



**WORLD
FAMILY
MAP** 2014

**MAPPING FAMILY CHANGE AND
CHILD WELL-BEING OUTCOMES**

ESSAY
FAMILY INSTABILITY AND
EARLY CHILDHOOD HEALTH
IN THE DEVELOPING WORLD

An International Report from

Child **TRENDS.**

Sponsors:



Focus Global

Institute for
Family Studies

Social Trends Institute
NEW YORK • BARCELONA

Co-Sponsors:

MYERS-JDC-BROOKDALE INSTITUTE (ISRAEL)
INTERMEDIA SOCIAL INNOVATION (ITALY)
UNIVERSIDAD DE PIURA (PERU)

NETHERLANDS YOUTH INSTITUTE
UNIVERSIDAD DE LOS ANDES (CHILE)
UNIVERSIDAD DE LA SABANA (COLOMBIA)

SEOUL NATIONAL UNIVERSITY
UNIVERSITAT INTERNACIONAL DE CATALUNYA (SPAIN)

WORLD FAMILY MAP 2014

MAPPING FAMILY CHANGE AND CHILD WELL-BEING OUTCOMES

Board of Advisors

Claudia Tarud Aravena (*Universidad de los Andes, Chile*)
Georgina Binstock (*Centro de Estudios de Población, Argentina*)
Paul Corcuera (*Universidad de Piura, Peru*)
Anjli Panalal Doshi (*Ministry of Women, Family & Community Development, Malaysia*)
Parfait Eloundou-Enyegue (*Cornell University*)
Montserrat Gas Aixendri (*Universitat Internacional de Catalunya, Spain*)
Frances Goldscheider (*Brown University (emerita) & University of Maryland*)
Bong Joo Lee (*Seoul National University, Korea*)
Kristin A. Moore (*Child Trends*)
Miriam Navot (*Myers-JDC-Brookdale Institute, Israel*)
Reynaldo Gustavo Rivera (*Intermedia Social Innovation, Italy*)
Andrés Salazar (*Universidad de La Sabana, Colombia*)
Glenn Stanton (*Focus Global*)
Arland Thornton (*University of Michigan*)
Erik Jan de Wilde (*Netherlands Youth Institute*)
Wei-Jun Jean Yeung (*National University of Singapore*)

Copyright

Child Trends is a nonprofit, nonpartisan research center that studies children at every stage of development. Its mission is to improve outcomes for children by providing research, data, and analysis to the people and institutions whose decisions and actions affect children. For additional information on Child Trends, including a complete set of free, downloadable Research Briefs, visit our Web site at www.childtrends.org. For the latest information on more than 100 key indicators of child and youth well-being, visit the Child Trends DataBank at www.childtrendsdatabank.org. For summaries of more than 565 experimental evaluations of social interventions for children, visit www.childtrends.org/links. Child Trends materials are copyrighted, but can be used if Child Trends is cited.

ISBN: 0-932359-56-6.

Acknowledgements

We would like to thank our sponsors, Doha International Family Institute, Institute for Family Studies, Focus Global, and the Social Trends Institute, as well as our co-sponsors, for their advice and generous financial support. We thank these sponsors for their support but acknowledge that the findings and conclusions presented in this report are those of the authors alone and do not necessarily reflect the opinions of the sponsors. We would also like to thank our Board of Advisors for their wise counsel, substantive suggestions, and editorial feedback in preparing this report; nevertheless this report does not necessarily represent their opinions. The authors wish to acknowledge the thoughtful reviews of Carol Emig, Mindy Scott, Alicia Torres, and Frank Walter of Child Trends. The report was edited by Anna Sutherland, and designed by Brandon Wooten of ID Company. Richard Brake and Brad Uhl facilitated production.

Executive Summary

Laura H. Lippman & W. Bradford Wilcox

The family is the core institution for child-rearing worldwide, and decades of research have shown that strong families promote positive child outcomes. For this reason the *World Family Map Project* monitors family well-being and investigates how family characteristics affect children's healthy development around the globe. Families do not operate in a vacuum: their ability to provide for their children and supervise their development depends not only on parenting behaviors and attitudes but also on the social, economic, and policy environments that surround them. Yet efforts to strengthen families are often considered off-limits or of low priority for policy and programmatic interventions, especially in times of financial strain. With the indicators and analyses presented here, this project points individuals, families, communities, NGOs, and governments to some key factors affecting child and family well-being that policies and programs can shape in order to foster strong families and positive outcomes for children.

The *World Family Map Project* monitors global changes in the areas of family structure, family socioeconomics, family processes, and family culture, focusing on 16 specific indicators selected by an expert group because of their known relationships to child outcomes in the research literature. Each annual report of the project provides the latest data on these indicators, as well as an original essay focusing on one aspect of the family and how it relates to child well-being in different parts of the world. In both the indicators and the essay, the highest quality data available are shared for countries that are representative of each region of the world. Scholars around the globe contribute to the project as advisors and analysts, stimulating a large community of researchers to improve data and research on families and children.

The inaugural edition of the *World Family Map* (see www.worldfamilymap.org/2013/) provided indicators of family well-being worldwide and an essay focusing on family living arrangements and education outcomes. This second annual edition of the *World Family Map*, sponsored by Child Trends and a range of educational and nongovernmental institutions from across the globe, provides updated indicators and a new essay focusing on union stability and early childhood health in developing countries, as well as a brief analysis of psychological distress among 9- to 16-year-olds in the European Union.

Selected findings from this year's family indicators are summarized below.

Family Structure

The number of parents and extended family members in a child's household influence the human and financial resources available to the child.

- In spite of marked family changes around the globe over the last half-century, children are still most likely to live in two-parent families in all countries except South Africa.
- One out of five children are living without either of their parents in South Africa and Uganda, and at least one out of eight children do so in other sub-Saharan African countries, including Ghana, Tanzania, Kenya, and the Democratic Republic of the Congo. About one out of 10 children live apart from both parents in several countries in Central/South America (Bolivia, Chile, Colombia, and Nicaragua), while less than one in approximately 20 do so in other regions of the world.
- Growing up with a single parent is especially common in sub-Saharan Africa, in Central and South America, and in several English-speaking Western countries; in the U.S., the U.K., New Zealand, and Canada, a fifth or more of children do so. Asia, the Middle East, and Eastern Europe have the world's lowest rates of single parenthood.
- Extended families, which can compensate for the absence of one or both parents from the household, are most commonly found in sub-Saharan Africa, followed by Asia and Central/South America.

- Although marriage rates for adults aged 18-49 are declining worldwide, they remain high in Asia and the Middle East (between 47 percent in Singapore and 80 percent in Egypt), and are particularly low in Central/South America. The rate of cohabitation for adults aged 18-49 tops 30 percent in some Central/South American countries and 20 percent in some European nations.
- While fertility rates are also declining worldwide, nonmarital childbearing is increasing in many regions, with the highest rates found in Central/South America and Western Europe.

Family Socioeconomics

Indicators such as poverty, undernourishment, parental education, employment, and public family benefits measure the material, human, and government resources available to families raising children.

- Undernourishment, or consuming fewer calories than needed for a healthy life, has become significantly less widespread in the past two decades: the percentage of the world's population that is undernourished decreased from 23 percent in 1990-92 to less than 15 percent in 2010-12. Nevertheless, it remains an indicator of material deprivation and disproportionately affects families with children. Despite global progress in fighting hunger, in some nations in sub-Saharan Africa and Central/South America, more than 20 or even 30 percent of residents are undernourished.
- Parental education, which positively affects parenting behaviors and child outcomes, is on the rise in many countries. Brazil exemplifies this trend, where the percentage of children living with a parent or household head with a secondary education increased from 17 to 29 percent between 2000 and 2010.

Family Processes

Family processes describe family members' interactions with one another: how they communicate, when they spend time together, how frequently they experience conflict, and whether they are satisfied with family life. Such factors can be positive or negative influences on child outcomes.

- The percentage of adults expressing a high degree of satisfaction with family life, in countries where this measure is available, ranges widely from 31 percent in Russia to 74 percent in Chile.
- The frequency of parent-teen communication also varies across countries; however, the vast majority of 15-year-olds eat their main meal with their parents in the countries where data are available.
- In Central/South America and some of the European countries studied, 15-year-olds are more likely to discuss how well they are doing at school frequently with their parents than to talk about more general topics, while in Germany and the Asian countries studied, they more frequently discuss general topics.

Family Culture

National attitudes toward family norms can influence trends in family structure and functioning, and thus they are important to monitor.

- Acceptance of voluntary single motherhood varies tremendously by region. In general, between 40 and 70 percent of adults in the Americas, Europe, and Oceania approve of it, but just 2 to 29 percent of those in Asia, the Middle East, and sub-Saharan Africa do so. Attitudes here generally align with behavior (single motherhood is more widely accepted where it is more common), with the exception of sub-Saharan Africa, where attitudes toward single motherhood are more negative, even though single motherhood is comparatively common.

The *World Family Map* indicators show that there are distinct family patterns across regions, and yet there is variation across the countries within a region. For example, some countries have managed to reduce malnutrition, while others have increased parental education. In some regions, students are comfortable talking to their parents about school, while in other regions, those students appear to be in the minority. There are many other patterns to discover in the report. Each country and region has unique strengths to offer as an example for others to follow, and each also has areas of life where families are struggling.

Essay on Union Stability and Childhood Health

The 2014 *World Family Map* essay suggests that the family contexts of caregiving deserve attention in ongoing efforts to improve children's health around the world. The essay specifically explores the relationship between family instability—measured here by divorce or dissolution of a cohabiting relationship, widowhood, or repartnering, either through marriage or cohabitation—and children's health. Three measures of child health are explored to cover different types of indicators of health: 1) diarrhea, an acute illness; 2) stunting, a longer-term measure of health resulting from chronic nutritional deprivation or repeated episodes of poor food intake, disease, or both; and 3) child mortality, the ultimate negative health outcome. Data from international Demographic and Health Surveys (DHS) are analyzed from 27 developing countries in Central/South America and the Caribbean, Africa, Asia and the Middle East. In Asia, Central/South America and the Caribbean, and sub-Saharan Africa, children raised by mothers who have experienced union instability are more likely to have health problems, especially diarrhea and to die, than children raised by a mother who has remained in her first union since before their birth. For instance, recent diarrhea was 16 percent more common in Africa and 35 percent more common in Asia among children of repartnered mothers than among children born to mothers continuously in their first union. Children of mothers who have divorced or dissolved a cohabiting partnership, been widowed, and repartnered in Africa, Asia, and Central/South America are 20 to 43 percent more likely to die than children in stable families. In the Middle East, however, family instability is not associated with negative child health outcomes. The essay also finds that in lower-income countries, single motherhood is more common among better-educated and wealthier mothers, a fact that stands in contrast to the typical pattern in higher-income countries. Note that adoptive and same-sex parents are not included in the study, so comparisons with them cannot be made.

The findings presented in the essay suggest that family instability compromises parents' ability to provide the kind of consistent and attentive care that is most likely to foster good health in children. The mechanisms of family instability that may compromise children's health might include increased levels of stress, less focus on the child, a reduction in social support, and a decrease in socioeconomic resources. Extended kin networks, communities, and private and public programs can do much to alleviate these stressors as families go through these transitions so as to improve health outcomes for children who experience such instability.

Together, the indicators and the essay suggest many opportunities to improve family and thus child well-being globally. These opportunities include fostering union stability (assuming parents have low-conflict relationships), extended family support, improving nutrition and parental education, and encouraging parent-child communication, among others. Fortunately, there are multiple mechanisms by which families can support healthy child development. This report illustrates some important ones that may produce a large return on investment in the health and well-being of the world's children.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
WORLD FAMILY MAP INDICATORS	
- FAMILY STRUCTURE	10
- FAMILY SOCIOECONOMICS	20
- FAMILY PROCESSES	34
- FAMILY CULTURE	42
ESSAY	48
FAMILY INSTABILITY AND EARLY CHILDHOOD HEALTH IN THE DEVELOPING WORLD	
CONCLUSION	63
SUPPLEMENT	64
FAMILY STRUCTURE ACROSS EUROPE AND CHILDREN'S PSYCHOLOGICAL HEALTH	



WORLD FAMILY INDICATORS

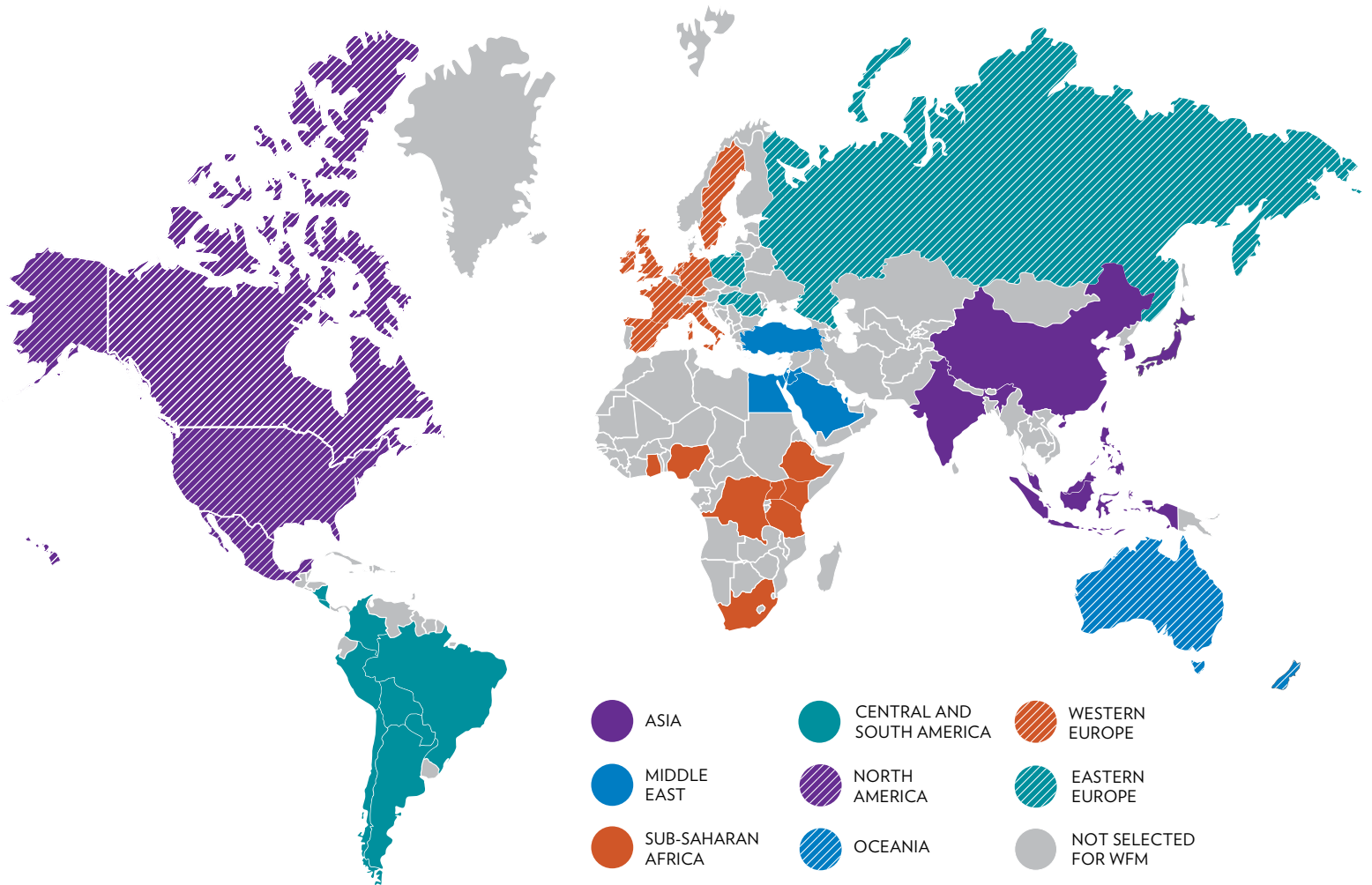
*Laura H. Lippman,
W. Bradford Wilcox, and
Renee Ryberg*

The indicators section of the 2014 *World Family Map* report provides information on 16 indicators of family well-being in four areas—family structure, family socioeconomic, family process, and family culture—across 49 countries, representing a majority of the world’s population.

The indicators section is an update to the 2013 *World Family Map* report. With the exception of two parent-child communication indicators in the family culture section, we used the same indicators as the 2013 report. This report is updated with new data, as available, and includes an additional four countries in sub-Saharan Africa.

General Methods

FIGURE 1 Countries in the 2014 World Family Map



- ASIA
- CENTRAL AND SOUTH AMERICA
- WESTERN EUROPE
- MIDDLE EAST
- NORTH AMERICA
- EASTERN EUROPE
- SUB-SAHARAN AFRICA
- OCEANIA
- NOT SELECTED FOR WFM

China
India
Indonesia
Japan
Malaysia
Philippines
Singapore
South Korea
Taiwan

ASIA

Egypt
Israel
Jordan
Qatar
Saudi Arabia
Turkey

MIDDLE EAST

Democratic Republic of the Congo
Ethiopia
Ghana
Kenya
Nigeria
South Africa
Tanzania
Uganda

SUB-SAHARAN AFRICA

Argentina
Bolivia
Brazil
Chile
Colombia
Costa Rica
Nicaragua
Paraguay
Peru

CENTRAL AND SOUTH AMERICA

Canada
Mexico
United States

NORTH AMERICA

Australia
New Zealand

OCEANIA

France
Germany
Ireland
Italy
Netherlands
Spain
Sweden
United Kingdom

WESTERN EUROPE

Hungary
Poland
Romania
Russian Federation

EASTERN EUROPE

SELECTING INDICATORS: Indicators were selected by the study team along with advisors representing every region of the world using a research-based conceptual framework of family strengths. Four groups of indicators were generated in the following domains: family structure, family socioeconomics, family process, and family culture. Indicators were chosen for each domain based upon their importance to family and child well-being, data availability, and regional representation, and in order to achieve balance in the number of indicators across domains.

SELECTING COUNTRIES: When designing this report, it was necessary to select a set of countries for which comparisons could be made. While it was not possible to include all of the approximately 200 countries in the world, countries were selected to ensure regional representation of high-, middle-, and low-income countries, and data availability for the desired time period was considered as well, resulting in 49 countries—an increase from 45 countries in the previous report—that account for over 75 percent of the world's population.¹ See [Figure 1](#). As data availability on key indicators of family well-being increases, the *World Family Map* will be able to continue to include more countries.

DATA SOURCES: There are numerous data sources available on indicators of family well-being. The sources presented here (see Data Sources below) were selected for their quality and coverage of countries as well as indicators. These sources have a strong reputation of rigorous data collection methodologies across countries, or if data are collected from individual country sources, such as censuses, they were harmonized post data collection to ensure comparability across countries. In addition, data sources were chosen in which multiple countries were represented; however, data from the same source may not be available for all countries or for the same year across countries, so caution is needed in making comparisons. For each indicator a primary data source was chosen. When data for a particular country were not available from that source, other sources were used to supplement.

When data are available from the same source for multiple years, we will note changes in indicators that are five percentage points or larger.

¹ United Nations, Department of Economic and Social Affairs, Population Division (2013). *World Population Prospects: The 2012 Revision, DVD Edition*.

Data Sources

Country-level sources When data were not available from an international survey, country-level data sources were sought. Examples include data from national statistics bureaus and country-level surveys.

Demographic and Health Surveys (DHS) DHS is a survey of over 90 developing nations, focusing on population and health information. This report uses the most recent data available for each country, ranging from 2001 to 2012.

Food and Agriculture Organization (FAO) As part of the United Nations, FAO compiles statistics on food- and agriculture-related indicators, including undernourishment. The most recent data are from 2011–13 and are published in their report *The State of Food Insecurity in the World 2013*.

Integrated Public Use Microdata Series-International (IPUMS) IPUMS is a compilation of harmonized censuses from countries throughout the world. This report uses the most recent data available for each country, ranging from 2000 to 2010.

International Social Survey Program (ISSP) ISSP is a collaboration between annual national surveys to ensure data comparability on social science questions. This report uses their 2002 collection on family and changing gender roles. Unfortunately, data are only available for a handful of countries that are not representative of regions. ISSP fielded a similar set of items in 2012; the data will be released in late spring, 2014.

LIS (formerly known as the Luxembourg Income Study) LIS is a collection of harmonized data on the income and wealth of individuals in middle- and high-income countries. Data from LIS used in this report range from 2002 to 2010.

Organization for Economic Co-operation and Development (OECD) OECD's Family Database provides cross-national statistics on the well-being of families and children throughout OECD's member and partner countries. A 2011 OECD report entitled *Doing Better for Families* was also used as a source. OECD data used in this report are generally from 2009.

Program for International Student Assessment (PISA) PISA is an international tri-annual assessment of literacy in reading, mathematics, and science. PISA is administered in all OECD member countries as well as additional self-selected countries. This report uses data from the contextual part of the 2012 parent survey. Unfortunately, the items of interest were asked in a small group of countries in this iteration of the survey.

UNICEF Innocenti Research Center A 2012 UNICEF report entitled *Measuring Child Poverty: New League Tables of Child Poverty in the World's Rich Countries* was used for up-to-date relative poverty rates.

World Values Survey (WVS) WVS is a survey of political and sociocultural values in over 50 countries. This report uses the most recent data available for each country, from the fourth and fifth survey waves, ranging from 1999 to 2008. The next wave of data will be released in late spring, 2014.

For more information on specific sources, see e-ppendix at worldfamilymap.org/e-ppendix.

Family Structure

Key Findings

Children's lives are influenced by the number of parents and siblings that they live with, as well as by whether their parents are married. The *World Family Map* reports these key indicators of family structure in this section.

- Although two-parent families are becoming less common in many parts of the world, they still constitute a majority of families around the globe. Children are particularly likely to live in two-parent families in Asia and the Middle East, compared with other regions of the world. Children are more likely to live with one or no parent in the Americas, Europe, Oceania, and sub-Saharan Africa than in other regions.
- Extended families (which include parent(s) and kin from outside the nuclear family) also appear to be common in Asia, the Middle East, Central/South America, and sub-Saharan Africa, but not other regions of the world.
- Marriage rates are declining in many regions. Adults are most likely to be married in Asia and the Middle East, and are least likely to be married in Central/South America, with Africa, Europe, North America, and Oceania falling in between. Cohabitation (living together without marriage) is more common among couples in Europe, North America, Oceania, and—especially—in Central/South America.
- Childbearing rates are declining worldwide. The highest fertility rates are in sub-Saharan Africa. A woman gives birth to an average of 6.1 children in Uganda. Moderate rates of fertility are found in the Middle East, and levels of fertility that are sufficient to replace a country's population in the next generation (about 2.1) are found in the Americas and Oceania. Below replacement-level fertility is found in East Asia and Europe.
- Given the decline in marriage rates, childbearing outside of marriage—or *nonmarital childbearing*—is increasing in many regions. The highest rates of nonmarital childbearing are found in Central/South America and Western Europe, with moderate rates found in North America, Oceania, and Eastern Europe, varied rates found in sub-Saharan Africa, and the lowest rates found in Asia and the Middle East.

Living Arrangements

Family living arrangements—how many parents are in the household and whether the household includes extended family members—shape the character and contexts of children's lives, as well as the human resources available for children. As evidenced in [Figures 2 and 3](#), which are derived from IPUMS, DHS, and national censuses, the living arrangements that children experience vary substantially around the globe. And the distribution of children across these various types of family living arrangements is changing over time. This report describes such patterns, without bias. The family strengths that are being described in the other indicators in this section can be found in each type of family.

Living with kin is particularly common in much of Asia, the Middle East, Central/South America, and sub-Saharan Africa. As seen in [Figure 2](#), in almost all of the countries in these regions, at least 40 percent of children live in households with other adults besides their parents. In many cases, these adults are extended family members. Indeed, at

least half of children live with adults besides their parents in parts of Africa (Democratic Republic of the Congo [58 percent], Ghana [53 percent], Nigeria [57 percent], South Africa [70 percent], and Tanzania [60 percent]); Asia (India [50 percent]); South America (Colombia and Nicaragua [55 percent]); and the Middle East (Turkey [58 percent]). In these regions, then, children are especially likely to be affected by their relationships with other adults in the household, including grandparents, aunts and uncles, and cousins, compared with children living in regions where extended household members played smaller roles in children's day-to-day lives. Living with adults other than parents can generate benefits for children, but, depending on the circumstances, it can also produce difficulties such as overcrowding, violence, and abuse.²

Whether in nuclear or extended family households, children are especially likely to live with two parents (who could be biological parents or stepparents) in Asia and the Middle East. See [Figure 3](#). On the basis of the data available for the specific countries examined in these regions, more than 80 percent of children in these two regions live with two parents (ranging from 85 percent in the Philippines and Indonesia to 94 percent in Jordan). About 80 percent of children in European countries live in two-parent households (ranging from 76 percent in the United Kingdom to 89 percent in Italy/Poland). In the Americas, between 62 percent (Colombia) and 78 percent (Canada) of children live in two-parent households. The two-parent pattern is more mixed in sub-Saharan Africa, ranging from 36 percent in South Africa to 76 percent in Nigeria. Some of these children living in two-parent households are also living with extended families, as noted above.

In much of Central/South America and sub-Saharan Africa, children have higher odds of living with either one or neither of their parents than in other regions. Between 13 percent (Nigeria) and 43 percent (South Africa) of children live in single-parent families and from 4 percent (Argentina) to 20 percent (South Africa and Uganda) of children live in homes without either of their parents. Among the South American countries in this study, for instance, Colombia had the highest percentage of children living without either of their parents: 11 percent. The high percentage of South African children living with one parent or without either parent—43 percent and 20 percent, respectively—is due in part to the high incidence of AIDS orphans.³

Finally, in North America, Oceania, and Europe, a large minority—about one-fifth—of children live in single-parent households, and less than 7 percent of children lived in households without at least one of their parents. In Eastern Europe, 11 to 15 percent of children live with a lone parent. In these regions, the United States (27 percent), the United Kingdom (24 percent), and New Zealand (24 percent) have particularly high levels of single parenthood. Many European countries have projected the proportion of children living with single parents to grow through 2030.⁴

In sum, the regional patterns identified in this section of *The World Family Map* suggest that children are especially likely to live with two parents and extended family members in Asia and the Middle East. Extended families also appear to be more common in Asia, Central/South America and sub-Saharan Africa. A relatively large minority of children are living with single parents or with no parents in the household in Central/South America and sub-Saharan Africa. A relatively large minority of children also live with one parent in Western Europe, North America, and Oceania.

