
- Davis, S., & Davis, D. (2012). Morocco. In J. J. Arnett (Ed.), *Adolescent psychology around the world* (pp. 47–60). Taylor & Francis.
- Davis, S. S., & Davis, D. A. (1989). *Adolescence in a Moroccan town*. Rutgers.
- Davis, S. S., & Davis, D. A. (1995). “The mosque and the satellite”: Media and adolescence in a Moroccan town. *Journal of Youth & Adolescence*, 24, 577–594.
- Davis, S. S., & Davis, D. A. (2007). Morocco. In J. J. Arnett, R. Ahmed, B. Nsamenang, T. S. Saraswathi, & R. Silbereisen (Eds.), *International encyclopedia of adolescence* (pp. 645–655). Routledge.
- Delafosse, R. J. C., Fouraste, R. F., & Gbobouo, R. (1993). Entre hier et demain: Protocol d'étude des difficultés d'identité dans une population de jeunes ivoiriens [Between yesterday and tomorrow: A study of identity difficulties in a population of young people in Cote d'Ivoire]. In F. Tanon & G. Vermes (Eds.), *L'individu et ses cultures* [Individuals and their culture] (pp. 156–164). L'Harmattan.
- English Language. (2019). *English language statistics*. <http://www.englishlanguageguide.com/facts/stats/>
- Erikson, E. H. (1950). *Childhood and society*. Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.
- Ferguson, G. M., & Bornstein, M. H. (2015). Remote acculturation of early adolescents in Jamaica towards European American culture: A replication and extension. *International Journal of Intercultural Relations*, 45, 24–35.
- Ferguson, G. M., Muzaffar, H., Iturbide, M. I., Chu, H., & Meeks Gardner, J. (2018). Feel American, watch American, eat American? Remote acculturation, TV, and nutrition among adolescent–mother dyads in Jamaica. *Child Development*, 89, 1360–1377.
- Friedman, T. L. (2000). *The Lexus and the olive tree: Understanding globalization*. Anchor.
- Greenhalgh, S. (2019a). Soda industry influence on obesity science and policy in China. *Journal of Public Health Policy*, 40(1), 5–16.
- Greenhalgh, S. (2019b). Making China safe for Coke: How Coca-Cola shaped obesity science and policy in China. *BMJ*, 364, 1–8.
- Hansen, N., & Postmes, T. (2013). Broadening the scope of societal change research: Psychological, cultural, and political impacts of development aid. *Journal of Social and Political Psychology*, 1, 273–292.
- Hansen, N., Postmes, T., van der Vinne, N., & van Thiel, W. (2012). Information and communication technology and cultural change: How ICT changes self-construal and values. *Social Psychology*, 43, 222–231.
- Haun, D. B. M., Rapold, C. J., Call, J., Janzen, G., & Levinson, S. C. (2006). Cognitive cladistics and cultural override in Hominid spatial cognition. *Proceedings of the National Academy of the Sciences of the United States of America*, 103, 17568–17573.
- Hermans, H. J. M. (2015). Human development in today's globalizing world: Implications for self and identity. In L. A. Jensen (Ed.), *Oxford handbook of human development and culture: An interdisciplinary perspective* (pp. 28–42). Oxford University Press.
- Hermans, H. J. M., & Kempen, H. J. G. (1998). Moving cultures: The perilous problems of cultural dichotomies in a globalizing society. *American Psychologist*, 53, 1111–1120.
- Hezel, F. X. (1987). Truk suicide epidemic and social change. *Human Organ*, 46, 283–291.

- Hugo, G. (2005). A demographic view of changing youth in Asia. In F. Gale & S. Fahey (Eds.), *Youth in transition: The challenge of generational change in Asia* (pp. 59–88). Association of Asian Social Science Research Councils.
- Jacobs, A. (2019, January 10). With obesity rising in China, Coke helps set nutrition policy. *New York Times*, A1, A9.
- Jensen, L. A. (2003). Coming of age in a multicultural world: Globalization and adolescent cultural identity formation. *Applied Developmental Science*, 7, 188–195.
