

The Parental and Micro- Environmental Model (PMEM):
A conceptual framework for exploring factors that impact on
early adult/child relationships.

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Thriving communities and the foundations of our nation are built on strong families, reciprocal relationships and the healthy development of our children (McNeil, 2010; Shonkoff, 2012; Shonkoff & Garner, 2011).

Some ponderings about working and researching with families of young children.



Does your research explore the contextual nuances and micro-context in which families live, work and play?

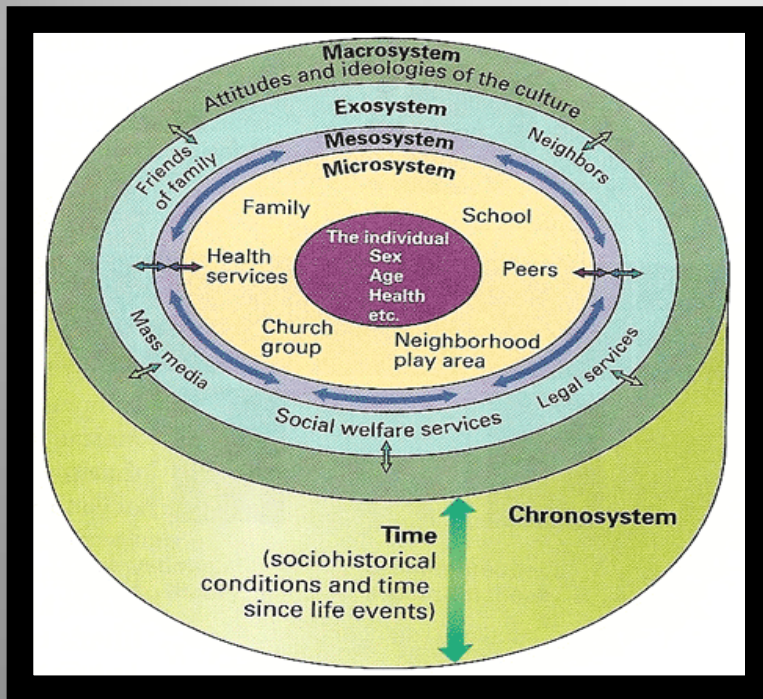
What approach could support a more comprehensive exploration of the history, values/attitudes/skills/behaviours of parents?

What could we be doing better to understand parent support structures and trigger points for toxic stress in order to then strengthen capacity in their relationships and support for children?

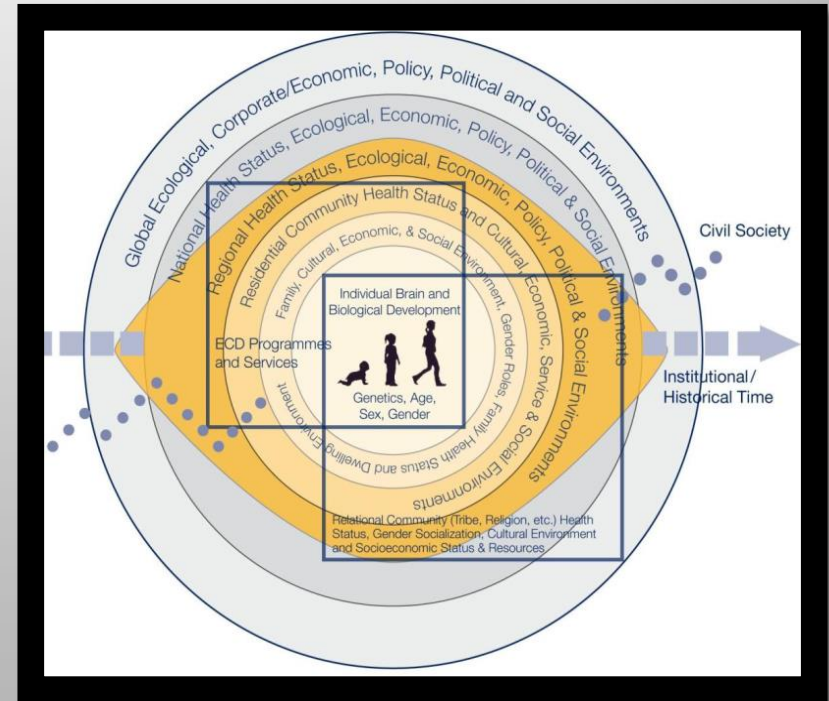
- How could understanding more about the family context, adult thinking and values contribute to more effective community capacity building and intervention strategies?