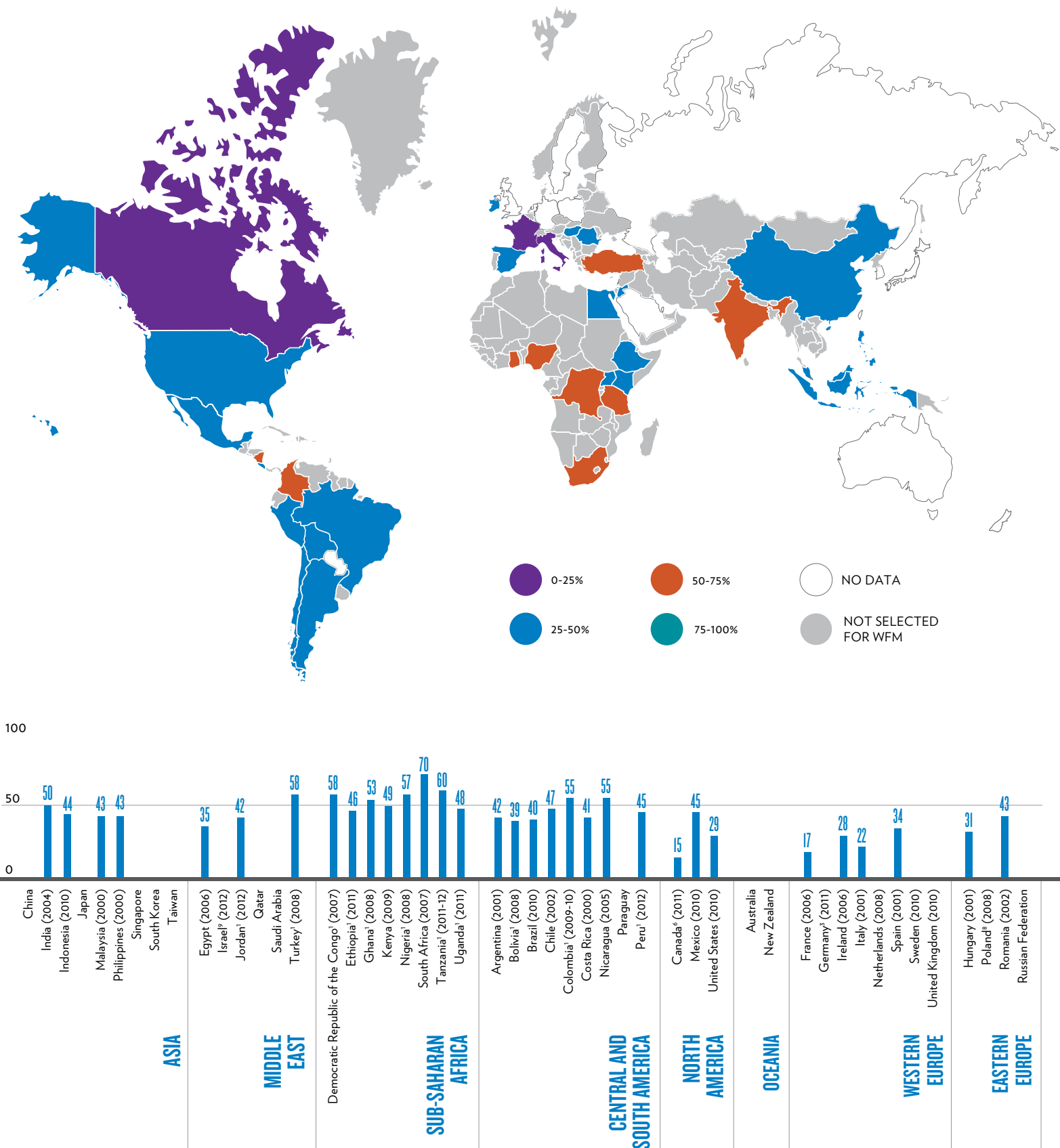
² K. Kopko, "The Effects of the Physical Environment on Children's Development" (Ithaca, NY: Cornell Department of Human Development, n.d.); G. Morantz et al., "Child Abuse and Neglect among Orphaned Children and Youth Living in Extended Families in Sub-Saharan Africa: What Have We Learned from Qualitative Inquiry?" *Vulnerable Children and Youth Studies: An International Interdisciplinary Journal for Research, Policy and Care* 8, no. 4 (2013).

³ N. R. Matshalaga and G. Powell, "Mass Orphanhood in the Era of HIV/AIDS" *British Medical Journal* 324, no. 7331 (2002); A. J. McMichael et al., "Mortality Trends and Setbacks: Global Convergence or Divergence," *Lancet* 363, no. 9415 (2004).

⁴ Organization for Economic Co-operation and Development (OECD), "Doing Better for Families," (OECD, 2011).

FIGURE 2 Living Arrangements, 2000-2012

Percentage of Children Living with Probable Extended Family (Adults in Addition to Parents)



Sources: www.worldfamilymap.org/2014/e-ppendix/figure2

FIGURE 3 Living Arrangements, 2000-2012



Sources: www.worldfamilymap.org/2014/e-appendix/figure3

Marriage and Cohabitation

The nature, function, and firsthand experience of marriage vary around the world. Marriage looks and feels different in Sweden, compared with the experience in Saudi Arabia; in China, compared with the experience in Canada; and in Argentina, compared with the experience in Australia. Nevertheless, across time and space, in most societies and cultures, marriage has been an important institution for structuring adult intimate relationships and connecting parents to one another and to any children that they have together.⁵ In particular, in many countries, marriage has played an important role in providing a stable context for bearing and rearing children, and for integrating fathers into the lives of their children.⁶

However, today the hold of marriage as an institution over the adult life course and the connection between marriage and parenthood vary around much of the globe. Dramatic increases in cohabitation, divorce, and nonmarital childbearing in the Americas, Europe, and Oceania over the last four decades suggest that the institution of marriage is much less relevant in some parts of the world.⁷ At the same time, the meaning of marriage appears to be shifting in much of the world. Marriage is becoming more of an *option* for adults, rather than a *necessity* for the survival of adults and children. Cohabitation has emerged as an important precursor or alternative to marriage in many countries for any number of reasons. Adults may look for more flexibility or freedom in their relationships, or they may feel that they do not have sufficient financial or emotional resources to marry, or they may perceive marriage as a risky undertaking, or simply unnecessary once they are cohabiting.⁸

Given the changing patterns and perceptions about marriage and cohabitation in many contemporary societies, this section of the *World Family Map* measures how prevalent marriage and cohabitation are among adults in their prime childbearing and childrearing years (18–49) around the globe. The prevalence of partnerships of either type is presented first, followed by a discussion of cohabitation and marriage separately.

Figure 4 provides information compiled from censuses and surveys conducted in 43 of the 49 selected countries, primarily in the mid-2000s. In most countries throughout the world, between 50 and 75 percent of adults of reproductive age are in either marital or cohabiting relationships. Exceptionally low rates of partnership are found in South Africa, Chile, and Singapore, where less than half of adults are cohabiting or married. In contrast, adults in India, Indonesia, and Egypt are most likely to be partnered. More than three-quarters of 18- to 49-year-olds in these countries are cohabiting or married.

The prevalence of partnerships is generally highest in Asia (with the exception of Singapore) and the Middle East, ranging from 55 (Israel) to 80 percent (Egypt). Rates of partnership are more moderate in sub-Saharan Africa, where they range from 61 (Ghana) to 70 percent (Uganda) when excluding South Africa's worldwide low rate. Partnership rates are also moderate in Eastern Europe, where they range from 57 (Poland) to 67 percent (Romania and Russia). Partnerships are least prominent in the Americas, Oceania, and Western Europe, where between 49 (Chile) and 67 (Bolivia) percent of adults are cohabiting or married. The following sections look at whether these partnerships are through marriage or cohabitation.

⁵ See, for example, B. Chapais, *Primeval Kinship: How Pair Bonding Gave Birth to Human Society* (Cambridge, MA: Harvard University Press, 2008); K. Davis, *Contemporary Marriage: Comparative Perspectives on a Changing Institution* (New York: Russell Sage Foundation, 1985); W. Goode, *World Revolution and Family Patterns* (New York: Free Press, 1963).

⁶ Chapais, *Primeval Kinship: How Pair Bonding Gave Birth to Human Society*; P. Heuveline, J. Timberlake, and F. Furstenberg Jr., "Shifting Childrearing to Single Mothers: Results from 17 Western Countries," *Population and Development Review* 29, no. 1 (2003).

⁷ R. Lesthaeghe, "A Century of Demographic and Cultural Change in Western Europe: An Exploration of Underlying Dimensions," *Population and Development Review* 9, no. 3 (1983); P. McDonald, *Families in Australia: A Socio-Demographic Perspective* (Melbourne: Australian Institute of Family Studies, 1995); D. Popenoe, "Cohabitation, Marriage, and Child Well-Being: A Cross-National Perspective" (New Brunswick, NJ: The National Marriage Project, 2008).

⁸ A. Cherlin, *The Marriage-Go-Round: The State of Marriage and the Family in America Today* (New York: Knopf, 2009); M. Pollard and K. Harris, "Cohabitation and Marriage Intensity: Consolidation, Intimacy, and Commitment," in *Working Papers* (Santa Monica, CA: RAND Labor and Population, 2013); S. Coontz, *Marriage: A History: From Obedience to Intimacy or How Love Conquered Marriage* (New York: The Penguin Group, 2005); W. Goode, *World Change in Divorce Patterns* (New Haven, CT: Yale University Press, 1993); Heuveline, Timberlake, and Furstenberg, "Shifting Childrearing to Single Mothers: Results from 17 Western Countries."

FIGURE 4 Marriage and Cohabitation, 2000-2012



- Means the data for cohabitation was not available

Sources: www.worldfamilymap.org/2014/e-ppendix/figure4

Marriage

Adults aged 18 to 49 are most likely to be married in Asia and the Middle East, and are least likely to be married in Central/South America. Marriage levels fall in the moderate range (about half) in most of Europe, Oceania, and North America. Moreover, the data show that a larger percentage of adults are cohabiting in Europe and the Americas than in other regions.

As **Figure 4** shows, between 47 (Singapore) and 77 percent (India) of the adult population in the Asian countries in our study are married, and marriage is even more common in the Middle East, where a clear majority of adults (between 55 [Israel] and 80 [Egypt] percent) are married.

By contrast, marriage patterns fall in the middle range, or are less consistent, in the Americas, Europe, and sub-Saharan Africa. In North America and Oceania, about half of 18- to 49-year old adults are married, ranging from 43 (Canada) to 63 percent (Mexico). Notably, the percentage of adults married in the United States fell from 52 percent in 2005 to 45 percent in 2010. In the sub-Saharan African countries studied, marriage patterns show a great deal of variation, with between 30 (South Africa) and 66 percent (Nigeria) of adults aged 18-49 married. Indeed, South Africa has one of the lowest marriage rates of any country included in our study, and the very lowest proportion of adults in unions (married or cohabiting) of any country was found in South Africa with just 43 percent of adults in unions. Among the European countries, between 37 (Sweden) and 60 percent (Romania) of adults aged 18-49 are married, with marriage clearly being more common in Eastern Europe. By contrast, in Central/South America, generally, less than half of adults are married, with the exception of Costa Rica and Paraguay; in Colombia, the proportion of married adults is a worldwide low 20 percent.

Cohabitation

Figure 4 indicates that cohabitation is rare in Asia and the Middle East, two regions where relatively traditional mores still dominate family life. Moderate to high levels of cohabitation are found in North America and Oceania, where between 9 (United States) and 19 percent (Canada) of adults aged 18-49 are in cohabiting relationships. Levels of cohabitation in sub-Saharan Africa vary considerably, with relatively high levels of cohabitation in Uganda (25 percent) and low levels in Ethiopia (4 percent), Nigeria (2 percent), and Kenya (4 percent).

There are also high levels of cohabitation in much of Europe. For example, about one-quarter of Swedish and French adults aged 18-49 are living in a cohabiting relationship. Cohabitation is most common among South Americans, where consensual unions have played a longstanding role in South American society.⁹ Between 12 (Chile) and 38 percent (Peru) of adults aged 18-49 live in cohabiting unions in South America, with Peru registering the highest level of cohabitation of any country in our global study.

In general, marriage seems to be more common in Asia and the Middle East, whereas alternatives to marriage—including cohabitation—are more common in Europe and Central/South America. North America, Oceania, and sub-Saharan Africa fall in between. Both cultural and economic forces may help to account for these regional differences.

It remains to be seen, however, how the place of marriage in society and the increasing popularity of cohabitation in many regions affect the well-being of children in countries around the globe.

Childbearing

Family size also affects the well-being of children, in part because children in large families tend to receive fewer financial and practical investments than do children in small families.¹⁰ Alternatively, some research suggests

⁹ Teresa Castro Martin, "Consensual Unions in Latin America: Persistence of a Dual Nuptiality System," *Journal of Comparative Family Systems* 33, no. 1 (2002).

¹⁰ D. Downey, "When Bigger Is Not Better: Family Size, Parental Resources, and Children's Educational Performance," *American Sociological Review* 60, no. 5 (1995).

TABLE 1 Total Fertility Rate, 2011*Number of children who would be born per woman given age-specific fertility rates***ASIA**

China ¹	1.6
India ²	2.6
Indonesia ²	2.1
Japan ³	1.4
Malaysia	2.6
Philippines ⁴	3.1
Singapore	1.3
South Korea ⁵	1.4
Taiwan ⁶	1.1

MIDDLE EAST

Egypt ²	2.7
Israel ⁷	2.9
Jordan ²	3.0
Qatar	2.2
Saudi Arabia ³	2.7
Turkey ⁸	2.1

SUB-SAHARAN AFRICA

Democratic Republic of the Congo ²	5.7
Ethiopia ²	4.0
Ghana ²	4.1
Kenya ²	4.7
Nigeria ^{2,9}	5.5
South Africa ²	2.4
Tanzania ²	5.5
Uganda ²	6.1

CENTRAL AND SOUTH AMERICA

Argentina ⁷	2.2
Bolivia ²	3.3
Brazil ¹⁰	1.8
Chile ¹¹	1.8
Colombia ²	2.3
Costa Rica ⁷	1.8
Nicaragua ⁷	2.6
Paraguay ⁷	2.9
Peru ²	2.5

NORTH AMERICA

Canada ¹²	1.7
Mexico ⁵	2.3
United States ¹³	1.9

OCEANIA

Australia ⁵	2.0
New Zealand ³	2.2

WESTERN EUROPE

France ⁸	2.0
Germany ⁸	1.4
Ireland ⁸	2.1
Italy ⁸	1.4
Netherlands ⁸	1.8
Spain ⁸	1.5
Sweden ⁸	1.9
United Kingdom ⁸	1.9

EASTERN EUROPE

Hungary ⁸	1.4
Poland ⁸	1.4
Romania ⁸	1.4
Russian Federation ⁹	1.5

Sources: www.worldfamilymap.org/2014/e-ppendix/table1

that children who grow up without siblings lose out on important social experiences and are at-risk for weight issues.^{11,12} How, then, is region linked to family size around the globe?

Table 1 presents the total fertility rate (the average number of children born to each woman of childbearing age) as a proxy for family size. Data are for 2011 and come from the United Nations Population Division. These data indicate that large families are most common in sub-Saharan Africa, where the total fertility rate (TFR) ranges from 2.4 children per woman in South Africa to 6.1 per woman in Uganda. Fertility is also comparatively high in the Middle East, ranging from a TFR of 2.1 in Turkey to a TFR of 3.0 in Jordan.

In the Americas and Oceania, fertility rates are now close to or slightly below the replacement level of 2.1. This means that women in most countries in these regions are having enough children for the population to replace itself from one generation to the next. For instance, the TFR was 2.0 in Australia, 1.8 in Chile, 2.3 in Mexico, and 2.1 in the United States. It is worth noting that fertility has fallen markedly in Central/South America in the last four decades, which is one reason that fertility rates there (which range from a TFR of 1.8 in Brazil, Chile, and Costa Rica to 3.3 in Bolivia) now come close to paralleling those in North America and Oceania.¹³

Fertility rates in Europe have increased since their lows in the early 2000s, but generally remain below the replacement level.¹⁴ Ireland has a replacement level TFR of 2.1, but the TFRs for all other countries in this region fall below this level, ranging from 1.4 to 2.0.

¹¹ D. Downey and D. Condon, "Playing Well with Others in Kindergarten: The Benefit of Siblings at Home," *Journal of Marriage and Family* 66, no. 2 (2004).

¹² A. Chen and J. Escarce, "Family Structure and Childhood Obesity, Early Childhood Longitudinal Study--Kindergarten Cohort," *Preventing Chronic Disease* 7, no. 3 (2010).

¹³ A. Adsera and A. Menendez, "Fertility Changes in Latin America in Periods of Economic Uncertainty," *Population Studies* 65, no. 1 (2011).

¹⁴ Organization for Economic Co-operation and Development (OECD), "Doing Better for Families."

Finally, fertility rates in Asia, especially East Asia, have fallen dramatically in recent years and vary substantially, to the point where the TFR ranges from 3.1 (Philippines) to 1.1 (Taiwan).¹⁵ Indeed, no country in East Asia has a fertility rate higher than 1.6. The long-term consequences of such low fertility—both for the children themselves and for the societies they live in—remain to be seen.

Nonmarital childbearing

Tracking nonmarital childbearing is important because, in many societies, children whose parents are not married are more likely to experience instability in their parents' union, and are less likely to have positive outcomes in many areas of life, from social behavior to academic performance.¹⁶

Nonmarital childbearing refers to the percentage of births that are to unmarried women, whether or not they are in a nonmarital relationship. Data for this indicator are from both surveys and official registration data. It is especially important to use caution when comparing rates for this indicator, as these two types of sources are very different. For more information on sources, see the e-ppendix.

Figure 5 indicates that rates of nonmarital childbearing are highest in Central/South America, followed by those in much of Northern and Western Europe. In South America, well over half of children are born to unmarried mothers, with Colombia registering the highest levels (84 percent).¹⁷ In much of Europe, between one-third and half of children are born outside of marriage, whereas in France and Sweden, more than 50 percent of children are. In many European countries, the average age at first childbirth is now lower than the average age at first marriage.¹⁸

Nonmarital childbearing is also common in Oceania and North America. In these regions, about four in 10 children are born outside of marriage, with rates ranging from 27 (Canada) to 55 percent (Mexico), with the U.S. at 41 percent. By contrast, trends in nonmarital childbearing are quite varied in sub-Saharan Africa, ranging from a low of 6 percent in Nigeria to a high of 63 percent in South Africa. Finally, nonmarital childbearing is comparatively rare throughout much of Asia and the Middle East. With the exception of the Philippines (where 37 percent of children are born to unmarried parents), nonmarital childbearing is 5 percent or less in these two regions. Not surprisingly, these patterns track closely with the marriage trends identified above in **Figure 4**; that is, where marriage is prevalent, the proportion of children born outside of marriage is smaller.

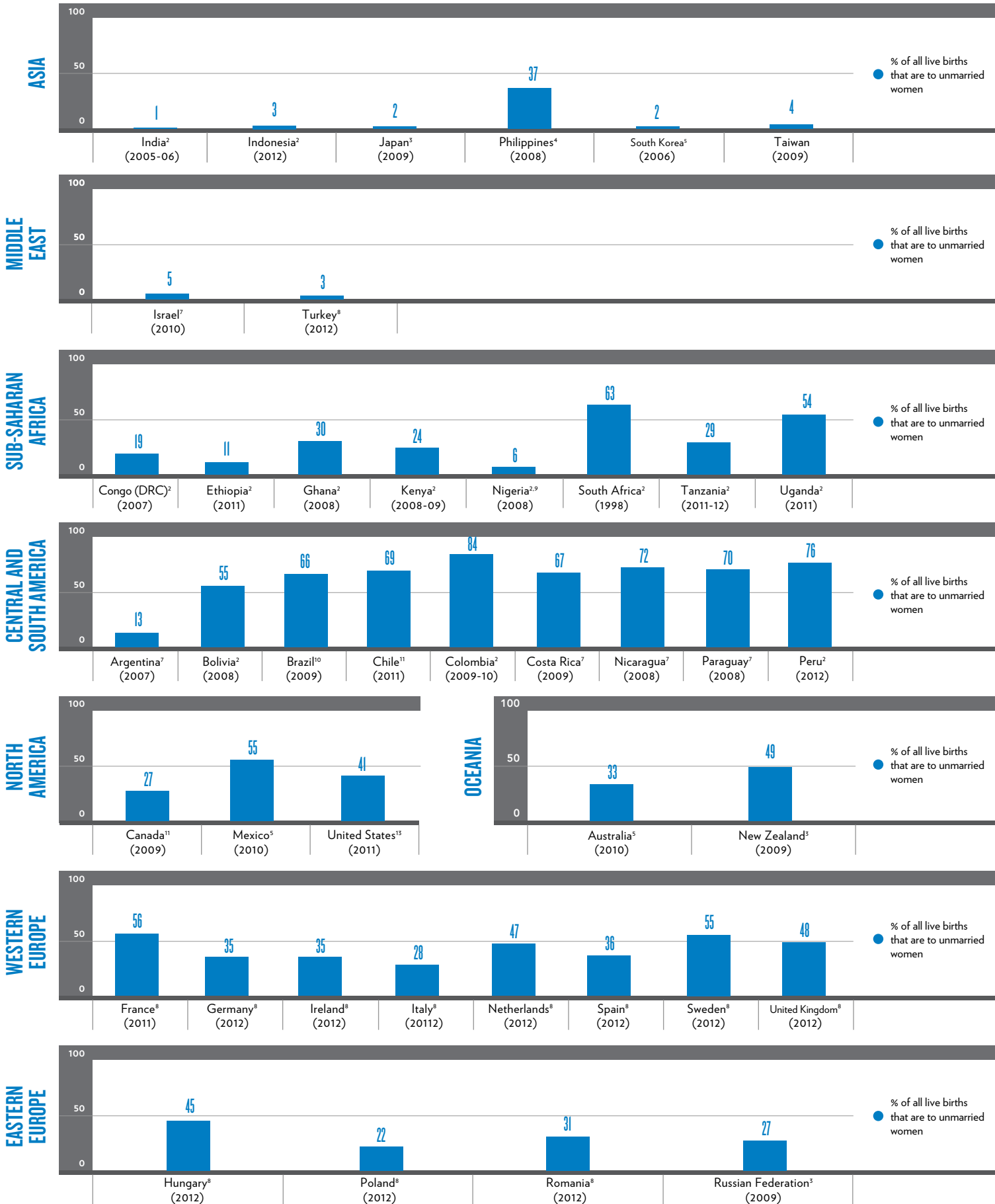
¹⁵ Social Trends Institute, "The Sustainable Demographic Dividend" (Barcelona: Social Trends Institute, 2011).

¹⁶ S. Brown, "Marriage and Child Well-Being: Research and Policy Perspectives," *Journal of Marriage and Family* 72, no. 5 (2010); Martin, "Consensual Unions in Latin America: Persistence of a Dual Nuptiality System"; W. Bradford Wilcox, "Why Marriage Matters: 30 Conclusions from the Social Sciences" (New York: Institute for American Values/National Marriage Project, 2010).

¹⁷ Argentina appears to be an exception, but their nonmarital birth rate does not include births to consensual unions.

¹⁸ Organization for Economic Co-operation and Development (OECD), "Doing Better for Families."

FIGURE 5 Births Outside Marriage, 1998-2012



Sources: www.worldfamilymap.org/2014/e-appendix/figure5

Family Socioeconomics

Key Findings

Socioeconomic indicators measure the material, human, and government resources that support family and child well-being. The socioeconomic indicators highlighted in our study include poverty; undernourishment (as a marker of material deprivation); parental education and employment; and public family benefits.

- In this study, poverty is calculated as *absolute poverty* (the percentage of the population living on less than 1.25 U.S. dollars per day) and as *relative child poverty* (the percentage of children living in households earning less than half their country's median household income). The prevalence of absolute poverty in the countries in our study ranges from 0 in several countries to 88 percent in the Democratic Republic of the Congo. The incidence of relative poverty for children ranges from 6 to 33 percent, with the lowest rates found in Europe and Oceania, and the highest rates found in Central/South America.
- In the Middle East, North America, Oceania, and Europe, less than 5 percent of the population is undernourished. In contrast, the highest levels of undernourishment are found in Africa, Asia, and South America.
- Levels of parental education, as shown by completion of secondary education, range widely around the world. The lowest levels are found in Africa, followed by Asia, the Middle East, and Central and South America. The highest levels are found in Europe.
- Between 38 and 97 percent of parents are employed worldwide, with the highest parental employment rates found in Asia. Consistently high rates are found in the Middle East; and medium to high rates are found in the Americas and Europe.
- Public family benefits across countries represented in the Organization for Economic Co-operation and Development (OECD) range from 1.0 to 4.2 percent of gross domestic product (GDP). According to the limited available data, the highest benefits are offered in Europe and Oceania.

Poverty

Recent economic downturns have placed stress on families with children. Poverty is a well-documented risk factor for many negative outcomes in childhood. Children growing up in poverty have more social, emotional, behavioral, and physical health problems than do children who do not grow up in poverty.¹⁹ Children who are poor also score lower on cognitive tests and are less likely to be ready to enter school than are their more affluent peers.²⁰

¹⁹ D. Lempers, D. Clark-Lempers, and R. Simons, "Economic Hardship, Parenting, and Distress in Adolescence," *Child Development* 60, no. 1 (1989); D. Seith and E. Isakson, "Who Are America's Poor Children? Examining Health Disparities among Children in the United States" (New York: National Center for Children in Poverty, 2011).

²⁰ T. Halle et al., "Background for Community-Level Work on School Readiness: A Review of Definitions, Assessments, and Investment Strategies. Part II: Reviewing the Literature on Contributing Factors to School Readiness. Paper Prepared for the John S. And James L. Knight Foundation" (Washington, DC: Child Trends, 2000); K. A. Moore et al., "Children in Poverty: Trends, Consequences, and Policy Options," in *Child Trends Research Brief* (Washington, DC: Child Trends, 2009).

Poverty affects children differently depending on the age at which it is experienced. Developmental differences between children who are poor and those who are not can be detected by a child's second birthday.²¹ In adolescence, poverty can lead parents to provide less nurture and more inconsistent discipline for their children, leading to young people's subsequent feelings of loneliness and depression.²²

Prolonged poverty is especially detrimental to healthy child development. Experiencing poverty for at least half of childhood is linked with an increased risk for teenage pregnancy, school failure, and inconsistent employment in adulthood in the United States.²³

In the United States and elsewhere, poverty is often related to family structure as well. Children living in single-parent households, especially those headed by a woman, are more likely to grow up in poverty.²⁴ This report considers two measures of poverty as indicators of family socioeconomics: absolute poverty and relative poverty.

Absolute Poverty

The absolute poverty indicator captures the living conditions in one country, compared with others, by using an international poverty line and determining the percentage of the country's population living below that line. The international poverty line that we used in this report is set by the World Bank at 1.25 U.S. dollars a day. One of the United Nations' Millennium Development Goals is to cut the proportion of people who live on less than one U.S. dollar a day in half.²⁵ Progress has been made in eradicating extreme poverty, and this goal was reached in 2010. However, poverty reduction has not been achieved equally around the world. Very high extreme poverty rates still exist in sub-Saharan Africa and parts of Oceania, where the MDG is not expected to be met.²⁶ In total, there are still over one billion people living in extreme poverty worldwide.²⁷

Data for this indicator come from the World Bank, which has compiled information from individual countries' government statistical agencies based on household surveys. Because individuals and countries themselves provide the information on poverty levels, instead of a more objective source, it is possible that these rates underrepresent the true level of absolute poverty. Another limitation is that data are not available for this indicator for the most economically prosperous countries, including the United States and countries in Western Europe. Unfortunately, due to changes in the calculations of absolute poverty, it is not possible to compare results from this year's report to the previous year's report.²⁸

Absolute poverty rates vary widely in Asia, ranging from 0 percent in Malaysia to 33 percent in India. The remaining Asian countries have absolute poverty rates between 13 and 18 percent, as shown in [Figure 6](#).

