

Two Factor Theory of Intelligence

Dr. Ramendra Kumar Singh

Assistant professor

PG Department of Psychology

Maharaja College, Arrah

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Background

Intelligence is an important higher functioning, which denotes aggregate or global capacity of the individual to act purposefully, thinks rationally and deals effectively with the environment. A lot of theories were developed by the scholars to explain the nature of intelligence. Among them one of the theory is Two Factor theory. This theory is proposed by British psychologist **Spearman in 1904.**

It comes under the **Factorial theories** of intelligence, because it explains the nature and organization of intelligence on the basis of factors. Spearman developed his ideas about the nature of intelligence on the basis of findings of several studies done through a statistical technique called **factor analysis**. Spearman considers intelligence as a general capacity of the individual to think rationally and problem solving. Due to this his theory comes under the **Lumpers** group of factorial theories.

According to Spearman structure of intelligence is consists of two factors named as:

- ❑ **The general ability known as general factor (g-factor)**
- ❑ **The specific ability known as specific factor(s-factor)**

general factor(g-factor):- It is referred as mental energy. According to Spearman in every individual a general capacity is found which will help the individual to perform all the mental or intellectual activity, this capacity is called g-factor. According to Spearman higher the magnitude of g factor within the individual , more the individual will be efficient to perform the mental functioning, So the intellectual capacity of the individual will be mainly depend upon the value of –g factor. Another characteristic of the g factor is that it is a innate factor, it is not affected by the learning or past experience of the individual.

Second characteristic of the g -factor is that its value is fixed within an individual for whole life time, although individual difference in magnitude of this factor is possible. So, there is following characteristics of the g-factor:

It is universal inborn abilities

It is constant

It is general mental ability

It is used in every mental activity

Greater the g in the individual , greater is his success in life.

Specific factor(s-factor):

According to Spearman each mental activity requires some specific characteristics or each mental activity have some amount of uniqueness. This will be provided by the specific factor. Specific factor have three characteristics:

- ❑ It's nature is changeable.
- ❑ It's magnitude is not fixed within an individual for all the time.
- ❑ It is affected by the learning and past experiences

Spearman provides a lot of evidences in support of the g and s- factor on the basis of correlation method. On the basis of these studies he told that higher the involvement of g-factors within two mental work higher the value of correlation.

Criticisms

1. Thurstone, 1938 and Guilford, 1967 opposed this theory on the basis of number of factors. According to them intelligence is made up of more than two factors.
2. A very strong criticism against the two factor theory has been put forward by Thorndike. According to him, the inter correlation studies by Spearman were too small to test the question of a common factor. Therefore he opposed the existence of a characteristic such as general intelligence.