- Jensen, L. A. (Ed.). (2011). *Bridging cultural and developmental approaches to psychology: New syntheses in theory, research and policy*. Oxford University Press.
- Jensen, L. A. (Ed.). (2016). *The Oxford handbook of human development and culture: An interdisciplinary perspective*. Oxford University Press.
- Jensen, L. A. (2018). The cultural-developmental approach to moral psychology: Autonomy, community, and divinity across cultures and ages. In M. J. Gelfand, C.-Y. Chiu, & Y.-Y. Hong (Eds.), *Handbook of advances in culture and psychology* (Vol. 7, pp. 107–143). Oxford University Press.
- Jensen, L. A. (in press). Globalization. In S. Hupp & J. Jewell (Eds.), *The encyclopedia of child and adolescent development*. Wiley.
- Jensen, L. A., & Arnett, J. J. (2012). Going global: New pathways for adolescents and emerging adults in a changing world. *Journal of Social Issues*, 68, 472–491.
- Jensen, L. A., Arnett, J. J., & McKenzie, J. (2011). Globalization and cultural identity developments in adolescence and emerging adulthood. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 285–301). Springer Publishing Company.
- Jensen, L. A., & Dost-Gozkan, A. (2015). Adolescent-parent relations in Asian Indian and Salvadoran immigrant families: A cultural-developmental analysis of authority, autonomy, conflict and cohesion. *Journal of Research on Adolescence*, 25, 340–351.
- Johnson, T., & Tomren, H. (1999). Helplessness, hopelessness, and despair: Identifying the precursors to Indian youth suicide. *American Indian Culture Research Journal*, 23, 287–301.
- Juang, P. L., Lerner, J. V., McKinney, J. P., & von Eye, A. (1999). The goodness of fit in autonomy timetable expectations between Asian-American late adolescents and their parents. *International Journal of Behavioral Development*, 23(4), 1023–1048.
- Kearney, R. N., & Miller, B. D. (1985). The spiral of suicide and social change in Sri Lanka. *Journal of Asian Studies*, 45, 81–101.
- Kwak, K., & Berry, J. W. (2001). Generational differences in acculturation among Asian families in Canada: A comparison of Vietnamese, Korean, and East-Indian groups. *International Journal of Psychology*, 36, 152–162.
- Lieber, R. J., & Weisberg, R. E. (2002). Globalization, culture, and identities in crisis. *International Journal of Politics, Culture, and Society*, 16, 273–296.
- Liechty, M. (1995). Media, markets, and modernization: Youth identities and the experience of modernity in Kathmandu, Nepal. In V. Amit-Talai & H. Wulff (Eds.), *Youth cultures: A cross-cultural perspective* (pp. 166–201). Routledge.
- Liechty, M. (2010). *Out here in Kathmandu: Modernity on the global periphery*. Martin Chautari Press.
- MacPherson, C., & MacPherson, L. (1987). Towards an explanation of recent trends in suicide in Western Samoa. *Man*, 22, 305–330.
- Manago, A. M. (2012). The new emerging adult in Chiapas, Mexico: Perceptions of traditional values and value change among first-generation Maya university students. *Journal of Adolescent Research*, 27, 663–713.
- McKenzie, J. (2018). Globalization and moral personhood: Dyadic perspectives of the moral self in rural and urban Thai communities. *Journal of Adolescent Research*, 33(2), 209–246.
- McKinsey Global Institute. (2014). *Global flows in a digital age: How trade, finance, people, and data connect the world economy*. <https://www.mckinsey.com/-/media/mckinsey/featured%20insights/Globalization/Global%20flows%20in%20a%20digital%20age/MGI%20Global%20flows%20in%20a%20digital%20age%20Executive%20summary.ashx>
- McLean, K. C., & Syed, M. (2016). Personal, master, and alternative narratives: An integrative framework for understanding identity development in context. *Human Development*, 58(6), 318–349.
- Miller, L. (2004). Those naughty teenage girls: Japanese kogals, slang, and media assessments. *Journal of Linguistic Anthropology*, 14(2), 225–247.
