

DERMATOGLYPHICS: A TOOL FOR COMBATING MENTAL HEALTH CHALLENGES

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Abstract—Five of the 10 leading causes of disability worldwide are mental problems which have a dreadful impact on individuals' lives. In a country like India, stress of finding a right career and fear of ending up opting for wrong choices is a matter of serious concern. In order to combat this, counsellors may employ a variety of facilitative techniques to increase awareness and assist in planning as well as decision making in relation to their careers. Likewise, they can make use of assessment tools to help the learners identify their career interests, skills, abilities, and learning styles. One of these assessment tools is the Dermatoglyphics Multiple Intelligence Test (DMIT) invented by Dr. Howard Gardner in 1983. This descriptive study brings into light the importance of DMIT techniques in career mapping and planning, helping students as well as corporates setting their goals, understanding their personality and helping them in identifying their abilities.

Keywords: mental health, India, dermatoglyphics, mental health statistics, career planning, WHO, DMIT.

Introduction

Dermatoglyphics, coined by Cummins and Midlo in 1926, refers to the scientific study of intricate pattern and fingerprints, where “derma” refers to skin and “glyphic” means carvings. It is involved with the analysis of impressions of papillary ridges of fingertips which are confined to palms, soles and toes. These epidermal ridges are genetically determined and their establishment takes place in third month of intrauterine life and their pattern remains constant throughout the life so that the likelihood of mental health could be predicted. Each individual has unique fingerprinting pattern which holds a value in the diagnosis of genetic disorders as well as identification of an individual. It has also been observed that genetics and environmental forces have a vital role in the genesis and development of an individual's fingerprints. Friction ridge patterns are grouped into three distinct types- loops, whorls and arches- each with unique variations, depending on the shape and relationship of the ridges. Exam stress and anxiety have become a norm and has almost acquired a permanent space in the lives of students these days. Recent statistics from WHO indicate how stress is playing the role of a havoc in our lives as more and more people are being diagnosed with stress-related disorders with the numbers going as high as one in every 10 individuals.

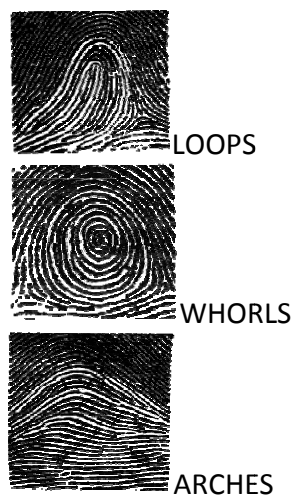
Another report published by the WHO says that the suicide rate in India in 2015 at 15.7/100,000 is higher than the regional average of 12.9 and the global average of 10.6. Suicide is the leading cause of death among those aged 15–29 in India.

The economic burden of neuropsychiatric disorders outweighs other non-communicable diseases and it can be as high as 4% of the gross national product (GNP) among which nearly 2% was accounted for treating mentally ill people.

Students in the country, pressurized by the syllabus and the fear of failure, often end up taking extreme measures. And even if exam stress is handled somehow, it is the stress of finding the right course and college that becomes the next big headache haunting both the students and their parents. Students often end up depending upon their parents and teachers for career guidance based on their experience and the limited trends they have seen over their life span. Therefore, in country like India, where unemployment, underemployment, overseas employment is common, a serious focus on this matter is very important.

In counseling the youths for their career development and eventual placement, counselors may employ a variety of facilitative techniques to increase self-awareness, career awareness, career exploration, and planning and decision making. Likewise, they make use of assessment tools to help the learners identify their career interests, skills, abilities, and learning styles. One of these assessment tools is the Dermatoglyphics Multiple Intelligence Test (DMIT) invented by Dr. Howard Gardner in 1983. Multiple Intelligence (MI. Theory) was especially invented for Education and Psychology Problem Solution. Every child is born with different types of multiple intelligence. With the help of these, a person's personality, innate intelligence distribution, preferred learning and communication styles and hidden talents can be evaluated and classified. Dermatoglyphics is complex. Each finger represents different abilities; each print has different interpretations. One's potential can be generally identify based on the shape of fingerprints. For more accurate results, the number of stripes (quantization) and Atd angle (the

angle between the a-triradius (under the index finger, the axial triradius (near the wrist), and the d-triradius (under the little finger) need to be measured. Each quantization represents one million genes; the more the quantization, the higher the ability. The smaller the Atd angle, the higher the sensitivity for learning.



2. Objective

To understand the effectiveness of dermatoglyphics in reducing the mental health challenges faced by students and adults in India in regards to career planning.

3. Methodology

The study involved searching the PUBMED, Google Scholar and WHO databases while some information were collected by direct searching using Google search engine regarding dermatoglyphic using the keywords like DMIT, dermatoglyphics, mental health, career planning, fingerprint analysis. Reference lists of identified articles were explored for additional articles. In maintaining the focus of the review original research and reviewed articles were included and relevant statistical data and information were used as a secondary database and a descriptive study base was constructed.

4. Result and discussion

The contribution of mental disorders to the total disease burden has doubled in India from 1990 to 2017 of which majority had depression and anxiety disorders and it is very shocking that thousands of students commit suicide every year just because of over-pressure of their education indicating the need for implementing effective strategies and tools to control this increasing burden.

One such tool to foster a movement for mental health is the dermatoglyphics multi-intelligence test (DMIT) which is a type of aptitude and intelligence test where the level of a person who is taking the test is determined to know the activities that the child can perform better. This test has many variables as it gives more diverse pictures of intelligence and aptitude keeping in mind the different types of intelligence a

person may possess. This test has a wider scope in comparison with the normal IQ test as it deals with multiple kinds of intelligence and skills.

Fingerprint analysis is a scientific technique helping unfold individual's potential using personality types, learning types, potential of brain, intelligence and sensitivity index. Development of fingerprint of a person and the brain is directly related. Hence, the study of fingerprints of individuals helps in determining the various types of intelligence.

It is noteworthy to mention that teachers and parents strongly agree that the DMIT results can be used as a baseline data and has a strong impact in helping them to identify the children's inborn talents, strengths, learning styles, skills, potentials which will help them to provide an important base to make smart and appropriate career choices. DMIT helps individual augment their already existing skillsets and prepare them for an enhanced learning experience.

5. Conclusion

In a nutshell, this review brings out the importance of DMIT techniques in career planning for students as well as corporates. After reviewing and analyzing the various papers and information, it is clear that DMIT has proved to be a powerful tool as a measure for students' goal setting behavior and their present and future lifestyle and expectations. It is needed to strengthen their self-confidence and self-esteem by identifying their innate abilities and guiding them to have a more happy and satisfied life.

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