Models for making sense of the nurturant environment

Social ecological models have been embraced in a range of disciplines, including public health, education, the behavioural sciences and environmental planning, to help make sense of the dynamic interplay of factors both socially, temporarily and environmentally that impact on human behaviour ([Brooks-Gunn, Duncan, & Maritato, 1997](#); [Irwin, Siddiqi, & Hertzman, 2007](#); [Jamner & Stokols, 2000](#)).



Source: Santrock 2007



Source: Total Environmental Assessment Model of Early Childhood Development (TEAM-ECD) framework developed for the WHO Commission on Social Determinants of Health (Irwin, Siddiqi & Hertzman, 2007).

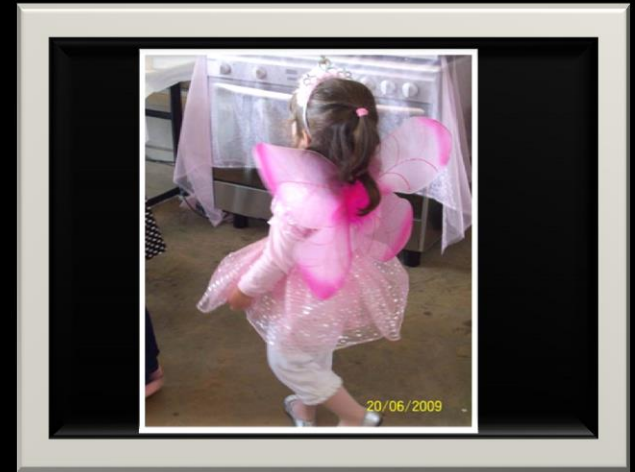
Nurturant environments: Environments where children “grow, live, and learn” and are of most significant impact on their development “grow, live, and learn” (includes parents, caregivers, family, and community) ([Irwin et al., 2010, p. 4](#)).

A rationale for investigating the “ecological niche of the family environment”



“Micro-environment” - the ecological niche defined by a specific location or physical boundary where a person is most heavily influenced or spends a large amount of time.

Ecological niche, “includes not only the immediate context in which a person is embedded, but also the contexts in which that context is situated” ([Davidson & Birch, 2001, p. 160](#)).



Human behaviour does not occur in a social vacuum, rather it is influenced by a complex set of determinants that emerge from multiple environments, including that of the micro-environment of the family home ([Kolar & Soriano, 2000](#)).

