



Demographic Characteristics Population Geography: Review

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INTRODUCTION

As stated by Wilbur Zelinsky, geography is a scientific study that investigates the ways in which the characteristics of various locales are impacted by population phenomena, which in turn are influenced by the physical properties of those areas. The population phenomena in question are subject to change in both location and time, and they interact not just with one another but also with other variables that are not related to demographics.

"people" Geography is a discipline of study that investigates the geographical distribution of people throughout the surface of the Earth, as well as the characteristics of the population and its interaction with the physical elements of a specific location. Geography covers a wide range of topics.

There is no such thing as a population that can be measured. Both population care and population awareness are concerned with the serious effects that are associated with population growth as well as the measures that are taken to solve this issue.

Population Composition Examples

The makeup of the population is exploited in a variety of different ways across society. Regarding politics, offering direction for campaigns that are more targeted. In order to study and supply explanations for research queries and solutions, many scientific disciplines are utilized.

- Marketing is a subfield of advertising.
- Officials from the government and those who create policy are going to be making preparations for the future.

One further factor that can affect how a population perceives any changes that occur within that group is the demographic composition of that population. It is possible to monitor the makeup of the population in order to discover any changes that have taken place. It is common practice to conduct a worldwide census in order to collect data on the demographic composition of a community. An individual is asked a series of questions about themselves that are directed toward the entire population. This type of survey is known as a census. The government is able to gain a full grasp of the general composition of the population for the purpose of using the data that was collected. Because of this, the government is able to monitor and evaluate patterns and deviations in comparison to the most recent Census, which helps with the distribution of resources and services across the country.

REVIEW OF LITERATURE

Adrian J. Bailey (2019) It was from the study of human geography that the discipline of population geography evolved as a way of analyzing and commenting on the spatial arrangement of human populations. Within the context of the neoliberal and restructuring capitalist global system, there is a rising interest in migration, population/environment/development links, and transition theory. Additionally, there are greater concerns about social difference, life course, and demographic issues. This larger interest is reflected in the proliferation of methodologies that use multidisciplinary approaches. Scholars who are interested in investigating the links between the demographic, geographical, and political organization of societies may discover each other via growing discourses of transdisciplinarity. These talks may result in the revitalization of a tradition of service and a desire for social justice.

A. Szajnowska- Wysocka(2023) It is necessary to have demographic potential for every human activity. Because of the mechanics of migration, resources for social interaction are made available. Because of this, human population geography is intertwined with a wide variety of subfields within the discipline of geography. These subfields include ecology, historical geography, political science, social science, regional geography, cultural geography,



and settlement geography. Geography is an implicational discipline that serves as a basis for a wide variety of other areas, such as sociology, medicine, economics, psychology, and town planning, amongst others. A genuinely worldwide reach is afforded to it by virtue of the fact that it is an applied discipline. In addition to being beneficial to research, it is also beneficial to policy. The political usage of it is extensive, and it has multisemantic features. To begin, having a grasp of population dynamics enables one to discern between the following: 1) the social and economic composition of the region; 2) the degree to which a state (continent, globe) is economically divided from one another; and 3) the degree of urbanization and the phases it has reached. 4) used in social policy in order to keep the labour market stable; 5) utilized in economic strategy in order to optimize the efficiency of human effort; 6) utilized as a prognostic category in a number of different domains, including sociology, economics, and demography.

Ivo Nejašmić (2021) Within the realm of population geography, the primary emphasis of the study is on the investigation of real world situations. For the purpose of doing research in applied population geography, dependable data sources and the development of a DIS are quite important. Over the course of the last several decades, we have made the decision to concentrate on geographical sizes that are more localised. There is little doubt that local demographic research from a geographical point of view will flourish. The number of people who need the services of population geographers is increasing, which brings up the question of what they are taught in college.

A.J. Bailey (2015) The study of human populations and the geographical distribution of those people laid the groundwork for the development of the field of population geography, which sprang from the discipline of human geography. The rise of multidisciplinary viewpoints is a reflection of the growing interest in social diversity, life course, and demographic issues that are occurring within a global system that is neoliberal and restructuring capitalism. In the field of migration, population, environment, and development links, as well as transition theory, these techniques have made significant contributions to study. Scholars who are interested in investigating the links between the demographic, geographical, and political organization of societies may discover each other via growing discourses of transdisciplinarity. These talks may result in the revitalization of a tradition of service and a desire for social justice.

