

Investigating intersubjectivity during infancy through behavioral expressions, physiological markers, hormonal parameters and psychosocial factors:

In honor of Colwyn Trevarthen

Intersubjectivity presupposes the transfer of emotional expressions between interactive partners (e.g. infant-mother) and is based on the temporal, spatial, physiological and psychological coordination that takes place between them. During the life period from conception to early childhood, combined genetic and environmental influences are critical perinatal parameters related to organogenesis, development and disease predisposition while they may be explanatory factors for neurodevelopmental disorders.

Within this context, the purpose of the speech is to highlight the importance of intersubjectivity for human development. During the talk, findings from cross-cultural and contemporary multi-factorial interdisciplinary and longitudinal studies concerning various dimensions of intersubjectivity will be presented. The findings concern: a) the study of behavioral expressions (e.g. emotional facial expressions, infant-directed speech, imitation, vocal expressions) in infants' free interaction with different Significant Others (mother, father, grandmother, grandfather) taking into account the family composition as well as the cultural context, b) the comparative investigation of physiology parameters (neonatal heart rate variability) during the transitional periods from relaxation to free newborn-parent interaction, and vice versa, between full-term and premature newborns, and c) the investigation of the relationship between psychosocial (postnatal depression, family functioning, social support, maternal perception of intersubjectivity and attachment) and biological/physiological factors (melatonin/heart rate variability) during the first year of life of preterm infants.

The above findings will be discussed in relation to designing early intervention programs to promote infant development and support parental mental health.