

Hello students,

welcome to econtent learning. This video pertains to the developmental psychology paper PSD 105 of TYBA.

This is Anuradha Kakodkar, associate Professor, St Xavier's College, Mapusa, Goa Presenting to you. the module "The science of human development, : characteristics of development and research methods

In this module I will cover the lifespan perspective, the characteristics of human development, the cross sectional studies, longitudinal studies and Cross sequential studies as methods of studying human development.

At the end of this module, you should be able to understand the lifespan perspective and the characteristics of development and also be familiar with the merits and limitations of the methods used to study the course of human development.

"Change is the only constant"

Well, this quote best describes the journey of human development.

We are constantly changing right from conception till old age and this change is something that spans throughout the lifespan and this is referred to as the "Lifespan perspective"

Every phase is affected by the preceding one and in turn affects the next phase of development.

Development involves several changes, quantitative changes and qualitative changes.

Quantitative changes are those in number or amount of something and involves for example. increases in height, weight, vocabulary, and so on.

Qualitative changes, on the other hand, involve changes in structure kind or organization. When new phenomena occur, for example, an infant moving from no speech to babbling or from crawling to walking.

However, development does not only mean growth, it also involves decline associated with old age.

Human development is generally considered in terms of three domains, the physical cognitive and the psychosocial domain

The physical domain involves the growth of the brain and body sensory systems, motor skills, health and so on.

The cognitive domain involves thinking, learning, memory, language, reasoning which are all mental changes that occur and the psychosocial domain involves personality, social relationships and emotions.

As we ponder about our development and the lifespan perspective, there are so many questions that intrigue us.

Are there universal patterns of development? Do people all over the world change in the same manner? Why are we different from others? What is it that makes us similar to many people and so on?

Well, developmental psychology aims to answer these questions by emphasizing certain characteristics of development.

What are these characteristics and how do they influence our development?

First. Development is multi directional. This means that there is no single path that development takes. Innumerable changes occur through the course of the lifespan. Some components expand, whereas others shrink. Some traits appear, whereas others disappear. For example, the swimming reflex of a new born baby is lost after about six months.

There is also increase, decrease or zigzag in development. However capacities like wisdom appear in adulthood due to the synthesis of knowledge with experience. Sometimes change occurs rapidly and dramatically. For example, physical development during the prenatal stages is really phenomenal because from a microscopic cell you get an entire baby which is about 21 inches in length.

The pace of direction of change varies. Every characteristic follows its own path.

It is pertinent to note here the concepts of the critical period and the sensitive period.

The critical period is a time during development when a given event will have its greatest impact. For example, if a pregnant woman is exposed to X Rays during the first trimester of pregnancy, then the fetus will show ill effects.

On the other hand, Sensitive period is one ,in which development occurs more easily, but not exclusively during that period. For example, language is learned more easily in childhood as compared to older ages.

Second characteristic is that development is multi contextual. Each individual's life is moulded by context and events.

The physical context involves climatic conditions, the noise levels, the population density, resources, facilities available,

The family context will involve family, environment, size of the family, ages of the family members. relationships among family members and so on.

The community context, on the other hand, will include rural, urban, or whether one comes from a homogeneous background or a multi ethnic background.

Each of these contexts is influenced by historical, economic, social and cultural factors and absorb three kinds of influences:

Normative age graded influences are biological and environmental influences that are similar for individuals in a particular age group. People who are born and go through life at about the same time are likely to experience similarities in biological processes such as pivotal changes or opportunities for formal education, opportunities for occupations, and so on are referred to as cohorts.

Normative history graded influences are those that are common to people of a particular generation because of historical events. For example, people when experience the freedom struggle or changes brought about by technology.

Non normative or highly individualized events. These are personal, unusual occurrences that have had a major impact on a person's life. For example, death of a parent or moving to another place or some traumatic experience as one browser or even or an unusual joyful experience.

