"We cannot continue to behave as though mind and brain are separate in our psychotherapeutic work."

"The ability of the gene to direct the manufacturing of specific proteins in any given cell is regulated partly in response to the environmental factors."

Shree Vinekar MD

The 1990s, known as the "decade of the brain," witnessed significant advancements in brain research, thanks to emerging neuro-imaging techniques. This presentation by Shree Vinekar MD seeks to explore the integration of some of these findings to comprehend the healing mechanisms potentially at play when psychoanalysis and yoga are practiced for psychological growth and mental well-being.

The presentation delves into the transformative potential of psychotherapy and yoga in shaping both the software (cognitive processes) and hardware (brain structure) of the brain. Recent studies indicate that psychotherapy can effectively modify gene expression and synaptic connections, thereby influencing the brain's structure and function. It emphasizes that the separation between mind and brain should not be regarded as distinct within the context of psychotherapeutic work. Similarly, the neural implications of yogic techniques, including meditation, should be acknowledged as impacting brain functions.

Furthermore, the presentation briefly touches upon the intricate neurobiological processes underlying psychotropic medications, encompassing changes in neurotransmitters and neuroreceptors. However, the comprehensive understanding of the mechanism, spanning from primary to tertiary actions and resulting behavioral outcomes, remains elusive due to technological limitations.

Interestingly, the conceptual framework presented here is relevant to contemporary epigenetic research, which supports a revision of the 'Modern Synthesis' of evolutionary theory and the *Weismann Barrier*. The latter principle maintains that hereditary information can only be transmitted from genes to body cells, and not in reverse. In this respect, Freud's own continued belief in the inheritance of acquired characteristics and a role for Lamarckian factors in human biological and cultural evolution may be supported.

Michael Poff