The selected Middle Eastern countries have relatively low levels of absolute poverty. Two percent of people at most live on less than 1.25 U.S. dollars a day in these countries.

The highest rates of absolute poverty are found in Africa. In the sub-Saharan countries selected for this study, between 14 and 88 percent of the population lives in poverty. The Democratic Republic of the Congo has the highest poverty rate: 88 percent of the population lives below the international poverty line. In both Nigeria and Tanzania, 68 percent of the population lives on less than 1.25 U.S. dollars per day. Ethiopia and Kenya have the next highest poverty rates, at approximately 40 percent. Ghana and South Africa have the lowest absolute poverty rates in sub-Saharan Africa, at 29 percent and 14 percent, respectively.

²¹ Ibid.

²² Lempers, Clark-Lempers, and Simons, "Economic Hardship, Parenting, and Distress in Adolescence."

²³ C. Ratcliffe and S. McKernan, "Childhood Poverty Persistence: Facts and Consequences" (Washington, DC: The Urban Institute, 2010).

²⁴ Federal Interagency Forum on Child and Family Statistics, "America's Children in Brief: Key National Indicators of Well-Being, 2012" (Washington, DC: U.S. Government Printing Office, 2012).

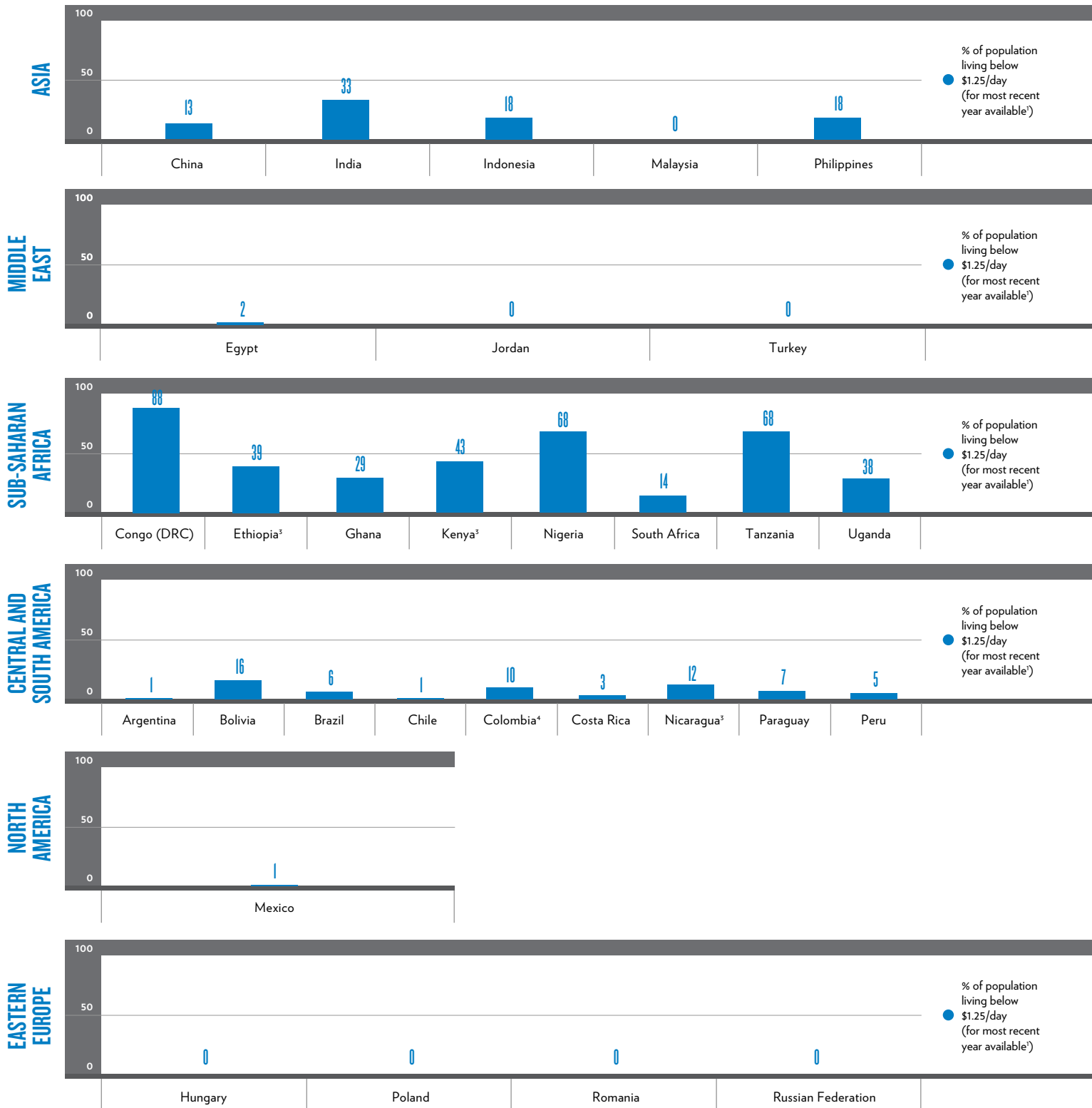
²⁵ United Nations, "The Millennium Development Goals Report," United Nations Department of Economic and Social Affairs, 2010.

²⁶ United Nations, "Millennium Development Goals: 2013 Progress Chart" (United Nations, 2013).

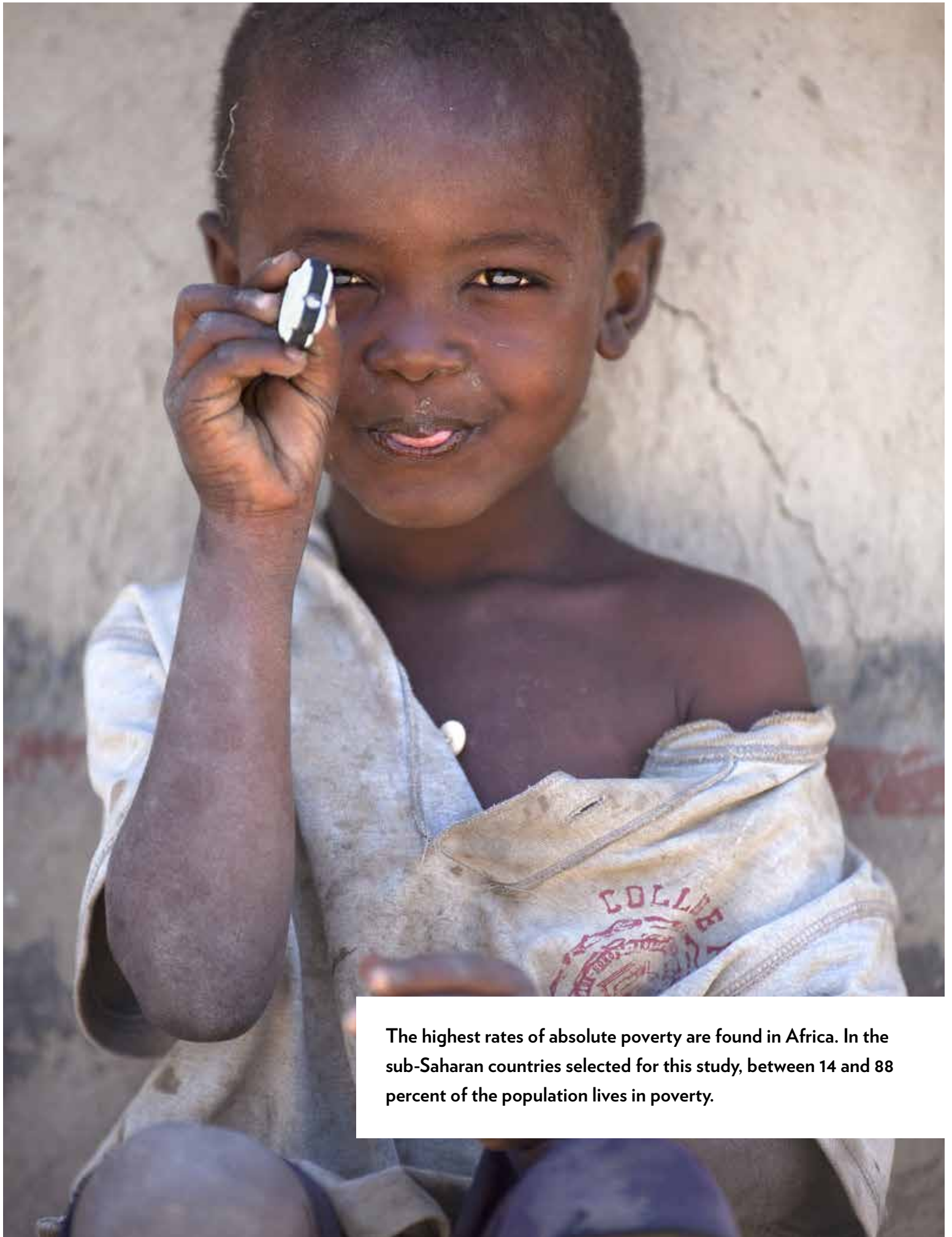
²⁷ United Nations, "Millennium Development Goals and Beyond 2014 Fact Sheet: Eradicate Extreme Poverty and Hunger" (United Nations, 2013).

²⁸ United Nations Children's Fund (UNICEF), "The State of the World's Children 2013" (New York, NY: United Nations Children's Fund (UNICEF), 2013).

FIGURE 6 Absolute Poverty



Sources: www.worldfamilymap.org/2014/e-appendix/figure6



The highest rates of absolute poverty are found in Africa. In the sub-Saharan countries selected for this study, between 14 and 88 percent of the population lives in poverty.

In Central and South America, two countries (Bolivia and Nicaragua) have poverty rates that, at greater than 10 percent, are much higher than those in the region's other selected countries. In Colombia and Paraguay, 8 percent and 7 percent, respectively, of people live on less than 1.25 U.S. dollars per day. Brazil and Peru have poverty rates around 5 percent, while in the remaining Central and South American countries, just 1 percent of people live in poverty.

Of the countries for which data are available, those in Eastern Europe, North America, and the Middle East have the lowest rates of absolute poverty. According to the international definition, 0 or 1 percent of people in these countries are poor.

Relative Child Poverty

The *World Family Map* also presents rates of relative poverty as an indicator of well-being of children in middle- and high-income countries. These rates speak to the poverty experienced by children whose families are poor relative to other families *within* each country. Specifically, the relative poverty indicator describes the share of children who live in households with household incomes that are less than half of the national median income for each country.²⁹ The higher the relative poverty rate, the more children live in poverty in comparison with the average income of all households with children within that country. This indicator also speaks to the income distribution within a country.

Data for this indicator come from household surveys, as reported by UNICEF's Innocenti Research Center's *Measuring Child Poverty* report card and LIS.³⁰ Data for this indicator range from 2002 to 2010 and may not be recent enough to reflect the recent economic recession in some countries.

Throughout the countries for which relative child poverty was measured, between 6 and 33 percent of children live in households with incomes that are below half of the national median income. There is wide regional variation on this indicator, as seen in [Figure 7](#). There are not, however, any changes of five or more percentage points for any countries for which more recent data were obtained since last year's *World Family Map* report.

The selected Asian countries have moderate rates of relative child poverty. In Taiwan, 8 percent of children live in households with incomes that are below 50 percent of the population's median income. The rates are slightly higher for South Korea and Japan, at 10 and 15 percent, respectively. Meanwhile, relative child poverty rates are much higher for China and India, at 29 percent and 23 percent, respectively.

Israel, the sole representative of the Middle East due to data limitations, has a relative child poverty rate of 27 percent.

The three countries included in the study from South America have slightly higher relative poverty rates for children, ranging from 25 to 33 percent. Peru has the highest rate of all countries included in the study, with 33 percent of children living in households earning less than 50 percent of the median income.

The North American countries' relative child poverty rates range from 13 to 23 percent. Canada has the lowest levels of relative child poverty in North America, with 13 percent of children living in households with incomes below half of the country's median income. The United States and Mexico, in contrast, have higher levels of relative child poverty, at 23 and 22 percent, respectively. In fact, the United States has one of the highest relative child poverty rates of the selected high-income nations.

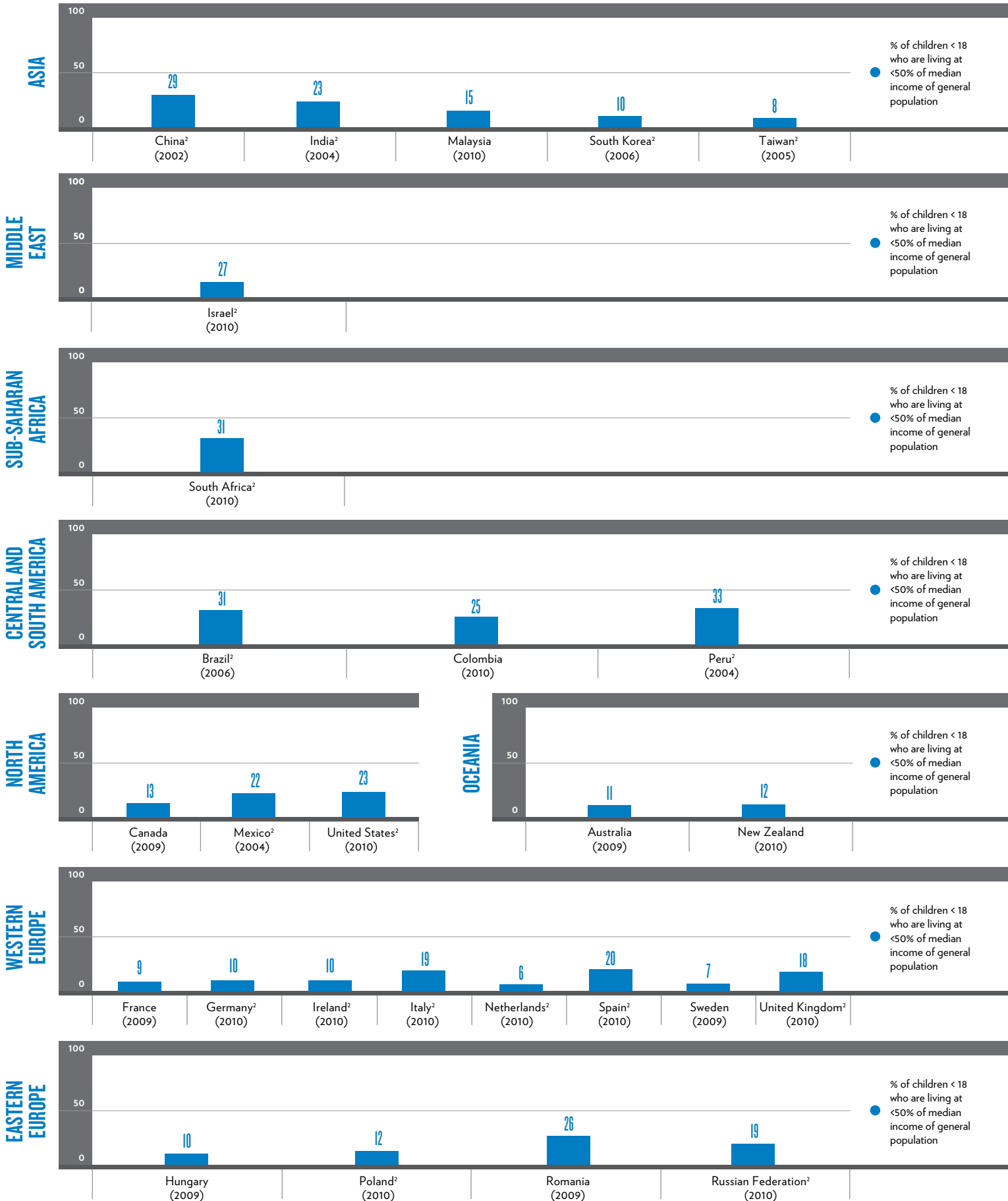
In Oceania, Australia has a relative child poverty rate of 11 percent, and New Zealand one of 12 percent.

Western Europe has the lowest rates of relative child poverty of the regions, led by the Netherlands and Sweden at 6 and 7 percent, respectively, which are the lowest rates in the world. France, Germany, and Ireland all have rates of approximately 10 percent. The United Kingdom, Italy, and Spain have higher rates, ranging from 18 to 20 percent.

²⁹ Income is adjusted according to household size and composition.

³⁰ UNICEF Innocenti Research Centre, "Measuring Child Poverty: New League Tables of Child Poverty in the World's Rich Countries," in *Innocenti Report Card 10* (Florence: UNICEF Innocenti Research Centre, 2012). Data come from EU-SILC 2009, HILDA 2009, PSID 2007, the Japanese Cabinet Office, Gender Equality Bureau (2011), and B. Perry, "Household Incomes in New Zealand: Trends in Indicators of Inequality and Hardship 1982 to 2010" (Wellington, NZ: Ministry of Social Development, 2011).

FIGURE 7 Relative Poverty, 2002-2012



Sources: www.worldfamilymap.org/2014/e-appendix/figure7

In Eastern Europe, between 10 and 26 percent of children live in households with incomes below 50 percent of the country's median income. Hungary has the region's lowest relative poverty rate, at 10 percent, whereas Romania has the highest, at 26 percent.

Undernourishment

One of the United Nations' Millennium Development Goals is to cut the proportion of people who suffer from hunger in half between 1990 and 2015.³¹ While this goal has not yet been met, progress has been made and the percentage of people who are undernourished worldwide decreased from 23 percent in 1990-1992 to less than 15 percent in 2010-12.³² The percentage of the population of each country that is undernourished is an indicator of material deprivation, disproportionately affecting families with children. In an effort to protect their children, mothers tend to go hungry before their children in some cultures.³³ Unfortunately, this tendency means that undernourishment is passed from generation to generation, because pregnant women and their babies are especially vulnerable to the effects of hunger. For example, undernourished mothers are more likely to give birth to undernourished babies.³⁴

Not having enough to eat and being poor are related in a cyclical fashion. Children growing up in families that lack the means to provide adequate and nutritious food are more likely to have physical ailments, such as blindness, stunted growth, iron deficiencies, and overall poor health. Children who are undernourished are also more likely to have delays in mental development, to show symptoms of depression, and to have behavior problems. Academically, undernourished youth have lower achievement and lower IQs. Undernourishment is a factor in one in three deaths of children under five throughout the world.³⁵ The loss of productivity associated with undernourishment among children can cost a country up to 3 percent of its GDP.³⁶

The *World Family Map* presents information on undernourishment for the entire population rather than for families with children specifically because the available data are limited. As it is, the data on undernourishment come from the Food and Agriculture Organization (FAO) of the United Nations and the World Bank.³⁷ The FAO defines undernourishment as "an extreme form of food insecurity, arising when food energy availability is inadequate to cover even minimum needs for a sedentary lifestyle."^{38,39}

In the majority of countries throughout the world with available data, less than 5 percent of the population is undernourished. All countries in Europe, the Middle East, North America, and Oceania have undernourishment rates under 5 percent. Countries with higher levels of undernourishment are concentrated in Africa, Asia, and South America, as seen in [Figure 8](#).

Undernourishment rates vary widely in Asia, from under 5 percent (Japan, Malaysia, Singapore, and South Korea) to 17 percent (India). Following India, the countries with the highest levels of undernourishment are the Philippines and China, at 16 and 11 percent, respectively.

³¹ United Nations, "United Nations Millennium Development Goals," United Nations (<http://www.un.org/millenniumgoals/>)

³² United Nations, "Millennium Development Goals and Beyond 2014 Fact Sheet: Eradicate Extreme Poverty and Hunger."

³³ United Nations System Standing Committee on Nutrition, "The Impact of High Food Prices on Maternal and Child Nutrition," in *SCN Side Event at the 34th Session of the Committee on World Food Security* (Rome: United Nations System Standing Committee on Nutrition, 2008).

³⁴ E. Munoz, "New Hope for Malnourished Mothers and Children," in *Briefing paper* (Washington: Bread for the World Institution, 2009).

³⁵ M. Nord, "Food Insecurity in Households with Children: Prevalence, Severity, and Household Characteristics," in *Economic Information Bulletin* (Washington, DC: United States Department of Agriculture, Economic Research Service, 2009); United Nations Children's Fund (UNICEF), "The State of the World's Children 2012," (New York, NY: United Nations Children's Fund (UNICEF), 2012).

³⁶ Munoz, "New Hope for Malnourished Mothers and Children."

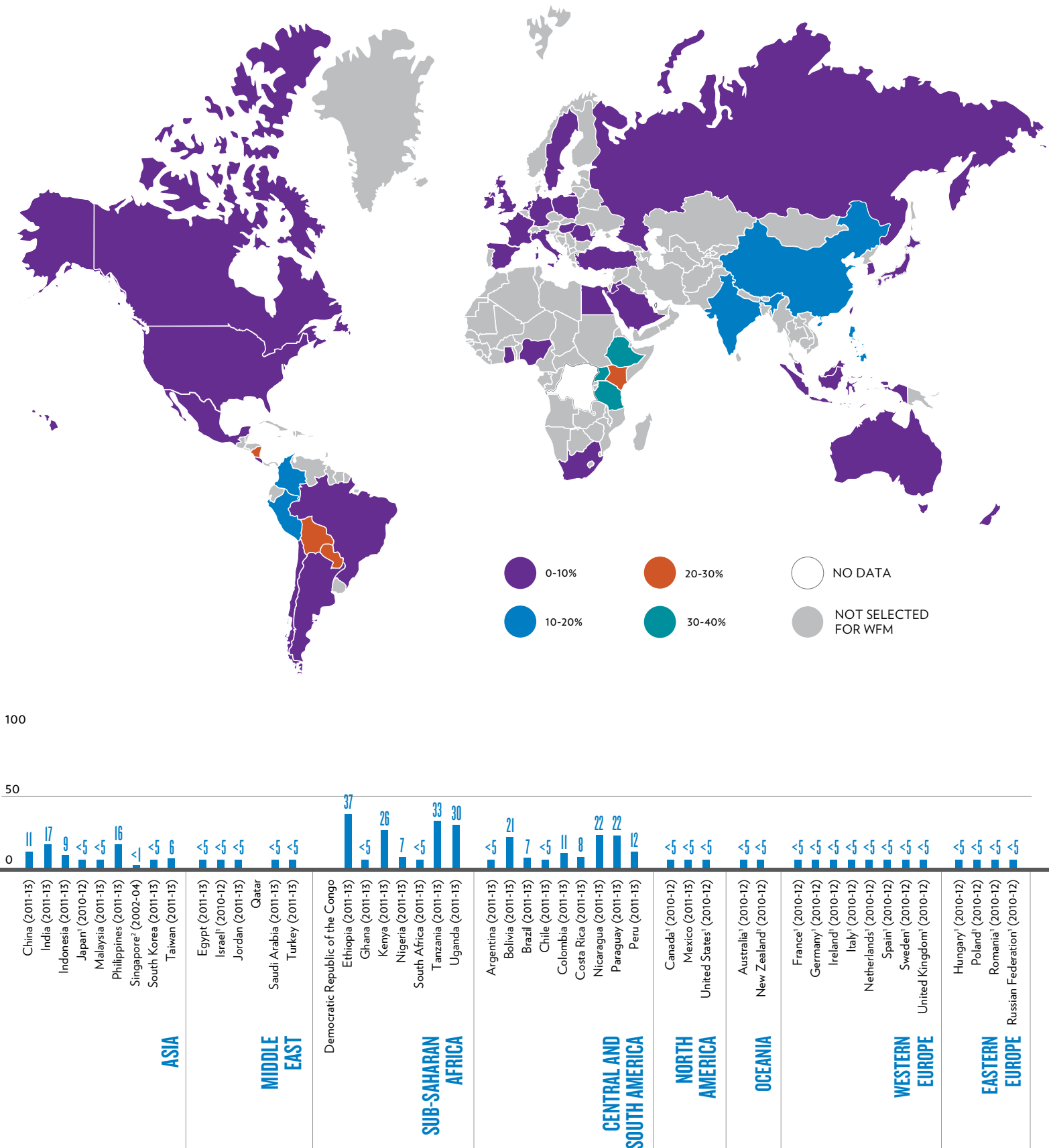
³⁷ Data for Taiwan come from C. Y. Yeh et al., "An Empirical Study of Taiwan's Food Security Index," *Public Health Nutrition* 13, no. 7 (2010).

³⁸ FAO, WFP, and IFAD. "The State of Food Insecurity in the World 2012. Economic Growth Is Necessary but Not Sufficient to Accelerate Reduction of Hunger and Malnutrition" (Rome: FAO, 2012).

³⁹ Note that dates are not comparable. See Figure 8 for detail.

FIGURE 8 Undernourishment, Circa 2012

Percentage of total population who are undernourished



The countries in sub-Saharan Africa for which data are available have higher levels of undernourishment than countries in other regions. In Ethiopia, almost two out of five people are undernourished; in Tanzania and Uganda, one out of three; and in Kenya, one out of four. Rates were much lower in Ghana, Nigeria and South Africa, where less than one out of ten people are undernourished.

In Central and South America, undernourishment also varies widely. The highest rates of undernourishment are found in Nicaragua and Paraguay, where 22 percent of the population are undernourished. Bolivia also has a higher undernourishment rate, at 21 percent. Colombia and Peru have more moderate undernourishment rates, at 11 and 12 percent of the population, respectively. In the remaining countries of Argentina, Brazil, Chile, and Costa Rica, less than one in ten people are undernourished.

The percentage of the population that suffers from undernourishment varies widely throughout the world, and does not always follow the level of absolute poverty in a given country. Despite having higher poverty levels, some countries are able to protect their populations from undernourishment. While the absolute poverty data predate the undernourishment data, the percentage of the population living in absolute poverty (on less than 1.25 U.S. dollars a day) is greater than the percentage of the population that is undernourished in almost all Asian and sub-Saharan African countries for which data are available: China, India, Indonesia, the Philippines, Ethiopia, Ghana, Kenya, Nigeria, South Africa, Tanzania, and Uganda. Strikingly, in Nigeria 68 percent of the population live on less than 1.25 U.S. dollars a day and 7 percent are undernourished. Though not as extreme, a similar story is taking place in Ghana, where 29 percent of the population live in absolute poverty and less than 5 percent are undernourished. Some countries are able to make combating hunger a high priority among expenditures; in addition, private-sector programs as well as international food aid, food pricing differences, and a country's food distribution infrastructure may help explain these differences.⁴⁰

Parental Education

Parental education influences parenting behaviors and child well-being. Well-educated parents are more likely to read to their children and provide their children with extracurricular activities, books, cognitive stimulation, and high educational expectations. Such parents are more likely to be active in their children's schools and are less likely to use negative discipline techniques.⁴¹ Internationally, children of well-educated parents have higher academic achievement and literacy.^{42,43} Parents transmit their education, knowledge, skills, and other aspects of human capital to their children, and parents' levels of education directly influence their access to social networks and well-paying jobs with benefits. These advantages are, in turn, conferred upon their children.