- Milner, A., McClure, R., & De Leo, D. (2012). Globalization and suicide: An ecological study across five regions of the world. *Archives of Suicide Research*, 16, 238–249.

- Naito, T., & Gielen, U. P. (2002). The changing Japanese family: A psychological portrait. In J. L. Roopnarine & U. P. Gielen (Eds.), *Families in global perspective*. Allyn & Bacon.
- Nguyen, N. A., & Williams, H. L. (1989). Transition from East to West: Vietnamese adolescents and their parents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 28, 505–15.
- Novins, D. K., Beals, J., Roberts, R. E., & Manson, S. M. (1999). Factors associated with suicide ideation among American Indian adolescents: Does culture matter? *Suicide and Life-Threatening Behavior*, 29, 332–346.
- Onitsuka, K., Hidayat, A. R. T., & Huang, W. (2018). Challenges for the next level of digital divide in rural Indonesian communities. *Electronic Journal of Information Systems in Developing Countries*, 84, e12021.
- Phinney, J., Ong, A., & Madden, T. (2000). Cultural values and intergenerational value discrepancies in immigrant and non-immigrant families. *Child Development*, 71, 528–539.
- Pike, K. M., & Dunne, P. E. (2015). The rise of eating disorders in Asia: A review. *Journal of Eating Disorders*, 33, 1–14.
- Population Reference Bureau. (2008). *World population data sheet*.
- Portes, A. (1997). Immigration theory for a new century: Some problems and opportunities. *International Migration Review*, 31, 799–825.
- Reser, J. (1990). The cultural context of aboriginal suicide: Myths, meanings, and critical analysis. *Oceania*, 61, 177–184.
- Robinson, G. (1990). Separation, retaliation and suicide: Mourning and the conflicts of young Tiwi men. *Oceania*, 60, 161–178.
- Rubenstein, J. M. (2017). *The cultural landscape: An introduction to human geography* (12th ed.). Pearson.
- Rubinstein, D. H. (1983). Epidemic suicide among Micronesian adolescents. *Social Science and Medicine*, 17, 657–665.
- Schlegel, A. (2001). The global spread of adolescent culture. In L. J. Crockett & R. K. Silbereisen (Eds.), *Negotiating adolescence in times of social change*. Cambridge University Press.
- Schwartz, S. J., Zamboanga, B. L., Luyckx, K., Meca, A., & Ritchie, R. (2015). Identity development in emerging adulthood. In J. J. Arnett (Ed.), *Oxford handbook of emerging adulthood* (pp. 401–420). Oxford University Press.
- Statista. (2019). *Global IP traffic from 2016 to 2021*. <https://www.statista.com/statistics/499431/global-ip-data-traffic-forecast/>
- Stevenson, H. W., & Zusho, A. (2002). Adolescents in China and Japan: Adapting to a changing environment. In R. Larson & T. S. Saraswathi (Eds.), *The world's youth: Adolescence in eight regions of the globe*. Cambridge University Press.
- Student Science. (2019). *About Intel ISEF*. <https://student.societyforscience.org/intel-isef>
- Unger, J. B. (2011). Cultural identity and public health. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 811–825). Springer.
- United Nations. (2018). *Department of Economic and Social Affairs: News*. <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html>
- Verma, S., & Saraswathi, T. S. (2002). Adolescents in India: Street urchins or Silicon Valley millionaires? In R. Larson & T. S. Saraswathi (Eds.), *The world's youth: Adolescence in eight regions of the globe* (pp. 105–140). Cambridge University Press.
- World Bank. (2009). *Information and communications for development 2009: Extending research and increasing impact*. <http://www.worldbank.org>
- World Bank. (2018). *Data: UNESCO Institute for Statistics*. https://data.worldbank.org/indicator/SE.ENR.PRIM.FM.ZS?year_high_desc=false
- World Health Organization. (2018). *Obesity and overweight*. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
- World Health Organization. (2019). *Controlling the global obesity epidemic*. <https://www.who.int/nutrition/topics/obesity/en/>