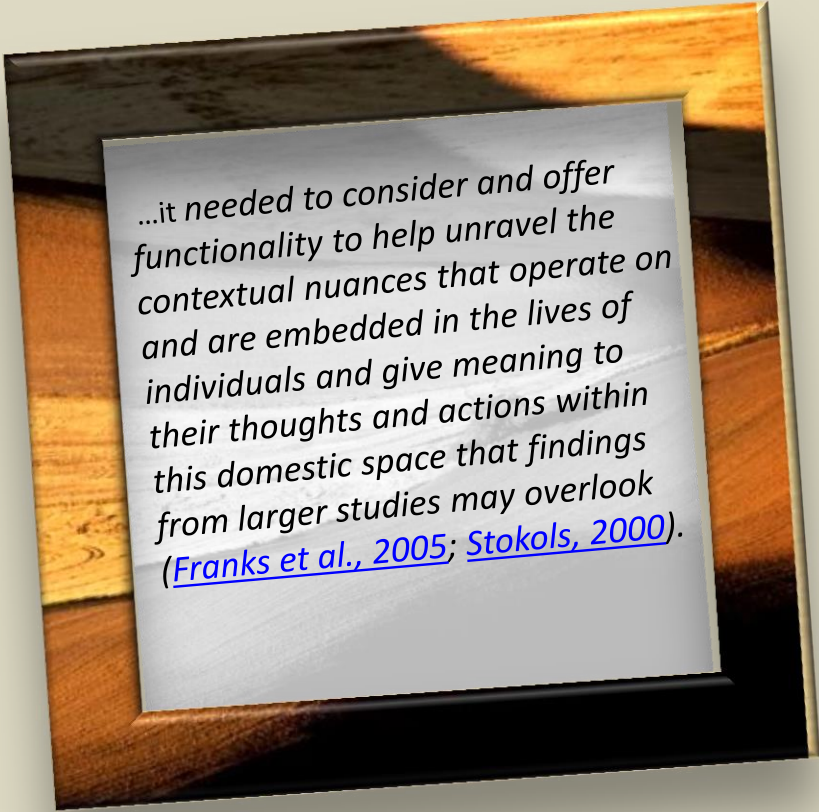




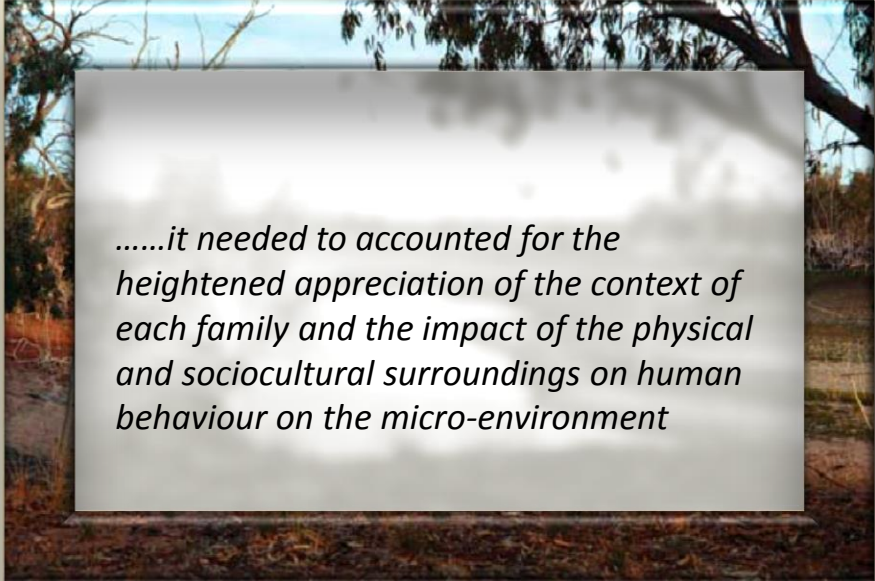
The PMEM model needed to be robust enough to acknowledge factors impacting on the micro-environment for each family, while also recognising that each micro-environment was, in itself, a micro-context with its own set of unique conditions and circumstances that operate on and are embedded in the lives of individuals which in turn give meaning to their thoughts and actions actions, and the inter-relationships between the various social, institutional, and cultural contextual ([Stokols, 1992](#)).



The ultimate test of the utility of the *Parental and Micro-Environmental Model (PMEM)* was that:



...it needed to consider and offer functionality to help unravel the contextual nuances that operate on and are embedded in the lives of individuals and give meaning to their thoughts and actions within this domestic space that findings from larger studies may overlook ([Franks et al., 2005](#); [Stokols, 2000](#)).