Due to data limitations, we use a proxy measure for the parental education indicator: the percentage of children who live in households in which the household head has completed secondary education, as shown in **Figure 9**. Due to this proxy, the household head could be the child's parent, grandparent, or other type of relation, with grandparents generally being most frequent, and this can vary by country. For example, in Russia, 20 percent of children's household heads are their grandparents. In South Africa, this percentage is 36.

⁴⁰ FAO, WFP, and IFAD. "The State of Food Insecurity in the World 2012. Economic Growth Is Necessary but Not Sufficient to Accelerate Reduction of Hunger and Malnutrition" (Rome: FAO, 2012).

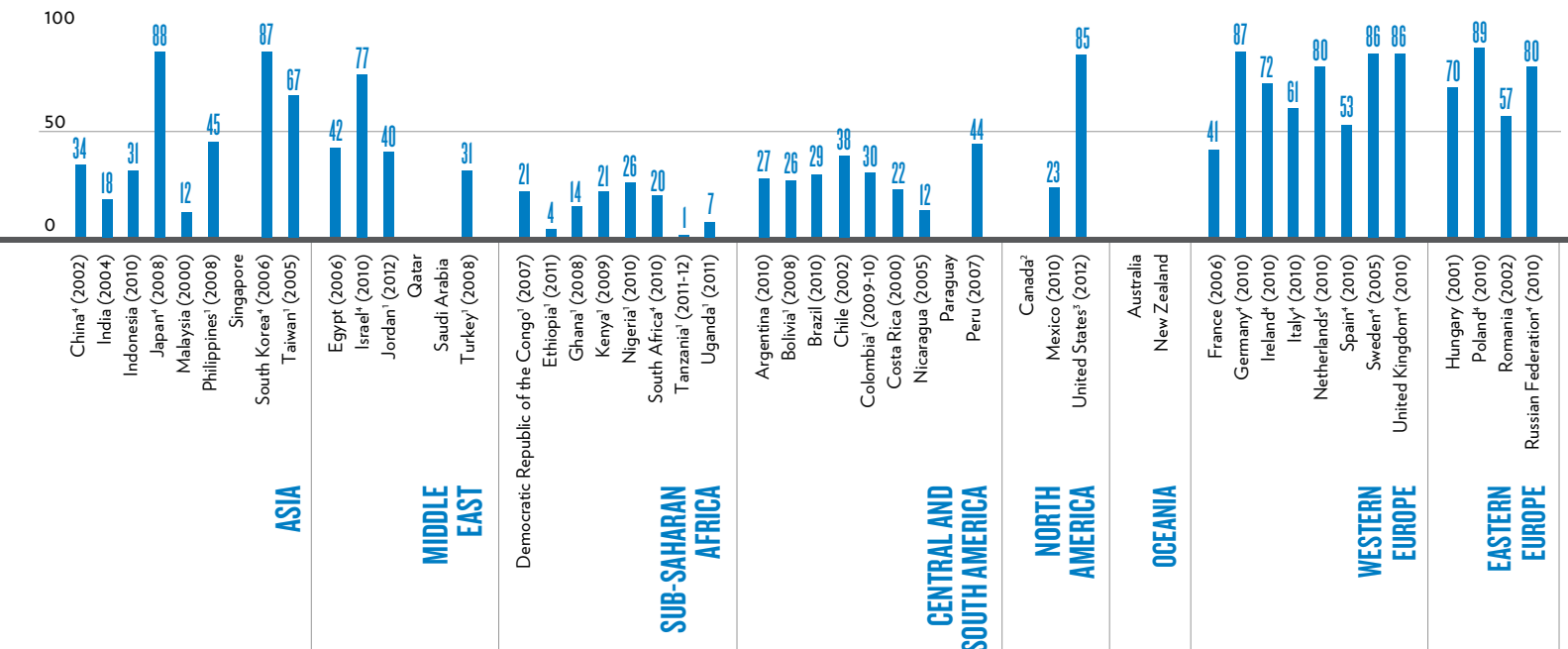
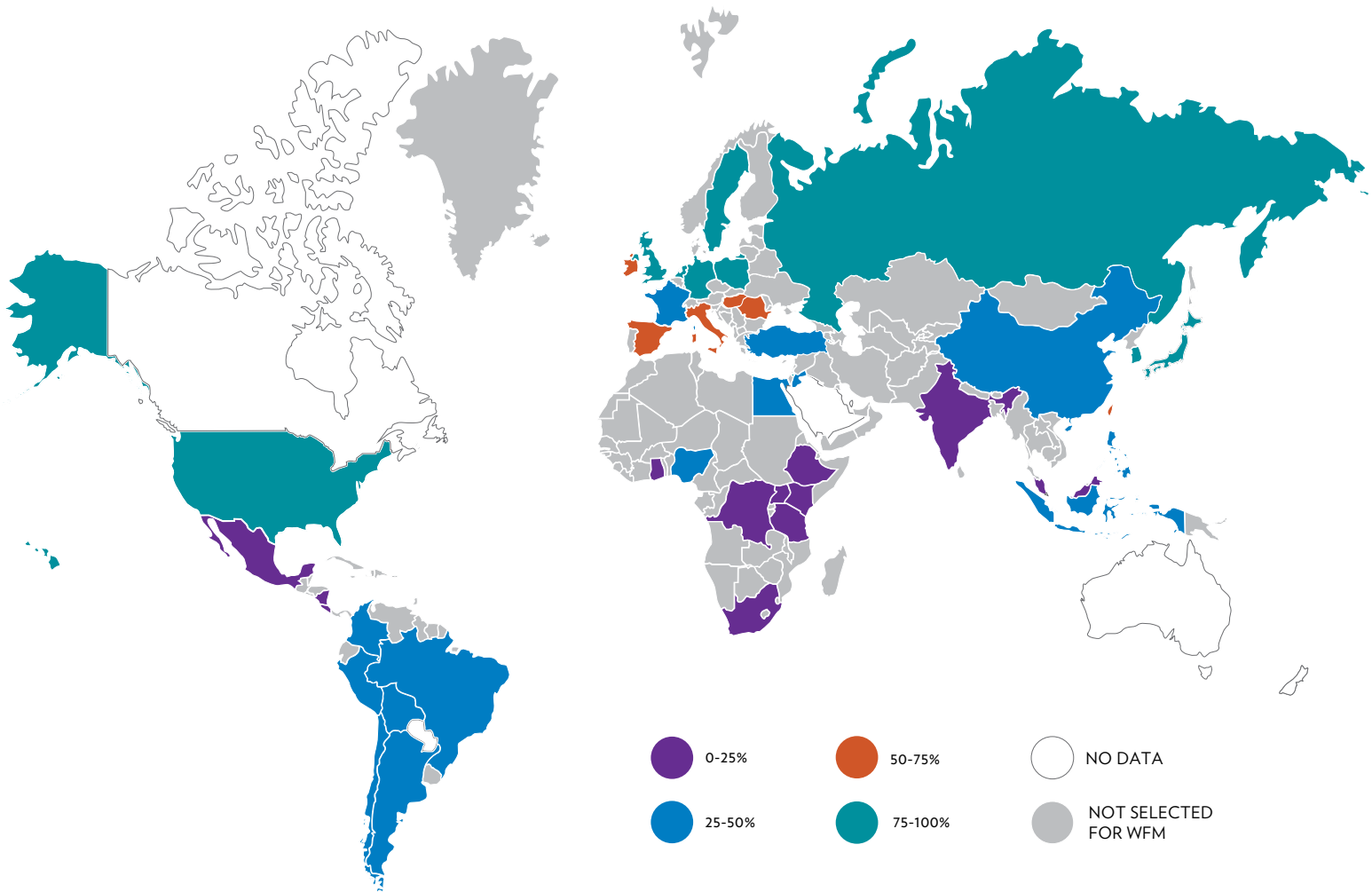
⁴¹ P. Davis-Kean, "The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment," *Journal of Family Psychology* 19, no. 2 (2005); E. Hair et al., "Parents Matter: Parental Education, Parenting and Child Well-Being" (paper presented at the Society for Research in Child Development, 2007); S. Hofferth and F.J. Sandberg, "How American Children Spend Their Time," *Journal of Marriage and Family* 63, no. 2 (2001); K. R. Phillips, "Parent Work and Child Well-Being in Low-Income Families" (Washington, DC: The Urban Institute, 2002).

⁴² M. Lemke et al., "Outcomes of Learning: Results from the 2000 Program for International Student Assessment of 15-Year-Olds in Reading, Mathematics, and Science Literacy" (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001).

⁴³ I. V. S. Mullis et al., "TIMSS 1999 International Mathematics Report: Findings from IEA's Repeat of the Third International Mathematics and Science Study at the Eighth Grade" (Boston: International Study Center, Lynch School of Education, Boston College, 2000).

FIGURE 9 Parental Education, 2000-2012

Percentage of children in households in which household head has a secondary education



In the United States, completing secondary education equates to earning a high school diploma or GED. Data for this indicator came from the Integrated Public Use Microdata Series, International (IPUMS), the Demographic and Health Survey (DHS), and LIS.⁴⁴

Levels of parental education vary widely across Asian countries. In 2000, 12 percent of Malaysian children lived with a household head who had completed secondary education. Eighteen percent of children did so in India in 2004. In China, Indonesia, and the Philippines, between 31 and 45 percent of children lived with household heads who had completed secondary education. Education rates are much higher in Japan, South Korea, and Taiwan, where 88, 87, and 67 percent of children live with educated household heads, respectively.

Among the Middle Eastern countries studied, Turkey has the lowest percentage of children living in a household with a household head who has completed secondary education, at 31 percent in 2008. In the remaining surveyed Middle Eastern countries, between 40 percent (Jordan in 2012) and 77 percent (Israel in 2010) of children live with a household head who has completed secondary education. Education levels in Jordan increased by five percentage points between 2009 and 2012.

Parental education is lower in sub-Saharan Africa than in other regions. Among the sub-Saharan African countries studied, between 1 and 26 percent of children lived in households in which the heads of these households had completed secondary education. For example, in the Democratic Republic of the Congo, Kenya, and Nigeria, at least 20 percent of children lived in such households, in 2007-10.⁴⁵ In contrast, in Ethiopia, 4 percent of children lived in such households in 2011.

In Central and South America, there is a large range in the percentage of children living in a household in which the household head has completed secondary education, from 12 percent in Nicaragua to 44 percent in Peru. In half of the selected countries, between 26 and 30 percent of children lived with a household head with secondary education between 2008 and 2010. Notably, the percentage of Brazilian children who lived in a household in which the head of the household has completed secondary education increased almost 13 percentage points from 17 percent in 2000 to 29 percent in 2010. For North American children, levels of parental education also vary widely. Twenty-three percent of Mexican children lived in a household in which the head of the household had completed secondary education in 2010. Eighty-five percent of American children lived in such households in 2012.

Europe has some of the highest rates of parental education. In Western Europe, between 41 (France) and 87 percent (Germany) of children live in a household in which the head of the household has completed secondary education. France and Spain have the lowest levels of parental education in Western Europe, at 41 percent and 53 percent, respectively. In contrast, over 85 percent of children live in such households in Germany, Sweden, and the United Kingdom.

In Eastern Europe, between 57 percent (Romania) and 89 percent (Poland) of children live with household heads with a secondary education, while in Hungary and Russia, that percentage is 70 and 80 percent, respectively.

Parental Employment

Researchers agree that poverty has detrimental effects on child and adolescent outcomes. Employed parents are more likely to be able to provide for their children, as well as to connect their families to important social networks and to serve as important role models for productive engagement. Having an employed parent creates an opportunity for the consumption of goods and services that are especially valuable during childhood, such as health care. In fact, adolescents of unemployed parents report lower levels of health.⁴⁶

⁴⁴ In this report, we present data for the most recent year available, which differs across countries. As with other indicators, we caution readers to refrain from making direct comparisons between countries that have data from different years.

⁴⁵ In South Africa, 19.7 percent of children lived in such households.

Parental unemployment can create stress in a family. The financial and emotional strain associated with unemployment can lead to depression and lower levels of satisfaction with a spouse or partner.⁴⁷ Family conflict created from this strain, whether in the setting of an intact family or one separated by divorce, is detrimental to child well-being.⁴⁸

Parental employment is also related to the number of parents present in a household. Children living with two parents are less likely to live in a jobless household than children living with one parent.⁴⁹

Data limitations restricted the measurement of parental employment to the percentage of children who live in households in which the household head has a job. This measure is limited for a number of reasons. It does not provide information on whether the employment is full-time or full-year, paid or unpaid, or on how many hours a day the provider is working. Again, the household head is not necessarily a parent of the child, but could be a grandparent or other relative. In addition, the measure does not shed light on what the parent's work means in the context of the child's life. For example, the data about parental employment do not reveal whether one or multiple adults in the household are working, where and with whom the child spends time while the parent is working, how old the child is while the parent is working, or what hours of the day the parent is working, all of which can have an impact on child well-being.

The data used to calculate parental employment are drawn primarily from LIS and Integrated Public Use Microdata Series, International (IPUMS). Data are from 2000 to 2010. This indicator is very sensitive to country economic conditions and general economic climate, so we do not recommend that readers use these data to make comparisons across countries for different years.⁵⁰

Throughout the world, between 38 and 97 percent of children under the age 18 live in households in which the head of the household is employed. See [Table 2](#) for more details.

As a region, Asia has the highest percentages of children living in households with an employed household head, ranging from 76 percent in Japan in 2008 to 97 percent in Taiwan in 2005.

Parental employment levels are slightly lower in the selected Middle Eastern countries. Israel, Jordan, and Turkey have parental employment rates of less than 80 percent. In Egypt, 88 percent of children lived in a household with an employed head of household in 2006.

The selected sub-Saharan African countries have the largest regional variation in parental employment rates. Thirty-eight percent of children live in a household with an employed household head in South Africa, whereas 87 percent do so in Tanzania. Reflecting the global recession, the percentage of children who live in a household with an employed household head decreased from 45 percent to 38 percent between 2008 and 2010 in South Africa.

Central and South America's parental employment rates exhibit a smaller range, from 68 percent in Chile to 82 percent in Argentina and Colombia. Notably, in Argentina the percentage of children who live with an employed household head increased from 68 percent in 2001 to 82 percent in 2010, but this includes those working even minimally in the informal sector as well.

In North America, parental employment rates range from 71 percent in the United States to 82 percent in Mexico and 90 percent in Canada. In Australia, the sole country for which we have data in Oceania, the parental employment rate was 81 percent in 2003.

⁴⁶ M. Sleskova et al., "Does Parental Unemployment Affect Adolescents' Health?," *Journal of Adolescent Health* 38, no. 5 (2006).

⁴⁷ A. D. Vinokur, R. H. Price, and R. D. Caplan, "Hard Times and Hurtful Partners: How Financial Strain Affects Depression and Relationship Satisfaction of Unemployed Persons and Their Spouses," *Journal of Personality and Social Psychology* 71, no. 1 (1996).

⁴⁸ G. D. Sandefur and A. Meier, "The Family Environment: Structure, Material Resources and Child Care," in *Key Indicators of Child and Youth Well-Being: Completing the Picture*, ed. B.V. Brown (New York: Lawrence Erlbaum Associates, 2008).

⁴⁹ Organization for Economic Co-operation and Development (OECD), "Doing Better for Families."

⁵⁰ Note that dates are not comparable. See [Table 2](#) for detail.

TABLE 2 Parental Employment, 2000-2010*Percentage of children under 18 in households in which the household head is employed*

ASIA	MIDDLE EAST	SUB-SAHARAN AFRICA	CENTRAL AND SOUTH AMERICA
China (2002) 92	Egypt ¹ (2006) 88	Democratic Republic of the Congo -	Argentina ¹ (2010) 82
India (2004) 89	Israel (2010) 76	Ethiopia -	Bolivia ¹ (2001) 71
Indonesia ¹ (2010) 93	Jordan ¹ (2004) 72	Ghana ¹ (2000) 83	Brazil ¹ (2010) 70
Japan (2008) 76	Qatar -	Kenya ¹ (2009) 85	Chile ¹ (2002) 68
Malaysia ¹ (2000) 88	Saudi Arabia -	Nigeria -	Colombia (2010) 82
Philippines -	Turkey ¹ (2000) 77	South Africa (2010) 38	Costa Rica ¹ (2000) 80
Singapore -		Tanzania ¹ (2002) 87	Nicaragua ¹ (2005) 76
South Korea (2006) 93		Uganda ¹ (2002) 75	Paraguay -
Taiwan (2005) 97			Peru ¹ (2007) 74
NORTH AMERICA	OCEANIA	WESTERN EUROPE	EASTERN EUROPE
Canada (2007) 90	Australia (2003) 81	France (2005) 88	Hungary (2005) 88
Mexico ¹ (2010) 82	New Zealand -	Germany (2010) 81	Poland (2010) 91
United States (2010) 71		Ireland (2010) 55	Romania ¹ (2002) 63
		Italy (2010) 77	Russian Federation (2010) 73
		Netherlands (2010) 87	
		Spain (2010) 73	
		Sweden (2005) 90	
		United Kingdom (2010) 79	

Sources: www.worldfamilymap.org/2014/e-ppendix/table2

In Western Europe, parental employment rates range from 55 percent in Ireland to 90 percent in Sweden.⁵¹ In the majority of remaining selected countries in this region, approximately 80 percent of children live in a household in which the head of household is employed. In this region, between 2004 and 2010 the parental employment decreased by at least five percentage points in Ireland and Spain, while it actually increased in the Netherlands by five percentage points.

Rates are similar in Eastern Europe, where they range from 73 to 91 percent. Romania is an exception to these relatively high rates: 63 percent of children in the country lived in a household in which the head of the household was employed in 2002. In Russia, parental employment fell from 84 percent in 2000 to 73 percent in 2010, while in Hungary, parental employment rose between 2004 and 2010, from 85 to 91 percent.

Public Spending on Family Benefits

Government spending on benefits for families provides support when parents need time off work to take care of a newborn, and to replace lost income during this time, as well as to support parental employment through early care and education.

The Organization for Economic Co-operation and Development (OECD) reports family benefits, including child care supports, parental leave benefits, child allowances, and family tax breaks. Unfortunately, these data are only available for members of the OECD, which are middle- and high-income nations. These data are also limited because funding plans differ between countries and local expenditures may not be depicted for all nations.⁵²

Public spending on family benefits may be viewed as one potential measure of governmental spending priorities. Here, we focus on the percentage of gross domestic product (GDP) that a country allocates to family benefits. As presented in **Table 3**, governments spent between 1.0 and 4.2 percent of their GDP on benefits exclusively for families in 2009. There were no changes greater than five percentage points in this indicator between 2007 and 2009.

⁵¹ Interpret Sweden's rate with caution. More than 15 percent of data is missing.

⁵² Organization for Economic Co-operation and Development (OECD), "Public Spending on Family Benefits" (http://www.oecd.org/els/family/PF1_1_Public_spending_on_family_benefits_Dec2013.pdf).

In Asia, Japan spent 1.5 percent of its GDP on family benefits and South Korea spent 1.0 percent. Israel, the only represented country in the Middle East, spent 2.4 percent of its GDP on family benefits, despite a hefty military budget.

In North America, spending on family benefits hovered around 1 percent, ranging from 1.1 percent in Mexico to 1.6 percent in Canada. South American countries, as represented by Chile, had similar levels of spending on families, at 1.5 percent.

Oceanic countries placed more monetary emphasis on family benefits. New Zealand spent 3.6 percent of its GDP in this area and Australia spent 2.8.

Western European countries have the highest levels of government spending on family benefits. Ireland and the United Kingdom led the selected countries by spending 4.2 percent of their GDP on family benefits. France, Germany, and Sweden also spent more than 3 percent of their GDP on family benefits.

In Eastern Europe, Hungary spent more than 3 percent of its GDP on family benefits, whereas Poland and Romania spent 1.5 and 1.7 percent, respectively.⁵³

TABLE 3 Public Spending on Family Benefits, Circa 2009

Public spending on family benefits in cash, services, and tax measures, in percent of GDP

ASIA

China	-
India	-
Indonesia	-
Japan	1.5
Malaysia	-
Philippines	-
Singapore	-
South Korea	1.0
Taiwan	-

MIDDLE EAST

Egypt	-
Israel ¹	2.4
Jordan	-
Qatar	-
Saudi Arabia	-
Turkey	-

SUB-SAHARAN AFRICA

Democratic Republic of the Congo	-
Ethiopia	-
Ghana	-
Kenya	-
Nigeria	-
South Africa	-
Tanzania	-
Uganda	-

CENTRAL AND SOUTH AMERICA

Argentina	-
Bolivia	-
Brazil	-
Chile	1.5
Colombia	-
Costa Rica	-
Nicaragua	-
Paraguay	-
Peru	-

NORTH AMERICA

Canada	1.6
Mexico	1.1
United States	1.2

OCEANIA

Australia	2.8
New Zealand	3.6

WESTERN EUROPE

France	4.0
Germany	3.1
Ireland	4.2
Italy	1.6
Netherlands	2.5
Spain	1.8
Sweden	3.8
United Kingdom	4.2

EASTERN EUROPE

Hungary	3.6
Poland	1.5
Romania ²	1.7
Russian Federation	-

Sources: www.worldfamilymap.org/2014/e-ppendix/table3

⁵³ Data reported for Romania are from 2007, as updated data were not available from OECD.

Family Processes

Key Findings

Family process indicators describe the interactions between members of a family, including their relationships, communication patterns, time spent together, and satisfaction with family life. Data on family processes are challenging to obtain in a way that allows for international comparisons, but this situation is likely to improve as new data are expected to be released. Here are some examples of indicators of family processes that can influence child and family well-being: family satisfaction; agreement or disagreement over household work; parent-child discussions about school; family meals together; and the time spent talking between parents and teenagers. While few countries have data on these measures, there is wide variation across the countries that do have data available.

- **Between 31 percent (Russia) and 74 percent (Chile) of adults around the world are completely or very satisfied with their family life. (Eight countries with information)**
- **Between 55 percent (Russia) and 88 percent (Philippines) of couples report low levels of disagreement around household work. (Eight countries)**
- **Across surveyed countries, between 44 and 92 percent of 15-year-olds spend time just talking to their parents every day or almost every day. The percentage of 15-year-olds who eat the main meal with their families varies widely throughout the world, ranging from 60 percent in South Korea to 94 percent in Italy. (Seven countries)**

Family Satisfaction

Family satisfaction both influences and is influenced by family structure, economics, and culture. The International Social Survey Program (ISSP) from 2002 provides data on this indicator for only a handful of countries. So, unfortunately, information in this area is quite limited but will be improved with the release of the 2012 ISSP data.

The highest levels of family satisfaction are found in South America, where 74 percent of Chileans report being satisfied with their family life, as seen in [Figure 10](#). The lowest levels of family satisfaction are found in Eastern Europe, with only 31 percent of Russian adults being satisfied with their family life. The surveyed countries in Western Europe and Asia fall in the middle, with satisfaction rates between 45 and 66 percent.

Disagreement Over Household Work

Research in the United States has demonstrated that children tend to have better outcomes when they are living with two parents and when their parents have a low-conflict marriage.⁵⁴ Research on relationship quality also points to

⁵⁴ G. Brody, I. Arias, and R. Finchman, "Linking Marital and Child Attributions to Family Process and Parent-Child Relationships," *Journal of Family Psychology* 10, no. 4 (1996); S. Brown, "Family Structure and Child Well-Being: The Significance of Parental Cohabitation," *Journal of Marriage and Family* 66, no. 2 (2004); C. Buehler and J. Gerard, "Marital Conflict, Ineffective Parenting, and Children's and Adolescents' Maladjustment," *Journal of Marriage and Family* 64, no. 1 (2002); J. M. Gerard, A. Krishnakumar, and C. Buehler, "Marital Conflict, Parent-Child Relations, and Youth Maladjustment: A Longitudinal Investigation of Spillover Effects," *Journal of Family Issues* 27, no. 7 (2006); G. T. Harold, J. J. Aitken, and K. H. Shelton, "Inter-Parental Conflict and Children's Academic Attainment: A Longitudinal Analysis," *Journal of Child Psychology and Psychiatry* 48, no. 12 (2007); S. Hoffert, "Residential Father Family Type and Child Well-Being: Investment Versus Selection," *Demography* 43, no. 1 (2006); K. Kitman, "Effects of Marital Conflict on Subsequent Triadic Family Interactions and Parenting," *Developmental Psychology* 36, no. 1 (2000); S. McLanahan and G. Sandefur, *Growing Up with a Single Parent: What Hurts, What Helps* (Cambridge, MA: Harvard University Press, 1994); K. A. Moore, A. Kinghorn, and T. Bandy, "Parental Relationship Quality and Child Outcomes across Subgroups" (Washington, DC: Child Trends, 2011); D. K. Orthner et al., "Marital and Parental Relationship Quality and Educational Outcomes for Youth," *Marriage and Family Review* 45, no. 2 (2009).

the importance of low levels of conflict in maintaining healthy relationships.⁵⁵ Therefore, maintaining a marriage or partnership that is not plagued by conflict has implications for each member of the entire family. Because responsibility for household work represents one area of potential disagreement that is shared by just about all couples who live together, the extent to which couples disagree about sharing household work can be seen as an indicator of family processes that couples throughout the world have in common.

The extent to which couples share household work is affected by norms in each country, and values related to gender equity, as well as the extent to which each spouse or partner in the relationship is working, or is at home caring for children and the household.

Data on this indicator are only available for a handful of countries from the 2002 International Social Survey Program (ISSP). Even though the information on sharing household work is limited, what little data that exist suggest regional differences.

For the eight countries with information available, the lowest levels of conflict reported are in the Philippines, where 88 percent of adults who are living with a spouse or a partner report a very low incidence of disagreement around housework, and in Chile, where 80 percent do so, as shown in [Figure 10](#).

In the Western European countries represented, low levels of disagreement also are reported, with 71 to 75 percent of coupled adults in all three countries (France, Great Britain and Ireland) reporting low levels of conflict around housework. These countries are characterized by women's high levels of participation in the labor force and by family policies—such as the provision of child allowances—that are supportive of mothers who stay home with their children in their earliest years of life.⁵⁶

Relative to the other regions for which data are available, married or partnered adults in Eastern Europe are less likely to agree over housework. In the Eastern European countries represented, 55 percent of adults in Russia who are married or living with a partner, 57 percent in Poland, and 69 percent in Hungary report low levels of conflict.

Discussions With Parents

Communicating with sons and daughters, both generally and about school, is a positive family process that any parent can do, and that can enhance parent-youth relationships as well as student academic outcomes.⁵⁷ Here we will report on two different indicators of parent-adolescent communication: talking to parents and discussions about school. Recent data for the indicator in the 2013 report on talking about social and political issues were not available; thus these two indicators have replaced it. Data for these indicators come from the 2012 Program for International Student Assessment (PISA) survey. The PISA sample contains primarily middle- and higher-income countries, and only eight countries included in the *World Family Map* chose to include questions on parental communication with students. PISA asks parents two different questions about the frequency of discussions with their 15-year-old children: how well their child is doing at school and how often they spend time just talking to their child. The indicators report the percentage of 15-year-olds who discuss these topics with their parents every day or almost every day, as reported by the parents.