Population and sex ratio -

Sex ratio means the number of women per 1000 men. The male-female ratio plays an important role in the social condition and economy of an area. Therefore, the study of sex ratio is especially important for population geographers. The nature of men and women is opposite to each other in some subjects and in many subjects men and women complement each other. Therefore, male-female ratio has a special place in the development of any economy. In fact, sex ratio is an indicator of the economy of any region and serves as a useful tool in the analysis of spatial variation. Study of sex ratio is also important because it has direct or indirect effect on various demographic elements like fertility, mortality, population change, occupational structure etc. According to Trewartha (1953) the male-female ratio is fundamental for the geographical analysis of an area because it is not only an important characteristic of the landscape but it also significantly affects other demographic elements.

IMPORTANCE OF POPULATION COMPOSITION

When depicting and analyzing populations, geographers can make use of population composition and its components. According to what was stated before, the most of this may be performed by making use of data that pertains to age, gender, and ethnicity. But what exactly is the application of this in the real world? What is the relevance of the demographic make-up of the population?

In the first place, it is of the utmost importance for every nation to have a complete comprehension of the composition of its population. Specifically, this is due to the fact that it makes it easier to coordinate the necessary infrastructure and services inside the country, such as transportation networks, educational institutions, healthcare facilities, residential properties,



and employment prospects. When it comes to preparing for both the present and the future, the demographic makeup gives vital information.

SOURCES OF POPULATION DATA:

Certain demographic information, such as birth rates, death rates, migration patterns, age distribution, gender composition, marital status, religious affiliation, literacy rates, language usage, and occupation statistics, may be inferred from population data. These data act as indicators for various demographic information. When it comes to planning and putting into action a variety of policies and strategies in a country, such figures are quite necessary.

Other Records:

Industrialized nations keep a variety of records that serve as additional sources of demographic data. These records are kept in addition to the population register. The maintenance of population statistics is necessary in order to satisfy the requirements of many social security programs, including unemployment insurance, pensions for the elderly, maternity allowances, and others.

WIKIPEDIA

Life tables are maintained by insurance companies in a number of countries. These tables contain information on births, deaths, and changes in demographic information. Election lists, lists of people who pay income taxes, and lists of people who subscribe to telephone services are some of the sources from which demographic information may be gathered. The availability of administrative data is limited; yet, it is beneficial for conducting sample surveys because of the information they provide.

International Publications:

There are numerous sources of demographic statistics for the world and for a variety of nations, such as the United Nations Demographic Year Book and the Statistical Year Book. Epidemiological and Vital Records is a magazine that is released on a monthly basis by the World Health Organisation (WHO). This publication contains pertinent information regarding the public health and mortality rates of a number of different countries. The Human Development Report and the World Development Report are two reports that are published annually by the United Nations Development Programme (UNDP) and the World Bank. These reports contain demographic statistics on population growth, predictions, fertility, mortality, health, and other related factors for nations all over the world..

Demographic Sample Surveys:

In the realm of population statistics, demographic sample surveys are an important source of information. When conducting sample surveys, data is gathered from selected samples, and the size of the samples is managed in order to reduce the amount of statistical inaccuracy that is present in the data. The information that is acquired in this manner serves many reasons, including the updating of the results of a prior full count that was carried out at a separate time, the verification of the correctness, and the supplementation of the information that is received from the most recent complete count.

DEMOGRAPHIC CHARACTERISTICS

Demographers are responsible for doing a wide variety of calculations on individual occurrences within the population. These computations include the number of births, deaths, and other events that are connected to the population. For the purpose of enhancing the relevance and utility of the counts in population analysis, the counts are converted into rates. Rates are the recorded frequency of an event occurring within a certain time period for a particular set of individuals. Rates are used to describe the frequency of an occurrence. It is possible to gain an understanding of the oscillations in the size of the global population by looking at the rates of reproduction and mortality, which display significant differences depending on the duration of time and the geographical location of the population. The two of these rates are affected by a number of different conditions together. When these two elements are taken into consideration, migration becomes an essential component for influencing the average size of the population..