Development is multicultural. Developmental psychology recognizes that one's culture markedly influences how one thinks acts and reacts. People in a particular culture share beliefs, values, norms and expectations, and these may differ from those of other cultures. For example, individualistic cultures encourage curious, talkative children, whereas in collectivistic cultures, obedience and subservience is valued.

However, multicultural environments may sometimes experience clashes on the basis of ethnic, national and family identity.

Development is multidisciplinary. The study of human development requires insights and contributions from various fields. For example, Biology and Medicine will contribute the biological aspects of life. The influence of communities and the interactions between its members will be explained by fields such as psychology, sociology, anthropology and so on.

And finally, development is plastic. Plasticity means that an individual has the capacity for change throughout life. Although the change may be slower or faster at certain ages people can and do change throughout the lifespan.

Development is an ongoing ever changing interaction between the body and the mind, the individual and the environment. We cannot assume that as one ages, one may not be able to learn and benefit

from exposure to varied experiences. Research has shown that abilities can be improved with practice and training even in old age. However, there are certain limits.

Having understood the basic principles of the field of human development, let us now turn to research methods in the field of developmental psychology. Basically, there are three methods of study the cross sectional method, the longitudinal method, and the cross sequential method.

In cross sectional studies, several groups of people are studied simultaneously and compared on a variety of measures such as IQ, memory, personality, developmental milestones, and so on. Now the advantage of this cross sectional study is that data are collected over a short span of time. The entire study of many different groups of people can be conducted within a few months at the most. So the researcher does not have to wait for subjects to grow up or become old. Secondly, it is a quick and relatively inexpensive way of studying development. However, cross sectional studies also suffer from its own drawbacks. First of all, a cross sectional study does not provide information about how individuals change over time and therefore cannot establish age effects.

Secondly, since different groups of people are compared to one another, Cross sectional study. Provides information on differences in development between groups, but it overlooks individual differences within a group.

Thirdly, since individuals born at different periods in time have varying opportunities for social interaction, education, employment and so on, cohort differences may affect the results powerful.

A longitudinal study is a research strategy in which the same group of individuals is studied over a period of time repeatedly on all the measures that one needs to study.

This research design has two major strengths. Since the same people are studied repeatedly, the researcher can track individual patterns of continuity and change in development. It establishes how the same individuals change with age. Also, it provides information on how early experiences contribute to later development.

However, longitudinal studies suffer from their own drawbacks, and one major drawback is the attrition rate. Attrition rate means dropout rate of participants. Since the study continues for several years, it is difficult to maintain the original sample since the people may move off somewhere else, or they may lose interest in the study, or they may die. Secondly, it is very expensive and time consuming, so funding is an issue.

Thirdly, the samples tend to be biased. Those who remain in the study tend to be more conforming. Or, they will have more stable lifestyles or they come from higher socio economic backgrounds compared to the ones we have left the study.

And finally, repeated testing makes the participants familiar with testing procedures. And this powerfully affect the results.

Now, keeping in mind the merits and demerits of both the longitudinal and the cross sectional studies A hybrid design has emerged, which merges the two approaches which is the cross sequential studies and longitudinal studies.

In which several groups of people are studied and these are then followed up over a number of years.

The cross sequential study enables us to separate cohort effects from age related effects.

Also, in a cross sequential study, a comparison is made between individual differences and developmental change.

Another advantage is that since it is a superimposition of the cross sectional on the longitudinal study, it provides a more complete picture of development as compared to cross sectional or longitudinal studies, since this is the merging of the two approaches.

However, cross sequential studies also have their own disadvantages. And one major disadvantage or drawback is that it is highly complex and involves a lot of time and effort.

Besides, it requires large number of participants, large amount of data to be collected over a long period of time.

Besides that, interpreting the findings and analyzing the data, first of all requires sophistication.

Before selecting a particular method of studying human development, the researcher needs to take into account the pros and cons of the various methods.

We come to the end of this module.

For a detailed reading you may refer to these resources.

Thank you.