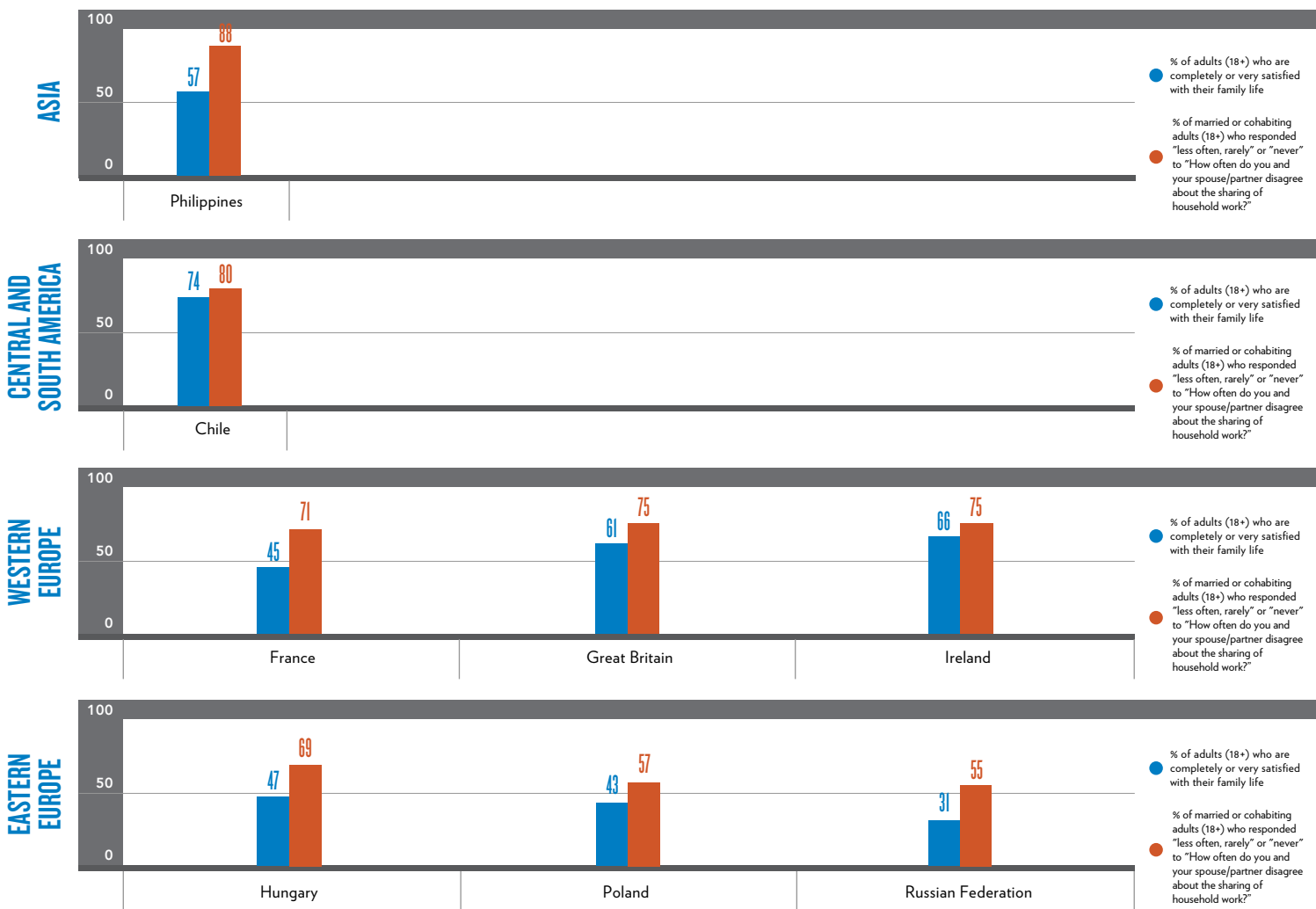
How often students discuss school and spend time just talking to their parents varies widely throughout the world. In some regions, discussing school is more popular, while in others just talking occurs more often. Across surveyed countries, between 44 and 92 percent of 15-year-olds spend time just talking to their parents every day

⁵⁵ K.A. Moore et al., "What Is a 'Healthy Marriage'? Defining the Concept" (Washington, D.C.: Child Trends, 2004).

⁵⁶ Organization for Economic Co-operation and Development (OECD), "Doing Better for Families."

⁵⁷ D. Caro, "Parent-Child Communication and Academic Performance: Associations at the Within- and Between-Country Level," *Journal for Educational Research Online* 3, no. 2 (2011); G. Hampden-Thompson, L. Guzman, and L. Lippman, "A Cross-National Analysis of Parental Involvement and Student Literacy," *International Journal of Comparative Sociology* 54, no. 3 (2013).

FIGURE 10 Family Satisfaction and Household Work Disagreement, 2002



Sources: www.worldfamilymap.org/2014/e-ppendix/figure10

or almost every day while between 19 and 79 percent of teens discuss how well they are doing at school with their parents as frequently, as seen in [Figure 11](#).

In Asia, 15-year-olds from two Special Administrative Regions in China, Hong Kong and Macao, and South Korea, are less likely to discuss how well they were doing in school with their parents every day or almost every day than teens in other parts of the world. In Macao, just 19 percent do so, while in South Korea 28 percent and in Hong Kong 31 percent do so. By contrast, students in these Asian regions talk to their parents frequently about more general topics at similar levels to students in other regions, from 39 percent in Macao to 66 percent in Hong Kong.

In the Americas, represented by Chile and Mexico, students are more likely to discuss school with their parents than to spend time just talking—a pattern unique to these regions. About 60 percent of students discuss school with their parents daily or almost daily, while about 45 percent of students spend time just talking to their parents daily or almost daily.

In Europe, teens have comparatively more discussions with their parents. In Italy and Hungary, approximately three-quarters of 15-year-olds discuss how well they are doing at school and spend time just talking with their parents daily or almost daily. German teens, in contrast, are less likely to discuss school with their parents (just 36 percent do so almost every day or daily) but are the most likely to spend time just talking to their parents, with 92 percent doing so daily or almost daily.

Family Meals

Eating meals together can be a regular time for children to talk with their parents and share what is going on in their lives.⁵⁸ It is a direct measure of a positive family process.

In the United States, eating together as a family has been associated with myriad positive outcomes, ranging from reduced levels of substance and alcohol use to lower levels of depression, even after accounting for other family factors. Eating meals together is also associated with favorable educational outcomes, such as showing a commitment to learning, seeking and earning higher grades, spending more time on homework, and reading for pleasure.⁵⁹ After including controls for background characteristics, one study found that eating meals as a family was the most important predictor of adolescent flourishing.⁶⁰ Recent longitudinal research has found that the value of eating meals together as a family may dissipate as adolescents enter young adulthood, leaving only indirect effects on well-being.⁶¹ The influence of sharing meals on positive outcomes also depends on the quality of family relationships. While sharing meals in families with stronger relationships has been found to have positive associations with child well-being, sharing meals in families that are marked by poorer or conflict-filled relationships has been found to have a lesser influence on how well children develop.⁶²

Evidence suggests that adolescents and their parents agree that eating together is important, although parents place more value on mealtime.⁶³

⁵⁸ The National Center on Addiction and Substance Abuse at Columbia University, “The Importance of Family Dinners VI” (New York, NY: Columbia University, 2010).

⁵⁹ M. Eisenberg et al., “Correlations between Family Meals and Psychosocial Well-Being among Adolescents,” *Archives of Pediatric Adolescent Medicine* 158, no. 8 (2004); J. Fulkerson et al., “Family Dinner Meal Frequency and Adolescent Development: Relationships with Developmental Assets and High-Risk Behaviors,” *Journal of Adolescent Health* 39, no. 3 (2006).

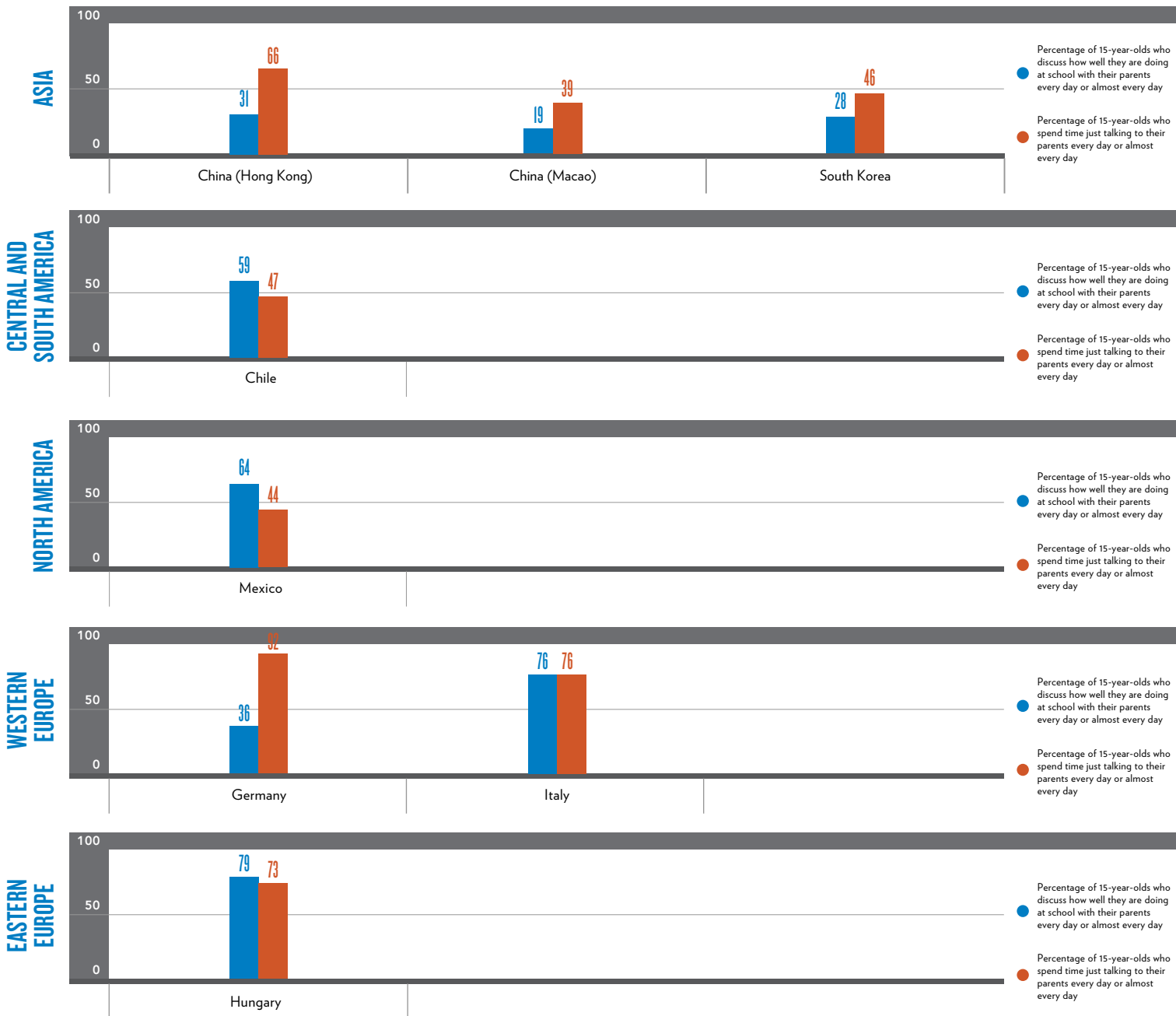
⁶⁰ N. Zarrett and R. Lerner, “Ways to Promote the Positive Development of Children and Youth,” in *Research-to-Results Brief* (Washington, DC: Child Trends, 2008).

⁶¹ K. Musick and A. Meier, “Assessing Causality and Persistence in Associations between Family Dinners and Adolescent Well-Being,” *Journal of Marriage and Family* 74, no. 3 (2012).

⁶² *Ibid.*

⁶³ J. Fulkerson, D. Neumark-Sztainer, and M. Story, “Adolescent and Parent Views of Family Meals,” *Journal of the American Dietetic Association* 106, no. 4 (2006).

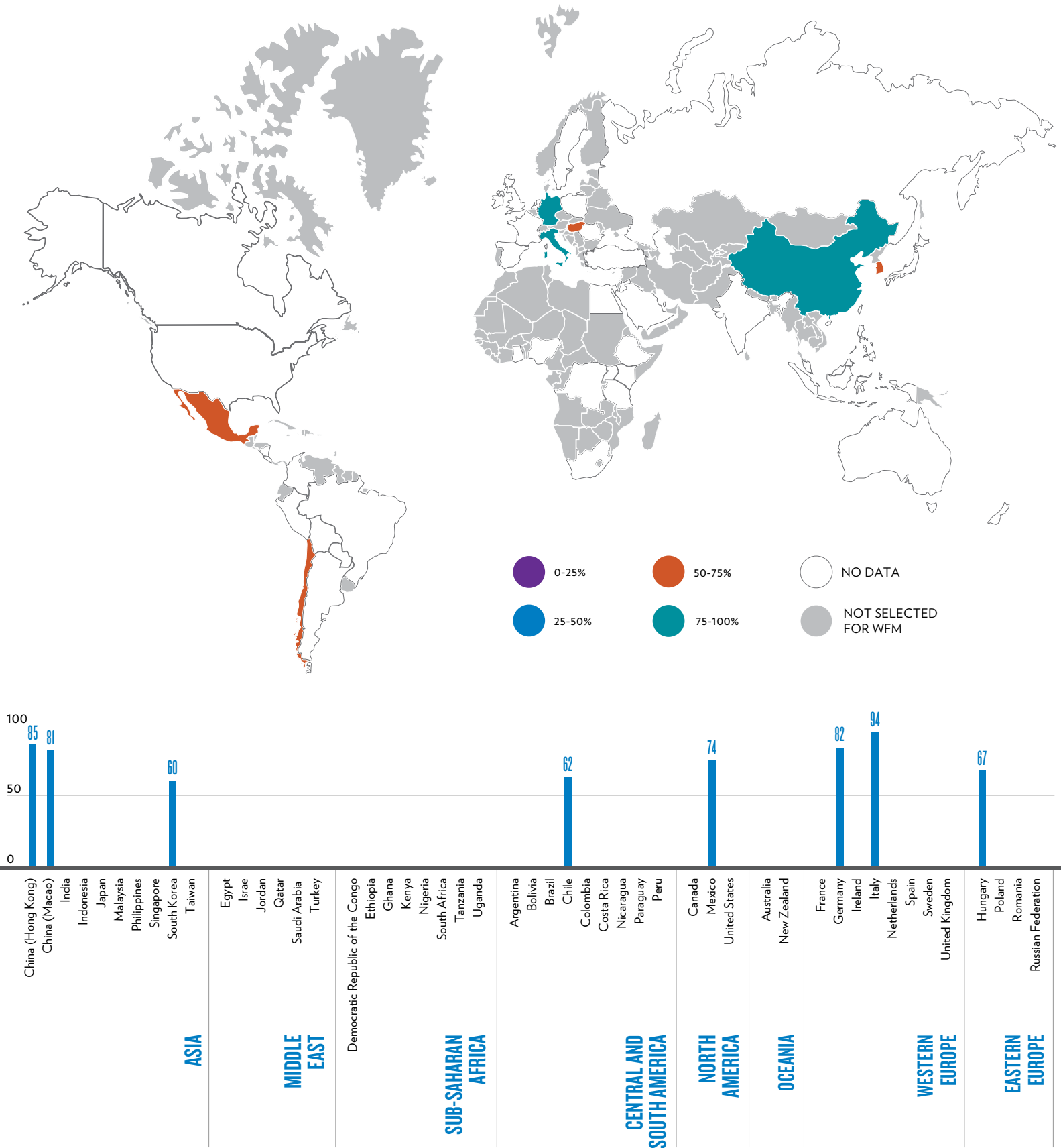
FIGURE 11 Parental Involvement, 2012



Sources: www.worldfamilymap.org/2014/e-ppendix/figure11

FIGURE 12 Family Meals, 2012

Percentage of 15-year-olds who eat the main meal with their parents around a table every day or almost every day



Sources: www.worldfamilymap.org/2014/e-ppendix/figure12

Internationally, research has demonstrated that students who eat meals with their families more frequently are more likely to achieve high scores in reading literacy in 16 out of 21 countries. This relationship is more consistent than that between discussing general topics with parents and reading literacy.⁶⁴

Families all around the world eat meals together, though the particular meal of importance may vary from country to country. The *World Family Map* presents the proportion of children who eat the main meal of the day with their families every day or almost every day as an indicator of family processes. The information for this indicator is drawn from the direct answers given by parents of 15-year-olds from a variety of countries participating in the 2012 PISA survey. Unfortunately, due to methodological changes in the new survey, the 2012 responses are not comparable with the responses that were reported in the 2013 *World Family Map* report.

These data indicate that the percentage of 15-year-olds who frequently eat meals with their families varies widely throughout the world, ranging from 60 percent in South Korea to 94 percent in Italy, as seen in [Figure 12](#).

In Asia, represented by South Korea and two regions in China, there is diversity in the number of teens who frequently eat with their parents. Sixty percent of teens in South Korea eat the main meal with their parents at least almost every day, while more than 80 percent do so in both Macao and Hong Kong. A similar proportion (62 percent) of teens eat the main meal of the day with their parents in Central/South America, as represented by Chile. Rates are higher in North America and Europe, where between 67 percent (Hungary) and 94 percent (Italy) of teens eat the main meal with their parents every day or almost every day. Mexican and German teens are in between, with 74 and 82 percent of teens eating with their parents at least almost every day, respectively.

The differences in the frequency of families' eating meals together may reflect differences in family structure, time use, proximity of work and school to home, rates of female labor-force participation, and cultural patterns.

⁶⁴ G. Hampden-Thompson, L. Guzman, and L. Lippman, "A Cross-National Analysis of Parental Involvement and Student Literacy," *International Journal of Comparative Sociology* 54, no. 3 (2013).



Internationally, research has demonstrated that students who eat meals with their families more frequently are more likely to achieve high scores in reading literacy in 16 out of 21 countries.

Family Culture

Key Findings

Family culture refers to the family-related attitudes and norms that are expressed by a country's citizens. Data suggest that adults take a range of progressive and conservative positions on family issues.

- Acceptance of voluntary single motherhood varies by region, with adults in the Americas, Europe, and Oceania leaning more towards acceptance (with a high acceptance rate of 80 percent in Spain), and countries in Asia, the Middle East, and sub-Saharan Africa leaning more towards rejection (as evidenced by an acceptance rate of only 2 percent in Egypt and Jordan).
- In the majority of countries featured in this study, most adults believe that working mothers can establish just as good relationships with their children as stay-at-home mothers, with those holding this view ranging from 47 percent in Jordan to 84 percent in Sweden.
- In the majority of countries, as well, most adults believe that children are more likely to flourish in a home with both a mother and a father, with those sharing this belief ranging from 47 percent of adults in Sweden to 99 percent of adults in Egypt.
- Most adults worldwide report that they completely trust their families; however, attitudes on this issue vary by region and country, with 63 percent of adults reporting they completely trust their families in the Netherlands, and 97 percent reporting this to be the case in Jordan. It should be noted that the willingness of adults to affirm the term “completely” varies across countries.

To shed light on adults' attitudes toward family life around the world, we relied on data from the World Values Survey (WVS), collected between 1999 and 2008, on four cultural indicators in 25 countries: 1) approval of single motherhood, 2) agreement that a child needs a home with a mother and father to grow up happily, 3) approval of working mothers, and 4) presence of family trust.⁶⁵ Given that respondents in different countries may interpret the questions and response categories somewhat differently, and that population representation of the survey varies from country to country, the WVS does not allow us to draw a perfect comparison between countries. Nevertheless, the survey is a source of data for international comparisons of adult attitudes towards family-related matters.

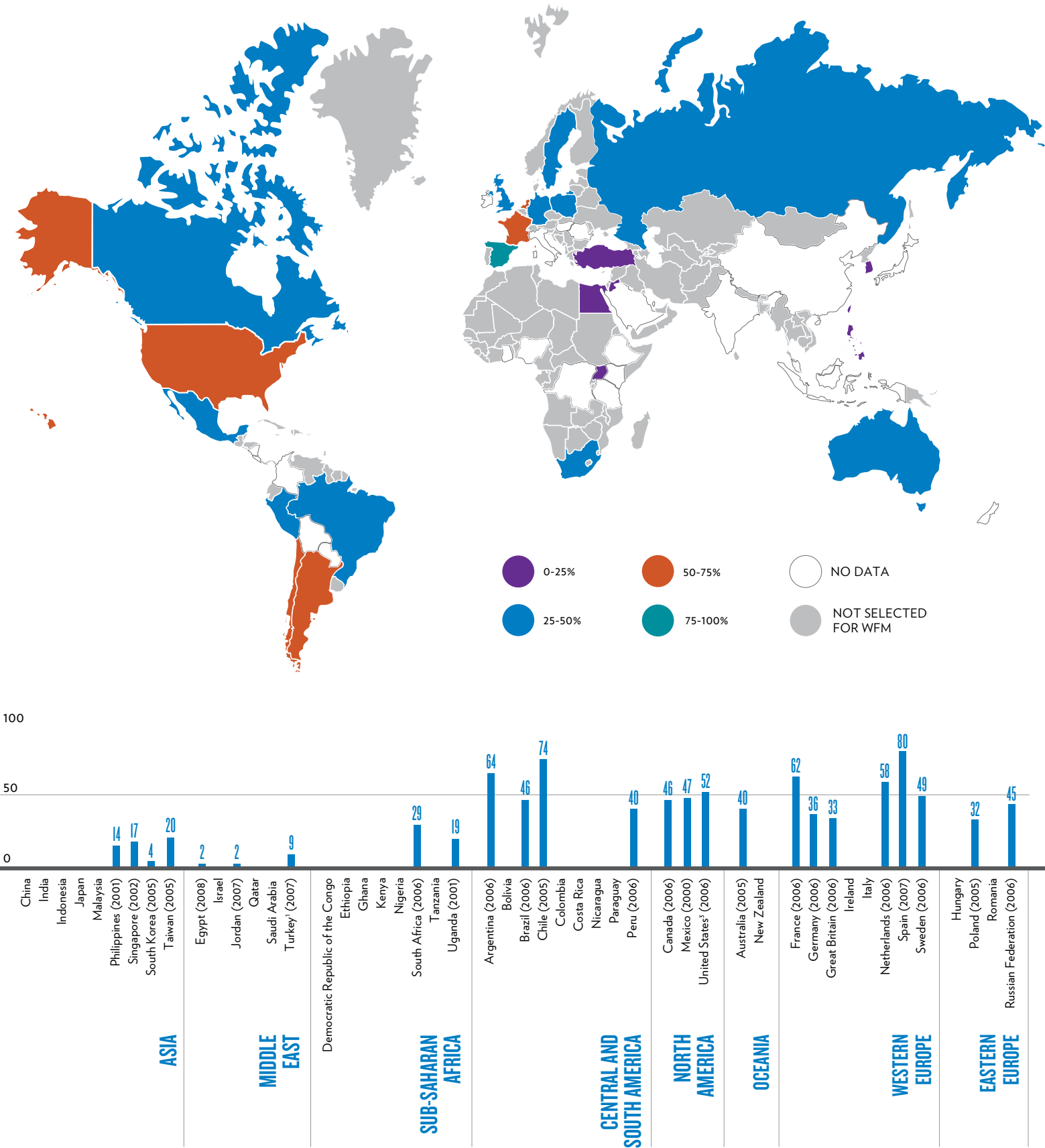
Attitudes Toward Voluntary Single Motherhood

Adult attitudes toward voluntary single motherhood vary greatly by region, as seen in **Figure 13**. The WVS asked adults if they approved of a woman seeking to “have a child as a single parent” without a “stable relationship with a man.” In Asia, the Middle East, and sub-Saharan Africa, little public support exists for this type of single motherhood. Specifically, in Asia and the Middle East, support for this view ranges from a high of 20 percent (Taiwan) to a low of 2

⁶⁵ World Values Survey Association, “World Values Survey 1981-2008 Official Aggregate V.20090901” (World Values Survey Association [www.worldvaluessurvey.org] Aggregate File Producer: ASEP/JDS, Madrid, 2009); Hampden-Thompson, Guzman, and Lippman, “A Cross-National Analysis of Parental Involvement and Student Literacy.”

FIGURE 13 Attitudes Toward Voluntary Single Motherhood, 2000-2008

Percentage of adults (18+) who approve of a woman who wants to have a child as a single parent but doesn't want to have a stable relationship with a man



Sources: www.worldfamilymap.org/2014/e-ppendix/figure13

percent (Egypt and Jordan). Support is also comparatively low in sub-Saharan Africa, where only 19 percent of adults in Uganda and 29 percent of adults in South Africa express approval of voluntary single motherhood.

Support for voluntary single motherhood is markedly higher in the Americas, Europe, and Oceania. Forty percent or more of adults living in Oceanic or American countries surveyed in the WVS express approval of single motherhood. For example, 52 percent of adults in the United States, 46 percent in Canada, 40 percent in Australia, and 74 percent in Chile indicate that they approve of unmarried women having children on their own. Views are more heterogeneous in Europe. Just 32 percent of adults in Poland express support for voluntary single motherhood, compared with 80 percent of adults in Spain. Overall, slightly less than half of the adults in most other European countries register their approval of voluntary single motherhood. In general, adults in countries with more affluence, lower levels of religiosity, or high levels of single parenthood prove to be more supportive of women having children without a husband or male partner. By contrast, countries with strong religious or collectivist orientations are less supportive of women who chose to be single mothers.⁶⁶

Attitudes About Whether Children Need Both a Mother and Father

Despite the considerable regional variation in public attitudes toward voluntary single motherhood, much less variation exists in public attitudes toward the value of a home with a mother and a father. In most of the world, the majority of adults appear to believe that a child “needs a home with both a mother and a father to grow up happily,” as seen in [Figure 14](#).

This sentiment is especially strong in Asia, the Middle East, and sub-Saharan Africa, where between 87 percent (Taiwan) and 99 percent (Egypt) of adults express the belief that children are more likely to be happy in homes with a mother and father. Indeed, more than 90 percent of adults in Egypt (99 percent), the Philippines (97 percent), Jordan (96 percent), Turkey (96 percent), Uganda (96 percent), Singapore (94 percent), South Korea (92 percent), and South Africa (91 percent) hold this view.

In addition, support for this belief is high among respondents in Central/South America, where large majorities agree that children are more likely to flourish in mother-father homes, including 88 percent of adults in Argentina, 82 percent in Brazil, 76 percent in Chile, and 93 percent in Peru. North Americans are less likely to agree with this idea, but still 63 percent of U.S. adults, 87 percent of Mexican adults, and 65 percent of Canadian adults express the belief that the mother-father household is optimal for raising happy children. Australian adults (70 percent) hold similar attitudes on this issue.

Agreement with the mother-father family ideal is higher among European adults than among adults in the Americas and Oceania, with the sole exception of survey respondents in Sweden, where only 47 percent of adults agree that a child needs to be raised by a mother and father to be happy. Agreement with a mother-father ideal exceeds 80 percent among adults in Poland (95 percent) and Germany (88 percent). More than three-quarters (78 percent) of adults in Spain also view this family arrangement as best for children.