- **Birth Rate** – When it comes to fertility, the most fundamental and often utilized metric is the crude birth rate. In a population over the course of one year, the crude birth rate (CBR), which is sometimes referred to as the birth rate, is a measurement of the number of live births that occur for every 1,000 persons in that population.

$$CBR = \frac{\text{number of live births in one year}}{\text{mid-year total population}} \times 1,000$$

In order to compute the number of births in proportion to the total population, the word "crude" is utilized. This is because the calculation does not take into consideration the age or gender distribution of the population. 17.76 births per thousand people is the crude birth rate (CBR) for the entire world in the year 2021. A number of factors, including the demographic mix in terms of age and gender, cultural customs, family size, and population control methods, all have a substantial influence on the birth rate. Birth rates are also subject to a substantial amount of volatility as a result of the significant diversity in these variables. In the year 2020, the country of Niger, which is situated in West Africa, has the highest birth rate of 45 per 1,000 people. In contrast, the birth rate in Japan, South Korea, and other Asian countries, as well as Greece, Italy, Monaco, and Portugal in Europe, is only 8 per 1,000 people. High birth rates are characterized as having thirty or more births per one thousand people, and countries in sub-Saharan Africa and Afghanistan have high birth rates. There is a sizeable population of young women who are impacted by poverty in many countries. This is because poverty is quite prevalent in many countries. It is generally accepted that birth rates that are lower than 18 per 1,000 people are regarded to be low. Countries in the Caribbean, East Asia, Europe, North America, Oceania, and a few South American nations are among those that follow this pattern.

Theory of Demographic Transition:

In 1929, Warren S. Thompson was the first person to use the word "demographic transition," and Frank W. Notestein was the first person to use it until 1945. When we talk about population growth, we are referring to a historical process that investigates the patterns of births, deaths, and population increase in modern industrialized civilizations, notably in Europe. During the second part of the 18th century, the trend of population shift began to make its most significant appearance. Rather than being seen as a "law of population growth," the demographic transition need to be regarded as a thorough portrayal of the process of change. A theory that seeks to describe universal laws that control the changes in size and composition of human populations during the process of industrialization is, to put it more simply, a theory that strives to define these principles. It is widely regarded as a helpful instrument for chronicling the demographic history of a country, and it is generally accepted as such.

As a society evolves from a predominantly rural, agricultural, and illiterate state to a predominantly urban, industrial, literate, and modern state, the theory proposes a certain trajectory of demographic transformation, transitioning from high fertility and high death rates to low fertility and low mortality rates. This occurs as there is a transition from a state of high mortality rates to a state of low mortality rates.

There are three stages that are commonly understood to be involved in the process: (i) the decrease in life expectancy occurs prior to the decrease in birth rates; (ii) eventually, the birth rates decline to align with the death rates; and (iii) the socioeconomic changes in a society occur concurrently with the changes in its demographics.

The demographic transition theory may be broken down into several separate stages of development.

DEMOGRAPHIC TRANSITION

The rate at which the population of our planet is increasing at an exponential rate cannot be maintained over the long run. As a result, the implementation of a brake mechanism of some type is required in order to control the growth of the population. There is a mechanism that makes voluntary population control easier, and that method is called a demographic transition model. As a result of industrialization, urbanization, breakthroughs in healthcare, and



variations in cultural perceptions on childbearing, the Demographic Transition model monitors the oscillations in human fertility and mortality rates that occur as a result of these factors. In 1929, Warren S. Thompson was the first person to use the word "demographic transition," and in 1945, Frank W. Notestein was the first person to embrace the phrase. The historical shifts in birth rates, death rates, and patterns of population increase that have occurred in industrialized civilizations, notably in European societies, are referred to as demographic transitions. This phrase is used to characterize the changes that have occurred in their patterns. The term "demographic transition" refers to the slow and long-term change in fertility and mortality rates, which changes from high and unpredictable levels to low and stable ones. This transformation occurs over the course of a lengthy period of time. The process of transition that is being discussed here is a very major shift that has had a substantial influence on human civilization over the course of the past five hundred consecutive years. This event is on par with the Industrial Revolution, the rise of urbanization, and the consistent increase in the percentage of people in human populations who have completed their education. A framework that is generally acknowledged for understanding the demographic history of a country is the demographic transition theory. This theory should not be regarded a definitive rule of population expansion; rather, it should be respected as a framework.

