

## CARLHILLIER, OD FCOVD March 27 - 30, 2019 - Keynote Presentation

## Granada, Spain

Attention - Memory - Perception - Cognition

Attention, memory, perception, and cognition constitute who we have been, who we are and what we will be in the future. This course investigates the various aspects of attention and memory: the foundation for perceptual and cognitive development. It is a practical course that covers testing, diagnosis, etiology and treatment.

Developmental Optometry's clinical range of testing and treatment modalities makes our profession to test and train attention and memory skills unique. Weaving attention, memory, perceptual, and cognitive treatment plans into existing treatment protocols will provide the most complete opportunity for visual development.

## Mirror Neurons and Embodied Cognition

The knowledge of the world is inside and outside of our whole body - our brain is just one part of our body, and our brain is certainly not the only source for cognitive activity. This is what is meant by "Embodied Cognition."

We don't touch the world; it has already embodied itself within us. We don't make contact with the world through vision, we are the world already, and becoming more aware of our visual process is one way that we can realize this.

The world is inherently rich with potential knowledge. Our physical presence as the world has already allowed for embodied cognitive skills to develop, and our preliminary working knowledge of the world begins before birth.

Future knowledge is dormant. It awaits our attention and intention to learn of it. We can derive more knowledge from it by acting within it, sometimes by choice and sometimes by obligation. The main platform that we utilize to engage the world is our visual system. The embodied individual is aligned with the possibility of engaging the world, to derive more knowledge and develop deeper meaning from it. Just looking at an object will engage the body in preparation for interaction with it.

There is a special sub-set of Embodied Cognition – The Mirror Neuron System. Just looking at another person allows for somatic resonance and empathy for them. Combining and synchronizing the understanding of Embodied Cognition with the Mirror Neuron System will enrich the range and depth of our understanding of vision and development.