Thus, even though many adults in the Americas, Europe, and Oceania approve of voluntary single motherhood, the majority of adults in these regions still believe that a child needs to have a mother and a father in the home to grow up happily. And the survey reveals that throughout the rest of the globe more than 80 percent of adults agree.

Support for Working Mothers

In a majority of the world’s countries, more than 50 percent of women aged 15 and older are participants in the paid labor force.⁶⁷ In line with this trend, as [Table 4](#) indicates, a clear majority of adults in most countries around the globe believe that a “working mother can establish just as warm and secure a relationship with her children as a mother who does not work.”

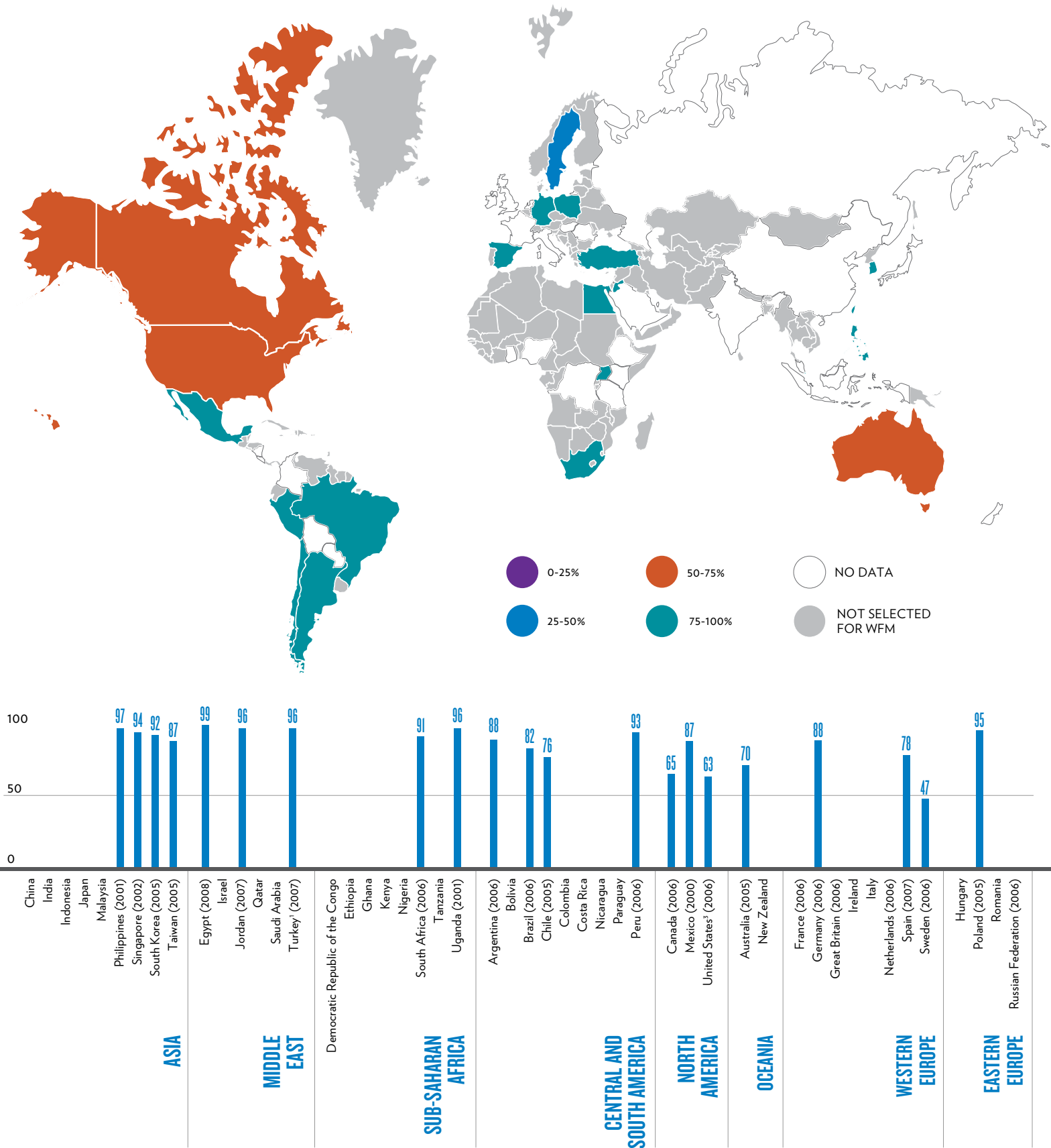
This view seems to be particularly common in the Americas and Europe, where more than 75 percent of adults in the surveyed countries generally agree that working mothers perform just as well as mothers who do not work outside the home.

⁶⁶ R. Inglehart and P. Norris, *The Rising Tide: Gender Equality and Cultural Change around the World* (New York: Cambridge, 2003).

⁶⁷ Department of Economic and Social Affairs, “The World’s Women 2010” (New York: United Nations, 2010).

FIGURE 14 Attitudes Toward the Need for Two Parents, 2000-2008

Percentage of adults (18+) who tend to agree that a child needs a home with both a father and a mother to grow up happily



Sources: www.worldfamilymap.org/2014/e-ppendix/figure14

For instance, 78 percent of adults in Canada, 78 percent of adults in Chile, and 81 percent of adults in Spain express the belief that working mothers can establish just as good a relationship with their children as can stay-at-home mothers.

The support for working mothers seems to be more mixed in sub-Saharan Africa, where 80 percent of adults in South Africa, but only 58 percent of adults in Uganda, agree that working mothers do as well as mothers who do not work outside the home.

Judging by trends in the Philippines and Singapore, where about three-quarters of adults approve of working mothers, public attitudes in Asia also seem to be supportive. By contrast, support for working mothers seems lower in the Middle East, where 47 percent of adults in Jordan and 70 percent of adults in Turkey report that they approve of working mothers.

In general, then, this somewhat limited global survey of public attitudes towards working mothers suggests that in most regions of the world, public support for working mothers is high. The one exception to this trend appears to be in the Middle East, where women's labor force participation is comparatively low and where traditional social mores are strongly held.⁶⁸ It is important to keep in mind that this question was asked in surveys around the turn of the millennium, and support for working mothers may have changed in the last decade.

Family Trust

In most societies, the family is seen as a fundamental source of social solidarity, the place where some of humankind's deepest needs for belonging are met, as well as the wellspring of the emotional and social support needed to thrive and survive in society. What, then, does the global public believe about the presence of trust in their own families? The World Values Survey asked its respondents if they trust their families, and the results suggest that trust remains high in most families around the world (see Table 5). Here the *World Family Map* provides information on the percentage of respondents reporting the highest category, in which they affirm that they "completely" trust their families,⁶⁹ because there is a tendency for respondents to pick the highest category in reporting on such a socially desirable indicator. However, differences across cultures exist in the degree to which survey respondents will affirm the category "completely." Evidence suggests that in the Netherlands

TABLE 4 Support for Working Mothers, 1999-2002

Percentage of adults (18+) who agree or strongly agree that a working mother can establish just as warm and secure a relationship with her children as a mother who does not work

ASIA	MIDDLE EAST	SUB-SAHARAN AFRICA	CENTRAL AND SOUTH AMERICA
China -	Egypt -	Democratic Republic of the Congo -	Argentina (1999) 76
India -	Israel -	Ethiopia -	Bolivia -
Indonesia -	Jordan (2001) 47	Ghana -	Brazil -
Japan -	Qatar -	Kenya -	Chile (2000) 78
Malaysia -	Saudi Arabia -	Nigeria -	Colombia -
Philippines (2001) 73	Turkey (2001) 70	South Africa (2001) 80	Costa Rica -
Singapore (2002) 74		Tanzania -	Nicaragua -
South Korea -		Uganda (2001) 58	Paraguay -
Taiwan -			Peru -
NORTH AMERICA	OCEANIA	WESTERN EUROPE	EASTERN EUROPE
Canada (2000) 78	Australia -	France -	Hungary -
Mexico (2000) 69	New Zealand -	Germany -	Poland -
United States (1999) 79		Great Britain -	Romania -
		Ireland -	Russian Federation -
		Italy -	
		Netherlands -	
		Spain (2000) 81	
		Sweden (1999) 84	

Sources: www.worldfamilymap.org/2014/e-ppendix/table4

⁶⁸ Ibid.; Inglehart and Norris, *The Rising Tide: Gender Equality and Cultural Change around the World*.

⁶⁹ Respondents could indicate that they trust their family "completely" or "somewhat," or that they "do not trust [their family] very much" or "do not trust at all."

TABLE 5 Family Trust, 2000-2008*Percentage of adults (18+) who completely trust their families*

ASIA	MIDDLE EAST	SUB-SAHARAN AFRICA	CENTRAL AND SOUTH AMERICA
China -	Egypt (2008) 96	Democratic Republic of the Congo -	Argentina (2006) 91
India -	Israel -	Ethiopia -	Bolivia -
Indonesia -	Jordan (2007) 97	Ghana -	Brazil (2006) 67
Japan -	Qatar -	Kenya -	Chile (2005) 83
Malaysia -	Saudi Arabia -	Nigeria -	Colombia -
Philippines -	Turkey (2007) 96	South Africa (2006) 85	Costa Rica -
Singapore -		Tanzania -	Nicaragua -
South Korea (2005) 87		Uganda -	Paraguay -
Taiwan (2006) 87			Peru (2006) 76
NORTH AMERICA	OCEANIA	WESTERN EUROPE	EASTERN EUROPE
Canada (2006) 83	Australia (2005) 83	France (2006) 80	Hungary -
Mexico -	New Zealand -	Germany (2006) 82	Poland (2005) 72
United States (2006) 72		Great Britain (2006) 86	Romania -
		Ireland -	Russian Federation (2006) 92
		Italy -	
		Netherlands (2006) 63	
		Spain (2007) 92	
		Sweden (2006) 94	

Sources: www.worldfamilymap.org/2014/e-ppendix/table5

and in Central/South America, specifically, and perhaps in other countries, respondents often avoid choosing the highest categories on survey questions because these response options are not culturally acceptable.⁷⁰

With these caveats, we find that family trust is especially high among adults in the African, Asian, Oceanic, and especially Middle Eastern countries studied. In the Middle East, 96 percent of Egyptian and Turkish adults indicate that they completely trust their families, as do 97 percent of adults in Jordan. Likewise, 83 percent of adults in Australia, 85 percent of those in South Africa, and 87 percent of those in South Korea and Taiwan express complete trust in their families.

Trends in family trust are more mixed in Europe and the Americas. In Europe, the proportion of adults who report completely trusting their families ranges from 63 percent in the Netherlands to 94 percent in Sweden, with most countries in the region falling close to 80 percent. In the Americas, the proportion of adults who report completely trusting their families ranges from 67 percent in Brazil to 91 in Argentina, with the percentage in other countries in the region falling in between.

Given the heterogeneous character of countries where high levels of family trust are registered—such as Egypt, Jordan, Spain, and Sweden—it remains to be seen how factors like affluence, public policy, religion, and familism (the elevation of the family over individual issues) play a role in fostering high levels of family solidarity in countries around the globe. Nevertheless, the varied character of nations that register high on the attitudinal measure of family trust suggests that different factors in different regional contexts foster high levels of family solidarity.

These indicators for the *World Family Map 2014* demonstrate the diversity of families and nations in which children are being raised. There are distinct patterns of family structure, socioeconomics, family process and culture in every region of the world, and often variation within regions. There are promising trends, such as reductions in malnutrition and increases in parental education, as well as continued stressors on families such as high poverty and parental unemployment. Parent-child communication is one indicator that can be improved simply through the efforts and participation of family members.

The need for data on additional countries for the indicators in the family process and culture sections is evident, and more comparable data across regions and countries of the world in the areas of family structure and socioeconomics are needed. Comparable data for additional indicators of family well-being are needed to further understand the family dynamics underlying child well-being outcomes. Specific surveys sometimes allow for analyses of these dynamics. The following sections in this report use survey data to examine the relationship between family structure and children's psychological health in the European Union and between union stability and early childhood health in lower-income countries.

⁷⁰ *World Family Map* partner research institutions in the Netherlands and South America, email message to author, October 2012.

**FAMILY INSTABILITY AND EARLY CHILDHOOD
HEALTH IN THE DEVELOPING WORLD**



Laurie DeRose, University of Maryland

Paül Corcuera, Universidad de Piura

Montserrat Gas, Universitat Internacional de Catalunya

Luis Carlos Molinero Fernandez, Intermedia Social Innovation

Andrés Salazar, Universidad de La Sabana

Claudia Tarud, Universidad de los Andes

Executive Summary

Improving children's health in lower-income countries around the globe is one of the paramount concerns of the international community. Research on this topic has focused on the role of financial resources, women's education, and public health interventions, largely overlooking the ways in which family structure, and union instability in particular, may shape children's health. Union instability may affect children's health by redirecting attention and time away from children, causing stress, disrupting networks of social support, and reducing the socioeconomic resources available to parents. These consequences of union instability, in turn, may make it more difficult for parents to give children the kind of consistent care they need to thrive—from the attention and affection associated with health to the medical care needed to treat an acute condition. While there are many forms of union instability, this essay specifically explores the relationship between family instability—measured here by divorce or dissolution of a cohabiting partnership, widowhood, or repartnering (i.e., remarriage or new cohabitation)—and children's health in a wide variety of societies, each with a variety of customs related to age at marriage and widowhood, and laws governing marriage and divorce. The analyses find that divorce or partnership dissolution and repartnering are associated with higher levels of diarrhea, stunting (i.e., poor growth), and child mortality in a number of lower-income regions around the globe. For instance, in most of these regions, family instability is associated with an elevated child mortality risk of at least 20 percent. However, family instability is not associated with negative child health outcomes in the Middle East. Finally, this essay finds that unlike in Europe and North America, single mothers in lower-income countries are more likely to be among their society's most socioeconomically advantaged mothers.

Introduction

Improving children's health in lower-income countries around the globe is one of the paramount goals of the international community—as articulated, for instance, in the United Nations' Millennium Development Goals. In pursuit of this goal, researchers have focused on the important roles that financial resources, women's education, public health interventions, and environmental conditions play in children's health.¹ But scholars have shown less interest in the role that family life plays *vis-à-vis* children's health. In particular, comparatively little attention has been paid to the ways in which family structure may shape the care that children in lower-income countries receive and their health.

This essay examines the relationship between family structure and children's health in a wide variety of societies using a measure that is known to have a negative effect on children's well-being in the United States and Europe: union instability.² Whether children in non-Western societies whose mothers have experienced union instability—measured here by divorce or dissolution of a cohabiting partnership, widowhood, or repartnering—fare worse than those in stable unions is an open empirical question with little evidence to date. A recent study that started to fill

¹ E. Gakidou et al., "Increased Educational Attainment and its Effect on Child Mortality in 175 countries between 1970 and 2009: A Systematic Analysis," *Lancet* 376, no. 9745 (2010).

² S. Bzostek and A. Beck, "Familial Instability and Young Children's Physical Health," *Social Science & Medicine* 73, no. 2 (2011); P. Fomby, "Family Instability and College Enrollment and Completion," *Population Research and Policy Review* 32 (2013); S. Liu and F. Heiland, "New Estimates on the Effect of Parental Separation on Child Health," in *Causal Analysis in Population Studies* Vol. 23 (2009).

this gap with evidence from sub-Saharan Africa showed that children of remarried mothers in a number of African countries were more likely to have died than children born to their mother's first and still-enduring union, even after accounting for socioeconomic factors.³ Likewise, a new study of child anemia (i.e., clinical iron deficiency) in Mexico indicates that children in Mexico are less likely to suffer from anemia if they grow up in a stable, two-parent married home, even after controlling for household economic resources.⁴ This new research suggests that stable, two-parent families may foster health for children in lower-income countries around the globe.

Accordingly, this essay explores the association between family stability and children's health across three important outcomes: diarrhea, stunted growth, and death. Diarrhea represents an acute health crisis; it is not only a leading cause of death among children under 5, killing nearly 1 million children each year across the world, but heavy incidence of childhood diarrhea is also associated with poor cognitive development and school performance.⁵ Stunted growth is a longer-term measure; it results from chronic nutritional deprivation or repeated episodes of poor food intake, disease, or both. Like diarrhea, childhood stunting is linked to poorer productivity later in life.⁶ Therefore, both of these health outcomes reflect childhood disadvantage, burdens for caretakers, and obstacles to adult success that in turn place a drag on national-level socioeconomic development. This analysis also addresses childhood death, which is associated with many of the same risk factors, and tests whether union instability is associated with childhood death in regions other than sub-Saharan Africa.

The findings detailed below suggest that union instability is associated with worse child health outcomes in several regions of the world. The findings are stronger for diarrhea and death than for stunted growth. Union instability seems to matter in Africa, Asia, and Central/South America and the Caribbean, but not the Middle East. Moreover, children of single mothers who have never experienced a union transition have fewer disadvantages than children of mothers with union instability, but there is still some evidence of disadvantage for them.

Caregiving & Children's Health

Environmental conditions, poor living conditions, and fewer parental resources in lower-income countries are fundamental determinants of children's health, but the research shows that so too is the direct parental care that children receive from their parents. Children who receive high levels of attention and affection are more likely to enjoy good health, even when controlling for external environmental factors.⁷ Moreover, the impact of health hazards or health resources found in the larger environment is often mediated by parental caregiving, as the UNICEF extended care model notes.⁸ For example, households with poor resources, such as those that lack piped water, may nonetheless have healthy children if caregivers take time to boil drinking water. Conversely, richer households that can afford nutrient-dense foods to help children transition away from breastmilk or infant formula may still have children who suffer if parents do not take the time to feed toddlers frequently throughout the day because the children's small stomach capacity precludes getting enough to eat from only two to three meals. Of course, the worst-off families who have neither piped water nor the means to compensate

³ S. Clark and D. Hamplová, "Single Motherhood and Child Mortality in sub-Saharan Africa: A Life Course Perspective," *Demography* 50, no. 5 (2013).

⁴ K. Schmeer, "Family Structure and Child Anemia in Mexico," *Social Science & Medicine* 95 (2013).

⁵ B. Lorntz et al., "Early Childhood Diarrhea Predicts Impaired School Performance." *The Pediatric Infectious Disease Journal* 25, no. 6 (2006).

⁶ J. Hoddinott et al., "Effect of a Nutrition Intervention During Early Childhood on Economic Productivity in Guatemalan Adults," *The Lancet* 371, no. 9610 (2008); S. Dercon and A. Sánchez, "Height in Mid Childhood and Psychosocial Competencies in Late Childhood: Evidence from Four Developing Countries," *Economics and Human Biology* 11, no. 4 (2013).

⁷ In the nutrition literature, this type of effect is known as "positive deviance." See e.g., U. Mackintosh, D. Marsh and D. Schroeder, "Sustained Positive Deviant Child Care Practices and their Effects on Child Growth in Viet Nam," *Food and Nutrition Bulletin* 23, Supp 4 (2002); the concept also emerges in and guides other public health interventions, e.g., L. Walker et al., "Applying the Concept of Positive Deviance to Public Health Data: A Tool for Reducing Health Disparities," *Public Health Nursing* 24, no. 6 (2007).

⁸ U. Jonsson, "Ethics and Child Nutrition," *Food and Nutrition Bulletin* 16, no. 4 (1995).

by routinely boiling water do not have much latitude to foster good health in their children, but in much of the lower-income world there are considerable opportunities for caregiving to matter at a wide variety of income levels.⁹

Caregiving also matters in another way: stress. Children who receive adequate food, affection, attention, and consistent discipline are less likely to be stressed.¹⁰ In turn, they are less likely to be affected by the physical ailments associated with stress.¹¹ So, when it comes to children's health, parental caregiving matters both in shaping the kinds of resources available to children, and in protecting them from the stresses that can be debilitating to their health.

Caregiving and Family Structure

Caregivers' own education, health status, mental health, control over resources, available time, and social support all help determine how well they fare and in turn how effective they are in giving care. These factors are often related to union instability.¹³ More specifically, we hypothesize that union instability may:

1. Be time- and attention-consuming;
2. Be stressful;
3. Disrupt networks of social support; and
4. Reduce the socioeconomic resources available to parents.

These consequences of union instability, in turn, may make it more difficult for parents to give children the kind of consistent care they need to thrive—from the attention and affection associated with health to the medical care needed to treat an acute condition. For instance, use of health care seems to be conditioned by family structure in some countries.¹⁴ Further, evidence from sub-Saharan Africa and the United States suggests that when parental unions are disrupted, children receive daily care from more caregivers and spend more hours away from their parents; both of these changes appear to be associated with poorer health outcomes.¹⁵ Mothers in non-intact families also appear to be less likely to breastfeed their infants and thus confer both short-term and long-term health benefits.¹⁶ Finally, any negative associations between union instability and children's health may be mediated by the economic dislocation that often follows in the wake of a union breakdown.¹⁷

Challenges of Cross-National Comparisons

Cross-national comparisons become tricky, however, because *how* care factors relate to union instability may vary between societies. That is, the socioeconomic resources or social support available in different countries may or may

⁹ A. Gage, "Familial and Socioeconomic Influences on Children's Well-Being: An Examination of Preschool Children in Kenya," *Social Science & Medicine* 45, no. 12 (1997).

¹⁰ S. Bzostek and A. Beck, "Familial Instability and Young Children's Physical Health."

¹¹ D. Umberson, R. Crosnoe, and C. Reczek, "Social Relationships and Health Behavior Across the Life Course," *Annual Review of Sociology* 36 (2010); R. Gerson and N. Rappaport, "Traumatic Stress and Posttraumatic Stress Disorder in Youth: Recent Research Findings on Clinical Impact, Assessment, and Treatment," *Journal of Adolescent Health*, 52 (2013).

¹² P. Engle, P. Menon and L. Haddad, *Care and Nutrition: Concepts and Measurement* (Washington DC: IFPRI, 1997).

¹³ For a discussion of the challenges that family instability poses to parents, see A. Cherlin, *The Marriage-Go-Round*. New York: Knopf, 2009.

¹⁴ A. Gage, A. Sommerfelt, and A. Piani, "Household Structure and Childhood Immunization in Niger and Nigeria," *Demography* 34, no. 2 (1997); B. Gorman and J. Braverman, "Family Structure Differences in Health Care Utilization among U.S. Children," *Social Science and Medicine* 67, no. 11 (2008).

¹⁵ R. Crosnoe et al., "Changes in Young Children's Family Structures and Child Care Arrangements," *Demography* doi: 10.1007/s13524-013-0258-5 (2013); M. Grant and S. Yeatman, "The Impact of Family Transitions on Child Fostering in Rural Malawi," *Demography* 51, no. 1 (2014).

¹⁶ N. Bar-Yam and L. Darby, "Fathers and Breastfeeding: a review of the literature," *Journal of Human Lactation*, 13, no. 1 (1997); Clark and Hamplova, "Single Motherhood and Child Mortality in sub-Saharan Africa: A Life Course Perspective."

¹⁷ M. McKeever and N. Wolfinger, "Rexamining the Costs of Marital Disruption for Women," *Social Science Quarterly* 82, no. 1 (2001).

not buffer against the effects of union instability. For instance, in the United States, single mothers have significantly less education than do married mothers whereas in Central/South America, they have significantly more.¹⁸ And while any path to single motherhood—nonmarital childbearing, divorce or union dissolution, widowhood—usually involves a great deal of stress, social support for widows may be greater than for divorcées, especially in countries with strong marriage cultures like those in East Asia.¹⁹ Customs, attitudes, and laws regarding marriage and cohabitation, divorce and union dissolution, and widowhood, vary widely across cultures, and these are no doubt related to the health outcomes of children whose mothers experience these various states, yet this is not accounted for in these analyses. For example, laws in a country may dictate whether a wife can leave an abusive relationship, and this has not been considered in the analyses.

While investigating all of the pathways through which family structure could influence children's health across a wide variety of societies is not possible, it is possible to determine the net association of union instability on children's health across societies around much of the globe. This is the focus of the work that follows. Nonetheless, because socioeconomic status predicts union instability differently in poorer countries than richer countries, this essay also pays careful attention to the ways in which controls for parental socioeconomic resources affect the links between union instability and children's health.

In particular, whereas in many rich industrialized countries today, union instability and single-parent families are more common among the disadvantaged, in many lower-income countries, the pattern between privilege and family structure is quite different: it is often the most privileged women who live as single mothers. That is because, as noted in the pioneering work of William Goode, family change often happens first among elites, who have the economic resources and the educational background to experiment with nontraditional family life or to leave an unsatisfying or abusive marriage.²⁰ Later, when union instability and single parenthood have become more common, they tend to be concentrated among those with less income and education, as is the case in much of the industrialized world.²¹

Put differently, in some poor regions of the world, it is difficult for young women with limited education and few economic resources to raise children on their own, either before marriage or in the wake of a divorce.²² So women with access to comparatively little education and income tend to remain in their relationships in many lower-income countries. To pick an example from Central America, the Lenca in Honduras are one of the least educated ethnic groups in the country; they also do not participate much in the modern economy and have few economic resources. It is very difficult to imagine a Lenca woman divorcing and raising a child independently given her few employment options, and Lenca marriages are relatively stable.²³ By contrast, highly educated and higher-income women in Honduras are more likely to have children on their own or divorce.²⁴ This example illustrates why in poorer countries never-married and divorced mothers are typically of higher status than their counterparts who have remained married, or have repartnered, or are widowed, as seen in [Figure 1](#).

As a result, in low-income countries single motherhood and family instability are *not* systematically associated with lower socioeconomic status. This is noteworthy for this essay because differential health outcomes associated with family instability, then, may not be a consequence of material or social deprivation on the part of mothers. That

¹⁸ W. Wang, K. Parker and P. Taylor, "Breadwinner Moms," <http://www.pewsocialtrends.org/2013/05/29/breadwinner-moms/>, calculations from the current study described below.

¹⁹ H. Park, "Single Parenthood and Children's Reading Performance in Asia," *Journal of Marriage and Family* 69, no. 3 (2007); W. Goode, *World Revolution and Family Patterns* (Glencoe: Free Press, 1963).

²⁰ W. Goode, *World Revolution and Family Patterns* (Glencoe: Free Press, 1963).