DEMOGRAPHIC DIVIDEND

The demographic transition hypothesis provides an explanation for the changes that have occurred in population patterns over the course of four distinct stages. There is a concomitant occurrence of economic growth and development, in addition to the altering demographic features that are occurring. The advantages and benefits that result from changes in the demographic composition of a country's population are referred to as the demographic dividend within the context of the notion of demographic dividend.

CONCLUSION

Alterations in demographic indicators, such as the crude birth rate (CBR), the crude death rate (CDR), the literacy rate, the mortality rate, and the infant mortality rate, provide a variety of opportunities and resources for the growth and development of a particular economy during the many periods of demographic transition. In the context of economic development, the term "demographic dividend" refers to the rapid economic growth that may occur when a nation has a fall in mortality and fertility rates, which in turn leads to a shift in the age distribution of its population. As the number of births in a nation continues to decline on an annual basis, the population of young people who are dependant gets smaller in comparison to the population of people who are of working age. To put it another way, it is a concept that refers to the advantages that economies experience when they reach a certain part of the demographic transition process.

BIBLIOGRAPHY

- [1] Stonitz George. J. (1970): "The Demographic Transition", from High to Low Birth Rates, in Demko, G.J.et. al population Geography: A Reader, p. 71.
- [2] The Demographic & Health Scenario of Rajasthan From An Analytical Perspective-2012- Directorate of Economics and Statistical, Rajasthan, Yojana Bhawan, Jaipur.
- [3] Lutz, Melanie & Schmidt, Jean-Olivier & Fleischer, Annett. (2023). Population Dynamics in Bangladesh. A case study on the causes and effects of demographic change in Bangladesh..
- [4] Jovanović, Jasmina & Živković, Dragica. (2015). Cartographic modeling of the population density in the function of research of spatial-demographical relations. Journal of the Geographical Institute Jovan Cvijic SASA. 2005. 115-127. 10.2298/IJGI0554115J.
- [5] Singh, Lokinder & Singh, Hardev & Jamwal, Rohit & Sharma, Swati. (2019). A Geographical analysis of Demographic characteristics and subsequent changing land use pattern in the Northern Himalayan City of Jammu, India. (1981-2011). 06.



- [6] Borderon, Marion & Sakdapolrak, Patrick & Muttarak, Raya & Kebede, Endale & Pagogna, Raffaella & Sporer, Eva. (2019). Demographic Research. Demographic Research. 41. 491-544. 10.4054/DemRes.2019.41.18içç.çççhal-02267010içç.DEMOGRAPHICRESEARCH.
- [7] Zhang, Xusong & Rodavia, Maria Rosario. (2023). Population Spatialization based on Random Forest Model and Multi-source Geospatial big data. Frontiers in Computing and Intelligent Systems. 5. 107-110. 10.54097/fcis.v5i1.12005.
- [8] Deng, Chengbin & Wu, Changshan. (2023). Improving Small-Area Population Estimation: An Integrated Geographic and Demographic Approach. Annals of the Association of American Geographers. 103. 10.1080/00045608.2013.770364.
- [9] Tuff, Kika & Tuff, Ty. (2012). Introduction to population demographics. Nature Education Knowledge. 3. 3.
- [10] Dasvarma, Gouranga. (2020). The importance of population studies and the state of technical demographic training in Asia. Asian Population Studies. 6. 1-2. 10.1080/17441731003603330The Free Encyclopedia
- [11] Hooimeijer, P. & Knaap, Bert & Weesep, Jan. (2014). Perspectives on population geography, demographics and forecasting..
- [12] Stonitz George. J. (1970): "The Demographic Transition", from High to Low Birth Rates, in Demko, G.J.et. al population Geography: A Reader, p. 71.
- [13] Weeks, J. (2015)The role of spatial analysis in demographic research. Chapter 19 in Good child M.F. and Janelle D.G. Spatially Integrated Social Science. New York, NY: Oxford University Press.