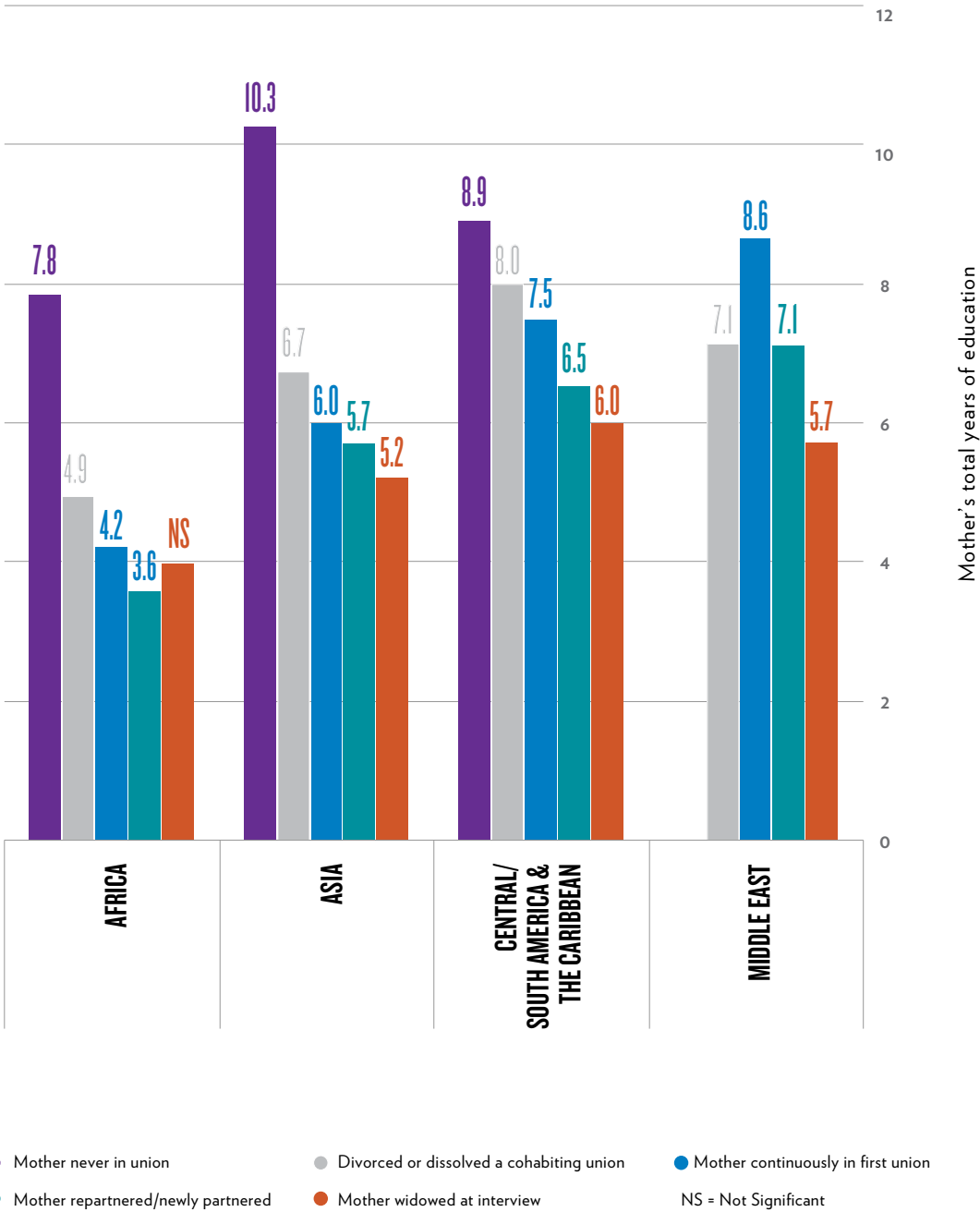
²¹ S. McLanahan, "Diverging destinies: How children are faring under the second demographic transition," *Demography* 41, no. 4 (2004); E. Thomson et al., "Childbearing Across Partnerships in Australia, the United States, Norway, and Sweden," *Demography* doi: 10.1007/s13524-013-0273-6 (2014).

²² C. Lloyd and B. Mensch, "Marriage and Childbirth as Factors in Dropping Out from School: An Analysis of DHS Data from sub-Saharan Africa," *Population Studies* 62, no. 1 (2008). The authors explain the low rate of pregnancy-related drop-outs in sub-Saharan Africa in terms of dropouts caused by low socioeconomic status long before risk of pregnancy.

²³ E. Zell, personal communication. See also C. Kendall, "Loose Structure of Family in Honduras," *Journal of Comparative Family Studies* 14, no. 2 (1983); J. Rowlands, *Questioning Empowerment: Working with Women in Honduras* (Oxford: Oxfam, 1997).

²⁴ Calculations described below.

FIGURE 1 Education and Union Stability



Note: All mothers have significantly different education levels, compared to mothers in a continuous union in their own region, except for widows in Africa.

is, because single mothers tend to have more education than their married peers in lower-income countries, their children may not suffer as many material and social disadvantages as they would if their mothers were less educated.

Data and Methods

The data analyzed in the essay are from the Demographic and Health Surveys (DHS) and include countries of Central/South America and the Caribbean, Africa, the Middle East, and Asia.²⁵ The DHS survey team administered the individual woman’s questionnaire to a nationally representative sample of reproductive-aged women in each country; the questionnaire included a complete birth history (including children who had died) as well as current health measures.²⁶ The analyses include all children born in the five years before the survey.

Although the data are cross-sectional, they can nonetheless be used to assess the relationship between union instability and children’s health outcomes under some reasonable assumptions. First, it is possible to identify children whose mothers have experienced no union transitions in their lifetimes, namely those whose mother has been continuously in her first union from before their birth until the survey,²⁷ and those whose mother has never been in a union (either married or cohabiting). Children born during their mother’s first and still-enduring union likely have biological parents who are still together, even though some do not live with both biological parents (for example, their father may be a migrant laborer). The questionnaire does not ask whether the mother has adopted the child, and asks about a union with a man; therefore no conclusions can be drawn about union stability and child outcomes for adoptive or same-sex parents from this analysis. In contrast to children born during their mother’s first and continuous union, those born to mothers who have never been in a union are much less

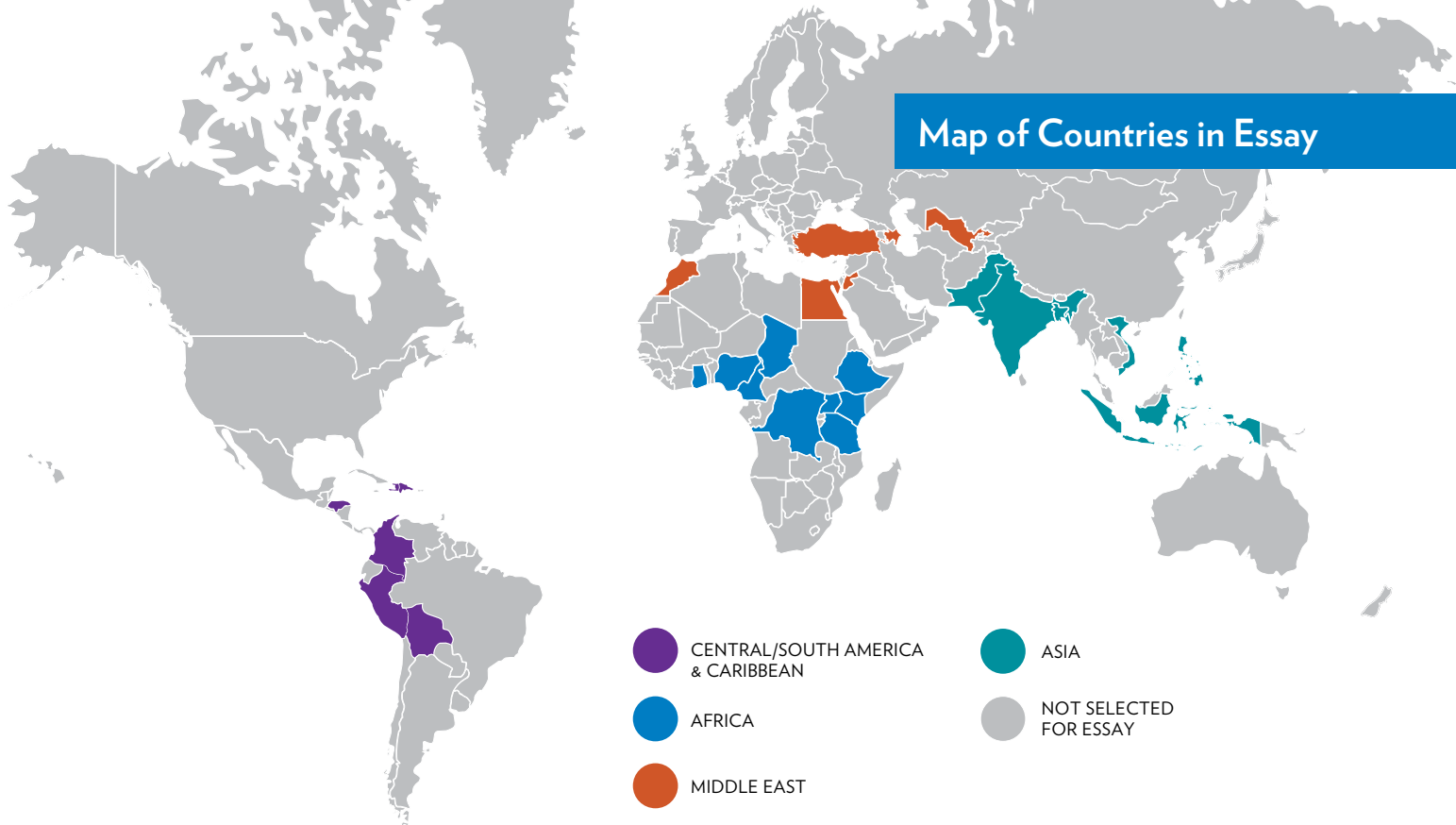
TABLE 1 Union Instability Among Mothers Of Young Children By World Region

REGION	MOTHER CONTINUOUSLY IN FIRST UNION	MOTHER NEVER IN UNION	MOTHER REPARTNERED/ NEWLY PARTNERED	DIVORCED OR DISSOLVED A COHABITING UNION	MOTHER WIDOWED
AFRICA	75.86%	2.93%	15.42%	4.30%	1.49%
ASIA	93.99%	0.19%	3.88%	1.17%	0.77%
MIDDLE EAST	95.44%	N/A	2.75%	1.12%	0.69%
CENTRAL/SOUTH AMERICA & THE CARIBBEAN	60.32%	6.16%	20.75%	11.93%	0.83%

²⁵ Central/South American & Caribbean countries: Bolivia (2008), Colombia (2010), Dominican Republic (2007), Haiti (2012), Honduras (2011-12), Peru (2012); African countries: Cameroon (2011), Chad (2004), Congo Democratic Republic (2007), Ethiopia (2011), Ghana (2008), Kenya (2008-09), Nigeria (2008), Tanzania (2010), Uganda (2011); Middle Eastern countries: Azerbaijan (2006), Egypt (2008), Jordan (2009), Morocco (2003-04), Turkey (2003), Uzbekistan (1996); Asian countries: Bangladesh (2011), India (2005-06), Indonesia (2012), Pakistan (2006-07), the Philippines (2008), Vietnam (2002).

²⁶ An analysis of childhood growth based on information in the household questionnaire (a nationally representative sample of children living in households) was compared to that from the individual woman’s questionnaire (a nationally representative sample of children living with reproductive-aged mothers) to determine whether the richer information from the individual interviews could be utilized without biasing our results. The estimates of the effects of the child’s living arrangements (living with only the biological mother versus living with both biological parents) were not statistically different between children living with all mothers and children living with interviewed mothers in any country.

²⁷ Determined using the date of the child’s birth, the date of the mother’s first union, and the number of unions the mother has been in.



<p>Bolivia Colombia Dominican Republic Haiti Honduras Peru</p> <p>CENTRAL/ SOUTH AMERICA & CARIBBEAN</p>	<p>Cameroon Chad Democratic Republic of the Congo Ethiopia Ghana Kenya Nigeria Tanzania Uganda</p> <p>AFRICA</p>	<p>Azerbaijan Egypt Jordan Morocco Turkey Uzbekistan</p> <p>MIDDLE EAST</p>	<p>Bangladesh India Indonesia Pakistan The Philippines Vietnam</p> <p>ASIA</p>
-------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

likely to have their biological fathers involved in their lives, but their mothers also have not experienced union instability (even the breakup of a cohabiting union). Women who have never been in a union were not included in most of the DHS in the Middle East (which interviewed ever-married women rather than reproductive-aged women as in the other regions' DHS), and therefore there is no "never in union" category for these countries. Note also that nonmarital childbearing in the Middle East is virtually nonexistent.²⁸ (See [Table 1](#) for the distribution of mothers across the union categories in world regions.)

Children whose mothers have experienced union instability may be either single or repartnered at the time of the DHS interview. The currently single with a history of union instability include those who have been divorced,²⁹ have experienced the dissolution of a cohabiting partnership, or have been widowed. Union instability could have preceded the child's birth (e.g., the child was born after the mother divorced), so it is much more accurate to think of these categories as representing the mother's union instability rather than union instability during the life of the child. In fact, some of the children of

²⁸ K. Mahler and J. Rosoff, *Into a New World: Young Women's Sexual and Reproductive Lives* (New York: Alan Guttmacher Institute, 1998) concluded that what little data is available from the Middle East supports the claim that abstinence before marriage is commonly practiced.

²⁹ Mothers who are separated from their partners are counted as divorced. Those who simply do not live with their partners but the union is ongoing are either continuously in first union or repartnered.

repartnered women may live with their biological fathers, as the DHS data do not provide union dates other than for first union, and therefore it is not possible to determine whether children of repartnered women were born during the current union. Children whose mothers entered their first union after their birth are also counted as having repartnered mothers.

There are three health outcomes: recent diarrhea³⁰ (an indicator of acute illness), stunted growth³¹ (an indicator of long-term health), and death (the most extreme health outcome, regardless of cause). This diverse set of measures allows us to determine whether union instability is associated with different domains of child health. Additionally, while children's health conditions can contribute to union instability,³² there is little concern that an episode of diarrhea in the two weeks before an interview has caused previous union transitions—in contrast to a child's death, which might destabilize a marriage.

The analytic models for recent diarrhea and childhood stunting are logistic regression models with controls for child's gender, urban residence, birth order, length of preceding birth interval, whether the child has dead siblings, maternal age, maternal education level, a household asset index,³³ and variables for each region of each country. Additional household structure variables are: the presence of women other than the mother, presence of men other than the mother's partner, the number of children under age 5, and the number of children aged 5-15.³⁴

The childhood death model is quite similar except that the outcome is whether the child lives or dies in every month from their birth to either their death or the interview (it is a discrete-time event history model that follows Clark and Hamplová's (2013) work on single motherhood and childhood death in Africa very closely, including a statistical correction for correlated observations between siblings). Child's age is included as an additional control (grouped according to relative probabilities of death in particular age intervals). The number of children under age 5 in the household must be omitted in the death analysis because that count is influenced directly by death (there are fewer children under 5 living in the household if a child has died in the past 5 years). It is retained for diarrhea and stunting because young children may compete for resources and spread disease among themselves.

Results

Education and Union Instability

The findings indicate that in poor countries single motherhood is not systematically associated with material disadvantage; indeed, our results suggest that mothers with more resources may feel freer to remain single. The Middle East resembles rich countries in that mothers in their first union have the most education; union instability is more

³⁰ The surveys in Jordan and Turkey did not collect data on recent diarrhea.

³¹ Stunted growth is height-for-age more than two standard deviations below the reference median of a healthy population. The stunting analysis for Asian countries is based only on Bangladesh and India as height measures were not obtained in the other DHS surveys.

³² P. Kaarensen et al., "A Randomized, Controlled Trial of the Effectiveness of an Early-Intervention Program in Reducing Parenting Stress After Preterm Birth," *Pediatrics* 118, no. 1 (2006).

³³ DHS provides a relative wealth index based on household assets for each country, but because we were pooling data across countries within major world regions we needed an absolute wealth index to keep the meaning comparable. We used the index developed by Sarah Giroux (personal communication):

1=poor floor, poor drinking water, and poor toilet

2=2 of the following (poor floor, poor drinking water, and poor toilet)

3=1 of the following (poor floor, poor drinking water, and poor toilet)

4=0 or 1 of the following (poor floor, poor drinking water, and poor toilet) and a radio

5=0 or 1 of the following (poor floor, poor drinking water, and poor toilet) and electricity

6=0 or 1 of the following (poor floor, poor drinking water, and poor toilet) and a television

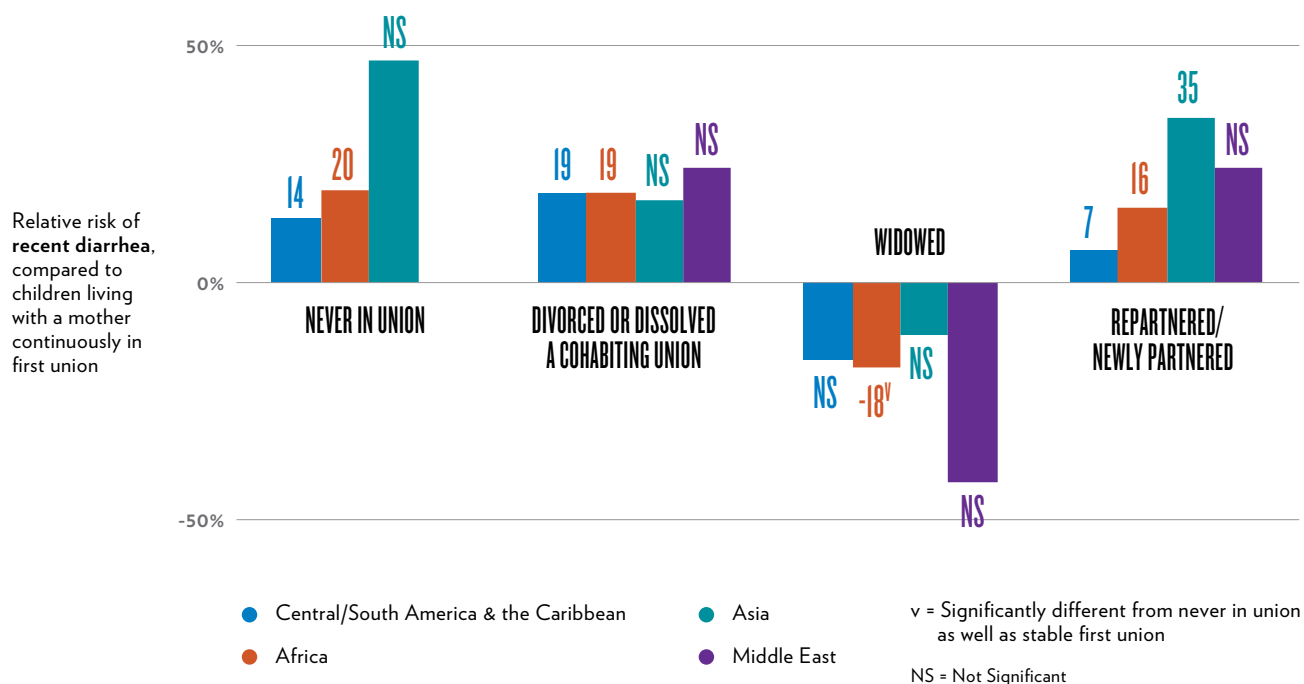
7=0 or 1 of the following (poor floor, poor drinking water, and poor toilet) and a refrigerator

8=0 or 1 of the following (poor floor, poor drinking water, and poor toilet) and a car

³⁴ These variables were obtained from the household roster; note: the roster was not available for Pakistan. For Pakistan, other women was approximated by other reproductive-aged women and children under 5 in the household was obtained by the individual interview. Other men and children 5-15 are omitted from analyses using the pooled sample of Asian countries.

FIGURE 2 Children of Repartnered Mothers Have More Diarrhea in Three Out of Four Regions, Accounting for Background Factors

Children of mothers who were never in a union, divorced, or dissolved a cohabiting union also at a disadvantage in Central/South America and the Caribbean and Africa



characteristic of less educated segments of the population in this region (Figure 1). The pattern in the other three regions is quite different: mothers who have never been in a union and those who have divorced or dissolved a union (and are currently single) have the most education. Repartnered and widowed mothers do have less education than mothers whose child was born in their first union.³⁵ That means that in Central/South America and the Caribbean, Africa, and Asia, single mothers besides widows are of higher socioeconomic status³⁶ than mothers living with partners.

Patterns in Child Health Outcomes

Although our focus here is on the effects of union instability on children's health, our other results are in keeping with established findings regarding children's health. First, health outcomes vary widely within world regions. Some of this variation is between countries, but health outcomes also varied significantly between regions *within* countries.³⁷ Second, socioeconomic status clearly matters: children in wealthier households and those with more educated mothers

³⁵ The difference in years of education between mothers continuously in their first union and all other categories is statistically significant in every region except that widowed mothers do not have significantly less education in Africa. This is likely because HIV death is not as concentrated among the poor as other causes of death are.

³⁶ Figure 1 shows their educational advantage; if the household asset index described in note 33 is used to measure socioeconomic status, the pattern of the results is almost exactly the same.

³⁷ Urban residence is usually associated with better health outcomes, but here most of that effect is picked up by the sub-national region variables.



Children of divorced mothers or those whose unions have dissolved are more likely to be stunted in Central/South America and the Caribbean (12 percent more likely), Africa (18 percent more likely), and Asia (52 percent more likely).

both had better health outcomes.³⁸ Third, boys were at higher risk of death everywhere, and more likely to have had recent diarrhea everywhere but the Middle East. Boys were also more likely to be stunted in Central/South America and the Caribbean, Africa, and the Middle East, but less likely to be stunted in Asia.

Just as previous research has established, children everywhere were most likely to die in the first month of life, and also, if they were their mother's first child. In Asia and Central/South America, children after the first born were more likely to have stunted growth. Both death and stunting were more prevalent among children born less than two years after the most recent sibling, or if any of a child's siblings had died. Children of mothers over 20 had better health outcomes across all three measures than those of teen mothers, except children of mothers in their forties were not less likely to die than children of teen mothers.

Although the effects of others in the household (adult women, adult men, other children) besides parents are not completely consistent, they seem to suggest that living with extended family helps protect children from having stunted growth.

Union Instability and Diarrhea

The most consistent result from the acute illness analysis is that children with repartnered mothers are more likely to have had recent diarrhea than those born during their mother's first and continuing union (far right bars, [Figure 2](#)). Only in the Middle East was the relationship between mother's repartnering and acute illness insignificant. In the other three regions, children of repartnered mothers were significantly more likely to have had recent diarrhea. In Central/South America and the Caribbean the disadvantage associated with having a repartnered mother was relatively small: it increased the chance of recent diarrhea by about 7 percent. In Africa and Asia, the effects were larger with recent diarrhea being 16 percent and 35 percent more common among children of repartnered mothers than among children born to mothers continuously in their first union.

In contrast, children of widows are not at a disadvantage anywhere. Moreover, children of widows in Africa are less likely to have diarrhea, compared to children in families where the mother was never in a union. Children of mothers who have divorced or dissolved a union are about 19 percent more likely to have had recent diarrhea in both Africa and Central/South America and the Caribbean.

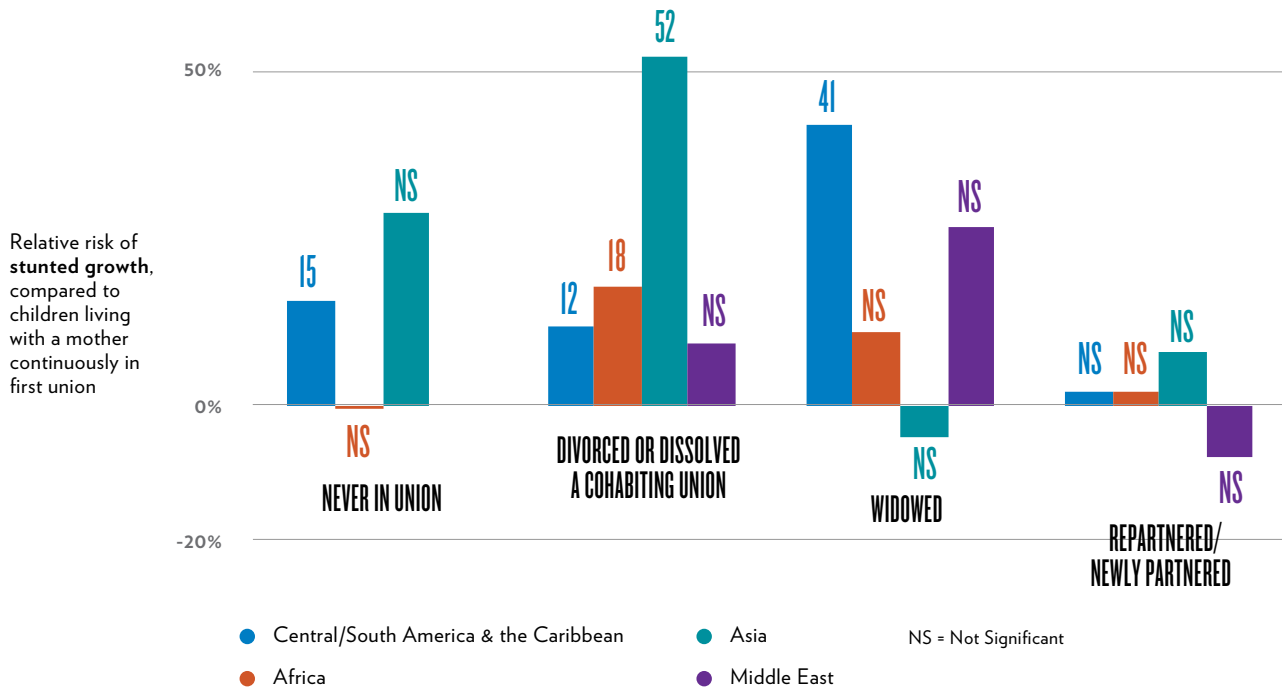
Children of mothers who have never been in a union comprise 0.2 percent of children in Asia and an unknown percentage in the Middle East, where all but one of the surveys was of ever-married women rather than reproductive-aged women ([Table 1](#)). Thus the association between having a never-partnered mother and poorer health is meaningful only for Africa and Central/South America (with almost 3 percent of children and over 6 percent of children, respectively). In both these regions, children of never-partnered mothers have significantly more recent diarrhea (20 percent more and 14 percent more, respectively).

Union Instability and Stunting

Turning next to childhood growth, children of never-partnered mothers in Central/South America and the Caribbean are more likely to have stunted growth than children born to mothers continuously in their first union; this is not the case in Africa ([Figure 3](#)). Again, children are very rarely raised by mothers who have never been in a union in the other two regions. Children of divorced mothers or those whose unions have dissolved are more likely to be stunted in Central/South America and the Caribbean (12 percent more likely), Africa (18 percent more likely), and Asia (52 percent more likely). Widowhood is associated with more childhood stunting only in Central/South America and the Caribbean. In contrast to the results for recent diarrhea, repartnering is not associated with childhood stunting anywhere.

³⁸ Mother's education was insignificant for diarrhea in Asia and the Middle East and also for death in the Middle East; it was significant for all other outcomes in all regions. The household asset index was always statistically significant.

FIGURE 3 Children of Mothers Who Divorced or Whose Union Dissolved More Likely to Have Stunted Growth in Three Out of Four Regions, Accounting for Background Factors

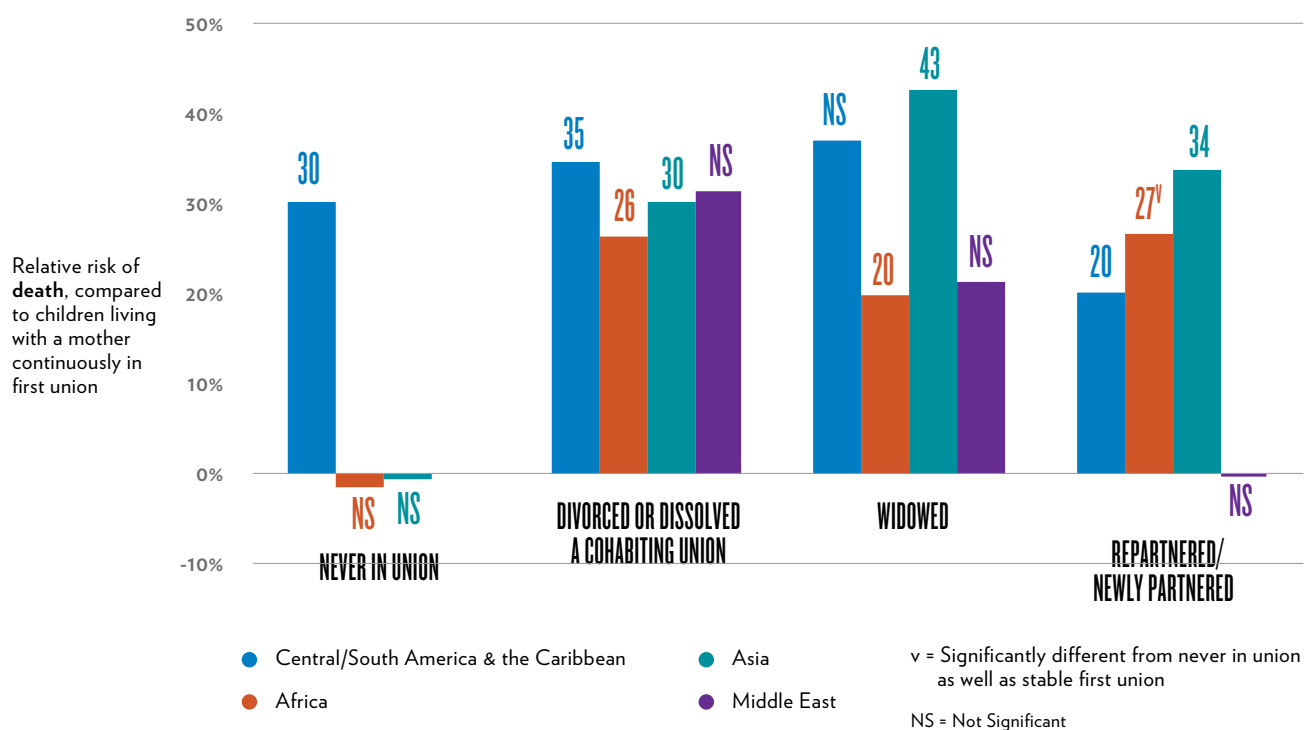


Union Instability and Death

Finally, with respect to child survival, an unequivocally important measure of child well-being, mothers who have experienced union instability in some regions are more likely to have had a child die, regardless of whether they have divorced or dissolved a partnership, are widowed, or are in a union at the time of the interview (Figure 4). In all regions except the Middle East, children of mothers who have divorced or dissolved a partnership are about 30 percent more likely to have died, and children of widows were in Africa 20 percent more likely and in Asia 43 percent more likely to die. Children of repartnered mothers face a 20-34 percent elevated death risk in regions besides the Middle East. The results for deaths of children born to never-partnered mothers follow the exact same pattern as for stunting: children of never-partnered mothers in Africa and Asia are no more likely to have died, but in Central/South America and the Caribbean, they are 30 percent more likely to have died.

These elevated death risks of course matter more in absolute terms where childhood death is most frequent. In Africa, where 9.1 percent of children born in the five years before the interview had died, a death rate 30 percent higher than the regional average means about 12 percent of children will die. By contrast, in Asia, 30 percent higher is the difference between 5.1 percent and 6.6 percent of children dying, and in Central/South America between 3.1 percent and 4.1 percent.

FIGURE 4 Children of Mothers Who Divorced, Dissolved a Cohabiting Union, and/or Repartnered More Likely to Have Died in Three Out of Four Regions, Accounting for Background Factors



Discussion

In our analysis, mothers' union instability seems to matter less for children's health in the Middle East than in other regions. It is possible that there were no significant effects due to other factors that are beyond the scope of this essay, such as laws governing marriage and unions, or simply because health is generally better there and most mothers are in their first marriage: rare events occurring to small portions of the population limit statistical power. Understanding the complexities of factors that could account for this difference in the Middle East as compared to the other regions would require additional research.

In the other three regions, union instability matters. It seems to matter the most in Central/South America and the Caribbean where, compared to children born during their mother's first and continuing union, children of divorced mothers were significantly worse off across all three health outcomes, and children of widowed or repartnered mothers were worse off in two of the three outcomes. It is also in Central/South America and the Caribbean that children whose mothers have never been in a marital or cohabiting union have poor health outcomes: more diarrhea, more stunting, and more death. In Africa, children whose mothers have never been in a union have only more diarrhea; in Asia, they are not disadvantaged for any of the health outcomes, though there are so few children in this category in Asia that accurate comparisons may not be possible.

It also appears that having a mother who divorced or dissolved a union is associated with the worst outcomes, but if we discount stunting—the outcome where union status overall had the weakest impact—the results for children of mothers who have divorced or dissolved unions and repartnered are remarkably similar. The fact that some children of repartnered mothers are children of second unions who live with both biological parents makes the disadvantage associated with repartnering all the more striking: both the economic advantages associated with two-parent homes and the other advantages to living with both biological parents would make it unlikely that we would find a significant disadvantage for children of repartnered mothers, and yet we find it for both recent diarrhea and child death in Africa, Asia, and Central/South America and the Caribbean. Remarriage does seem to protect children from having stunted growth, however.

With an outcome like child death, it is easy to imagine a child's death destabilizing the mother's union rather than a union transition leading to the child's death. However, studies with data that can establish the order of events indicate that marital instability precedes child death.³⁹ The results here also indicate that marital instability often likely comes first: diarrhea within two weeks of the interview is unlikely to have caused union transitions, and children of mothers who have divorced, dissolved their unions, or repartnered often have more recent diarrhea, just as they are more likely to have died.

Note also that [Figures 2 through 4](#) indicate that children with never-partnered single mothers do about as poorly in Central/South America and the Caribbean as do children in families marked by union instability. This finding suggests that in some cases it is not instability alone that matters for children's health, but also having access to two (stably partnered) parents.

Taking differences in socioeconomic status into account did little to alter the association between a mother's union status and any of her children's health outcomes. In richer countries, part of the disadvantage associated with single parenthood and union instability can be explained by socioeconomic status,⁴⁰ but in these data differences by union status are instead marginally (not significantly) *enhanced* when controlling for socioeconomic status.

Finally, the association between union instability—specifically, divorce or union dissolution and repartnering—and children's health is greater than that of an additional level of maternal education when it comes to diarrhea and death. For instance, African children whose mother has completed primary school are about 10 percent more likely to have had recent diarrhea or to have died than those whose mothers have completed secondary school, while children of mothers who have divorced or dissolved unions or repartnered are about 16 percent more likely to have had recent diarrhea and about 26 percent more likely to have died. In Central/South America and the Caribbean, incidence of recent diarrhea is about the same between children of stably married primary-educated women and those of secondary-educated women who have divorced or dissolved unions or repartnered, but children in the latter group face a greater risk of death, even with the mothers' educational advantage. In Asia, the health benefit associated with an additional level of education is smaller than the deficit associated with union instability.

³⁹ N. Alam et al., "The Effect of Divorce on Infant Mortality in a Remote Area of Bangladesh," *Journal of Biosocial Science* 33, no. 2 (2001); A. Bhuiya and M. Chowdhury, "The Effect of Divorce on Child Survival in a Rural Area of Bangladesh," *Population Studies* 51, no. 1 (1997); R. Sear et al., "The Effects of Kin on Child Mortality in Rural Gambia," *Demography* 39, no. 1 (2002).

⁴⁰ M. Bramlett and S. Blumberg, "Family Structure and Children's Physical and Mental Health," *Health Affairs* 26, no. 2 (2007).

Overall, the analyses find the best health outcomes for children whose mothers have been in their first union for the children's entire lives. In some ways this simply extends findings from wealthier countries that show advantages in multiple domains for children who have not experienced the stress associated with union transitions. The data also indicate there may be health disadvantages associated with having a mother who has undergone union transitions, even if they were not during the child's lifetime. Because the children in our sample are under 5 years old, many of them are products of the mother's current union. Further analyses could test whether a mother's previous union instability reduces the health benefits associated with marriage in wealthy and poor countries alike.

Note, of course, that union stability is likely to be beneficial to children when parents enjoy average or high levels of relationship quality, but could be harmful when parents have high-conflict relationships.⁴¹ In fact, domestic violence against women is a primary reason for a marriage or union to dissolve, and this analysis does not take into account the reasons leading to union instability. In addition, the DHS does not include data on adoptive or same-sex parents, so no comparisons can be made between the family structures reported here and those categories of parents. Moreover, other family factors besides union stability, such as direct measures of parental monitoring, affection, and engagement with children, are known to be important influences on child health outcomes, yet current international data do not allow for such analyses.

Conclusion

Policymakers, NGOs, and scholars have devoted substantial attention to understanding and addressing the environmental, economic, and educational challenges affecting children's health in lower-income countries around the globe. This essay suggests that the family contexts of caregiving also deserve attention in ongoing efforts to improve children's health around the world. In Asia, Central/South America and the Caribbean, and sub-Saharan Africa, children raised by mothers who have experienced union instability are more likely to have health problems, especially diarrhea, and to die than children raised by a mother who has remained in her first union since before their birth. The results found in this study suggest that family instability may compromise parents' ability to provide the kind of consistent and attentive care that is most likely to foster good health in children. Accordingly, international efforts to improve children's health should also explore ways to stabilize the contexts of family care—assuming parents do not have high-conflict relationships—and to help children whose care is compromised by family instability.

⁴¹ P.R. Amato and A. Booth, *A Generation At Risk* (Cambridge: Harvard University Press, 2000).

Family Structure Across Europe and Children's Psychological Health

Health challenges in the European Union (EU) are substantially different from those covered elsewhere in this report because positive health outcomes are more common overall in the EU than in lower-income countries. However, in both richer and poorer countries, children's health outcomes tend to be shaped by the influence of national-level factors, socioeconomic inequality between households, and family structure within individual households.¹ In most EU states, children are at greater risk of poverty and social exclusion than the general population.² Economic crisis, and its associated social impact, can result in even greater proportions of children at risk, and thus magnify the pronounced nature of health disparities.³ Psychological health is a pressing issue in the EU, where the cost of mental disorders has been estimated at 3 to 4 percent of GNP and where epidemiological evidence suggests that children are suffering from certain mental disorders in increasing proportions and at earlier ages.⁴

Research indicates that children living with a single parent and children living in stepfamilies have generally poorer outcomes than those living with both biological parents in a low-conflict relationship within the region.⁵ (It is important to note that these studies did not compare children living with biological parents to those living with adoptive or same-sex parents, since samples are too small to support such comparisons.) However, few studies have been able to take a comparative perspective on psychological health disparities among countries within the EU.⁶ As a result, little is known about whether two-parent families hold similar advantages for children's psychological health in disparate countries throughout the region.

The analysis presented here begins to fill this gap by:

1. Examining whether family structure is associated with psychological health across 25 EU countries, and
2. Assessing whether the association between family structure and psychological health varies between countries within the EU.

Data and Methods

The data are from the 2010 EU Kids Online Survey,⁷ which includes approximately 1,000 children aged 9-16 in each of 25 EU countries.⁸ Researchers drew a nationally representative sample of children: internet-using children were selected for face-to-

¹ C. Currie et al., "Inequalities in Young People's Health, HBSC International report from the 2005/2006 survey," *Health Policy for Children and Adolescents*, 5 (2008); K. Larson et al., "Influence of Multiple Social Risks on Children's Health," *Pediatrics* 121, no. 2 (2008); L. Rajmil et al., "Socioeconomic Inequalities in Mental Health and Health-Related Quality of Life (HRQOL) in Children and Adolescents from 11 European Countries," *International Journal of Public Health* (2013).

² European Commission, Recommendation C(2013) 778 "Investing in children: breaking the cycle of disadvantage," 20 February (2013).

³ S. Ruxton, "How the Economic and Financial Crisis Is Affecting Children & Young People in Europe," *Eurochild* December (2012).

⁴ V. Lehtinen, E. Rikonen, and E. Lahtinen, *Promotion of Mental Health on the European Agenda*. National Research and Development Centre for Welfare and Health Helsinki (1997). <http://www.mhfs.org.uk/resources/NMHW06/pdf/Promotion%20of%20mhealth.pdf>; IMPACT Consortium, *Mental Well-Being: For a Smart, Inclusive and Sustainable Europe*. European Union (2011). http://ec.europa.eu/health/mental_health/docs/outcomes_pact_en.pdf

⁵ F. Bernardi, et al., "Effects of Family Forms and Dynamics on Children's Well-Being and Life Chances: Literature Review," *Families and Societies Working Paper Series*, Number 4 (2013); L. Panico et al., "Family Structure and Child Health in the UK: Pathways to Health," International Union for the Scientific Study of Population Conference, Evolving Families and Child Wellbeing session (2013). URL: <http://www.iussp.org/en/event/17/programme/session/711>.

⁶ For example, P. Keilthy has done a comparative longitudinal study of children in Ireland and Denmark using comparable longitudinal data (P. Keilthy, "Child Well-Being in Ireland and Denmark," Growing Up in Ireland Conference (2011). URL: http://www.growingup.ie/fileadmin/user_upload/documents/Conference/2011/Session_E_Paper_1_Keilthy.pdf), but broader comparisons are lacking.

⁷ *European Union Kids Online: Enhancing Knowledge Regarding European Children's Use, Risk and Safety Online*, 2010. UKDA study number: 6885. Principal Investigator: Livingstone, S. London School of Economics and Political Science. Department of Media and Communications. Sponsor: Commission of the European Communities. Distributed by: UK Data Archive, University of Essex, Colchester. November 2011.

⁸ Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Germany, Greece, Finland, France, Hungary, Ireland, Italy, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Turkey, and the United Kingdom.

face interviews, and sensitive questions were covered in a self-completion section.⁹ Although internet users are not entirely representative of all children, these data nonetheless allow cross-national comparisons of adolescents' psychological health using comparably drawn samples. Further, because 96 percent of people aged 16 to 24 have used the internet in Europe,¹⁰ selecting on internet use probably does not exclude large numbers of children—however, the excluded children likely have greater than average material disadvantage.

The focus of the work is on the differences in psychological health between children living in one-parent and those in two-parent families. The vast majority of interviewed children live with at least one parent, and those who do not were excluded from the analysis. While the literature indicates that children living with both biological parents may tend to have health advantages over those living in stepfamilies, the data do not distinguish between different types of two-parent families. While biological, step, adoptive, and same-sex parents may have been included among the two-parent families sampled, they were not identified separately, and thus no comparisons can be made between children living in different types of two-parent families. Children of single mothers may also have different physical and psychological outcomes than children of single fathers,¹¹ but in this analysis, all one-parent families are analyzed together. The data allow us to assess whether children living with two parents fare better than those living with one, but cannot be used to test whether differences within those categories are consistent across the EU.

Psychological health is measured using the widely used Strengths and Difficulties Questionnaire (SDQ), which includes: emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior, or voluntary behavior intended to benefit another.¹² Following other work using this instrument, children scoring medium to high on difficulties (the worst-off 20 percent of children) were compared to children experiencing few difficulties.¹³

The analysis controlled for differences in: child's age, child's gender, number of adults in the household (other than the parents), the household's socioeconomic status (defined in six categories), the highest educational level of the household (seven categories), and country of residence. Controlling for household characteristics is important because single-parent households in the EU tend to have lower incomes, and income and income security can independently affect psychological health.¹⁴ In 2005, 13 percent of children in the EU overall were living in poverty, but 23 percent of children in one-parent households.¹⁵

To address the first question of whether family structure is associated with psychological health across the EU, the data from all 25 countries are pooled: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Turkey, and the United Kingdom.¹⁶ Research on infant mortality and low birth weight has identified a north–west to south–east gradient with outcomes generally worse toward the southeast of Europe.¹⁷ Preliminary analysis revealed that in countries where overall well-being as measured

⁹ S. Livingstone, et al., "Technical Report and User Guide: The 2010 EU Kids Online Survey," LSE London: EU Kids Online (2011).

¹⁰ European Commission, "Digital Agenda Scoreboard 2012," URL: http://ec.europa.eu/digital-agenda/sites/digital-agenda/files/scoreboard_life_online.pdf

¹¹ M.D. Bramlett and S.J. Blumberg, "Family Structure and Children's Physical and Mental Health," *Health Affairs* 26, no. 2 (2007).

¹² R. Goodman, H. Meltzer, and V. Bailey, "The Strengths and Difficulties Questionnaire: A Pilot Study on the Validity of the Self-Report Version," *European Child & Adolescent Psychiatry* 7, no. 3 (1998).

¹³ K. H. Bourdon et al., "The Strengths and Difficulties Questionnaire: U.S. Normative Data and Psychometric Properties," *Journal of the American Academy of Child and Adolescent Psychiatry* 44, no. 6 (2005).

¹⁴ F. J. Elgar et al., "Absolute and Relative Family Affluence and Psychosomatic Symptoms in Adolescents," *Social Science & Medicine* 91 (August 2013): 25–31.

¹⁵ European Commission. Directorate-General for Employment, Social Affairs and Equal Opportunities (2008).

¹⁶ Initial sample size was 25,142 cases, but after dropping children not residing with parents (453) and cases having missing values for key variables, the analytic sample is 23,398.

by the UNICEF index¹⁸ was lower, psychological health was often poorer (more children scoring medium to high on psychological difficulties). These differences are then accounted for by using a set of variables referring to the country of residence.

To answer the second question of whether the association between family structure and psychological health varies within the EU, we examined interaction terms between the key independent variable—number of parents in the child’s household—and country of residence. (Details about the regression model can be found at www.worldfamilymap.org/2014/e-ppendix)

Results

Overall Differences Between Countries

There are large differences between countries in the proportion of children reporting elevated levels of psychological difficulties. Specifically, as **Figure 1** indicates, children are least likely to experience psychological difficulties in Italy, Portugal, and Greece and most likely to experience difficulties in Bulgaria, Cyprus, and Turkey. In general, children are psychologically healthier in the southwest and northwest of Europe than in Eastern Europe, especially in southeast Europe.

Family Structure Differences

Across all 25 countries, 21 percent of children report medium or high levels of psychological difficulties, but 25 percent of children living in one-parent families at the time of the interview reported medium or high difficulties, compared with 20 percent of children living in two-parent families. The difference is small yet statistically significant: net of all the controls, children living with only one parent are more likely to experience medium or high levels of psychological difficulties. The analyses suggest that adults other than parents living in the household had no effect on children’s psychological difficulties.

Figure 2 shows the variation *between* countries in how family structure is associated with risk of medium or high psychological difficulties. Children are estimated to be at higher risk when living with one parent in only eight of the 25 countries. The differences by family structure are not statistically significant in the other 17 countries, but note also that there are four countries—the Czech Republic, Poland, Slovenia, and Turkey—where the insignificant differences favor children in single-parent families.

¹⁷ Organisation de coopération et de développement économiques (Paris), *Health at a Glance: Europe 2012*. Paris: OECD (2012).

¹⁸ A five-dimensional index that uses material well-being, health and safety, education, behaviors and risks, and housing and environment. See <http://www.unicef-irc.org/Report-Card-11/>.

FIGURE 1 Levels of Psychological Distress by Country

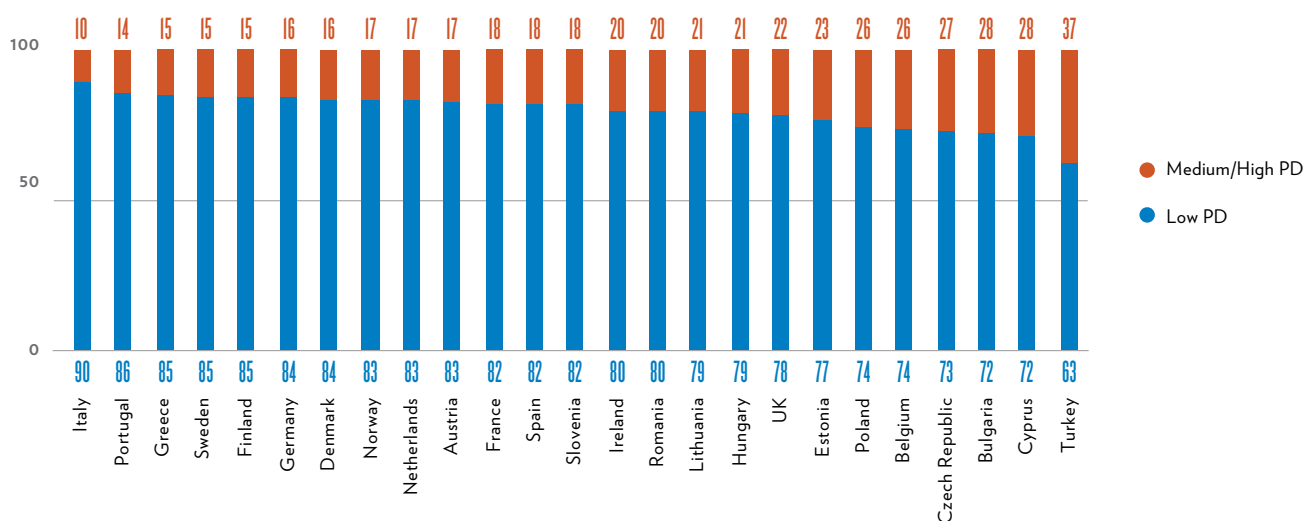
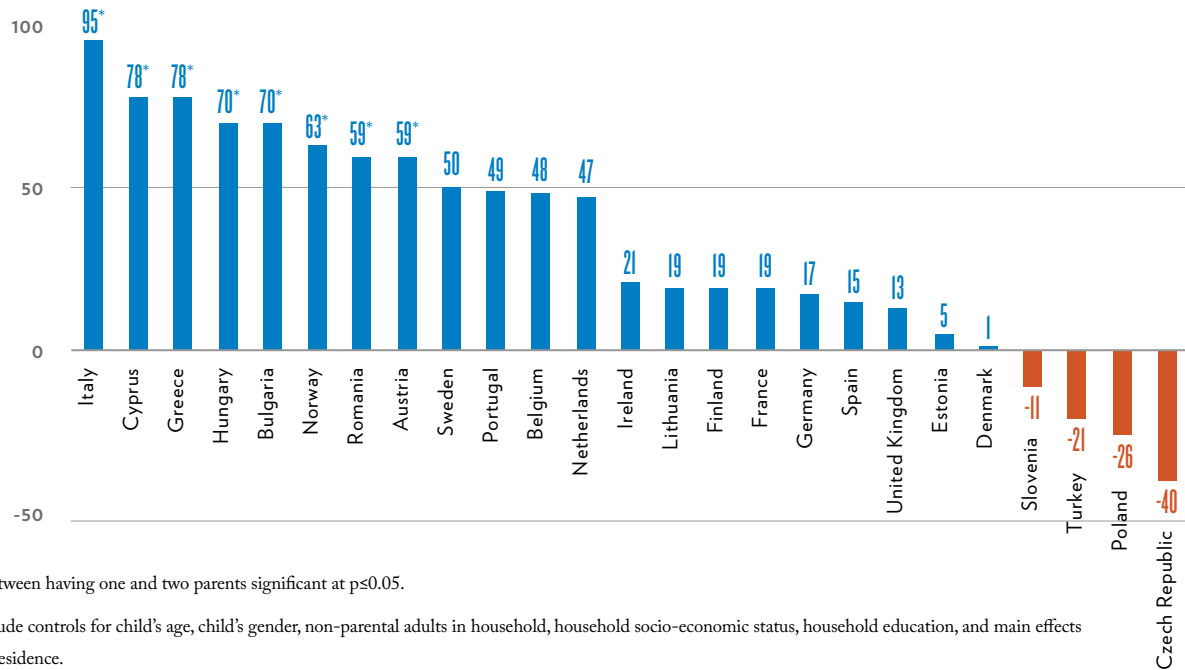


FIGURE 2 Odds of Elevated Psychological Difficulties in Sole-Parent Families Relative to Two-Parent Families



*Difference between having one and two parents significant at $p \leq 0.05$.

Estimates include controls for child's age, child's gender, non-parental adults in household, household socio-economic status, household education, and main effects of country of residence.

Odds ratios calculated using interaction terms between number of parents and country of residence; statistical significance tested using individual country models.

The Role of Other Socioeconomic Characteristics

Children from more educated households report fewer psychological difficulties, but household socioeconomic status has the opposite effect, with higher status being associated with more difficulties. Household socioeconomic status was defined using the occupation and education of the main earner, while household education was recorded as the highest level achieved among all adults in the household.¹⁹ Therefore, it is possible that children experience and are influenced by “second-hand stress” from higher-status occupations. Older children reported fewer psychological difficulties, but there were no marked differences by gender.

Conclusion

On average when responses are pooled across the 25 EU states, living with two parents rather than one is associated with fewer psychological difficulties among 9- to 16-year-old internet-using children (the vast majority of children in this age range). Other adults do not confer a significant advantage, but a second parent does. However, analyses at the country level show that there is a significant advantage associated with living with two parents in only eight out of 25 countries: Italy, Cyprus, Greece, Hungary, Bulgaria, Norway, Romania, and Austria. Differences do not reach statistical significance in other countries. The results suggest that in the EU as a whole, children's living arrangements are related to their psychological well-being. Therefore, public policies and programs supporting and educating families should take into account these family structure differences: specifically, one-parent homes, and homes touched by union instability, may need greater support in order to address higher levels of psychological distress and economic disadvantage experienced by children in these homes.

¹⁹ Livingstone et al. (2011).

Sponsors



DIFI

معهد الدوحة الدولي للأسرة
Doha International Family Institute
البحوث لدعم السياسات الأسرية
Research to advance family policies

Member of Qatar Foundation. عضو مؤسسة قطر

Acknowledging the importance of the family in society, Doha International Family Institute (DIFI), formerly known as Doha International Institute for Family Studies and Development, was established in 2006 by Her Highness Sheikha Moza bint Nasser, Chairperson of Qatar Foundation. The mandate of the Institute is based upon the affirmations set forth in the Doha Declaration on the Family, which was the outcome of the Doha International Conference on the Family. The Institute has a special consultative status with the United Nations Economic and Social Council. DIFI's vision is to be recognized as a global knowledge leader on issues facing the Arab family through research, policy, and outreach. Its mission is to support the aims of the 2004 Doha Declaration on the Family.



Institute for

Family Studies

Strong Families. Sustainable Communities.

The Institute for Family Studies (IFS) is dedicated to strengthening marriage and family life, and advancing the well-being of children, through research and public education in the United States and around the globe.

Focus Global

Focus Global is a consortium of NGOs from around the world committed to providing encouragement, advice, and assistance to help families thrive.



Social Trends Institute

FOSTERING UNDERSTANDING

NEW YORK • BARCELONA

The Social Trends Institute is an international research center dedicated to the analysis of globally significant social trends in the areas of family, bioethics, culture & lifestyles and corporate governance.