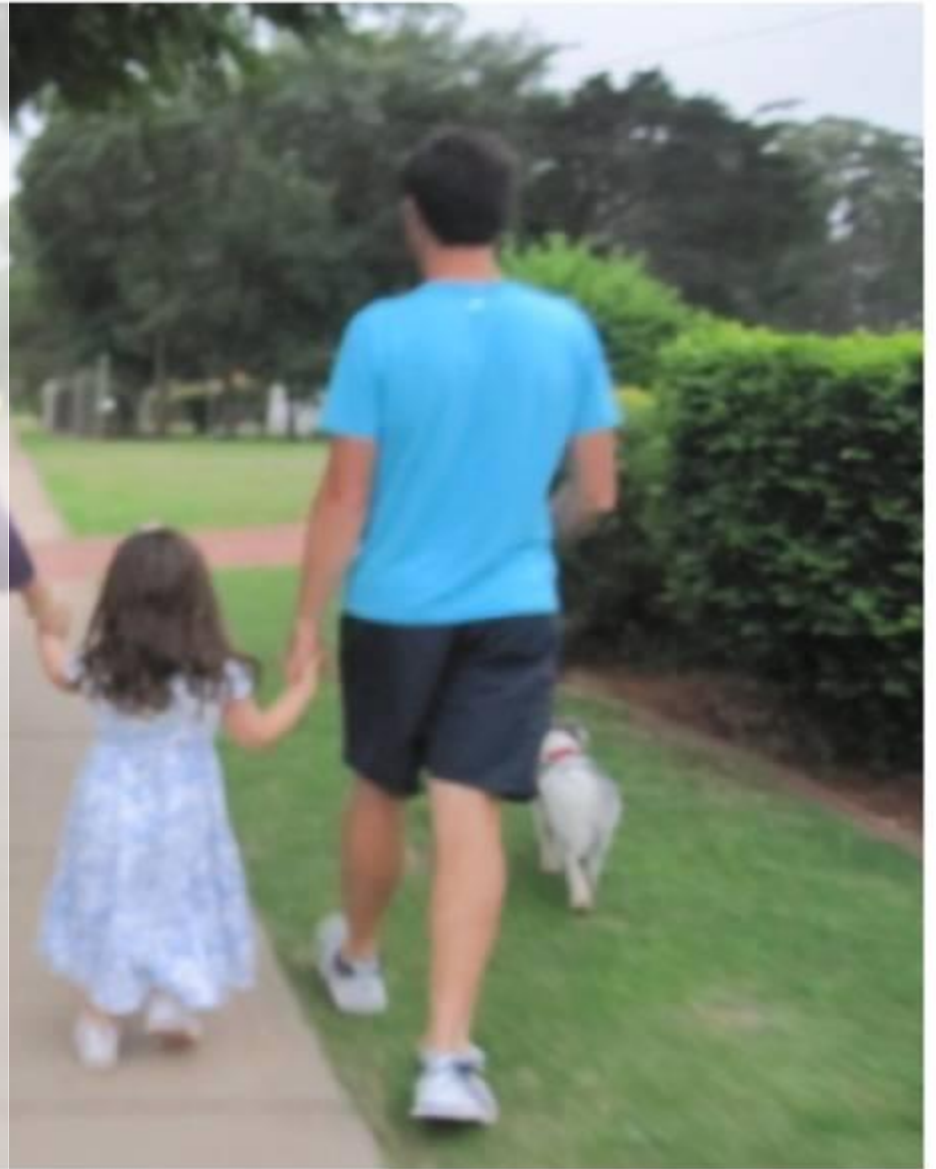


.....it needed to account for the heightened appreciation of the context of each family and the impact of the physical and sociocultural surroundings on human behaviour on the micro-environment


Context in this case is understood to be a “unique set of conditions or circumstances that operate on or are embedded in the life of an individual, group, a situation, or an event that gives meaning to its interpretation” ([Brown & Reushle, 2010, p. 37](#); [Oers, 1997](#)).

Contextual nuances: The environments, behaviours and circumstances that are altered due to being located in a particular context – and present within each family micro-environment.


Privileging this nuanced space and intentionally illuminating individual complexity means paying pay closer attention to the micro-environment and the “power of context”, whilst still accounting for the multiple layers of influence on a phenomenon and changes that occur over time.




Components of the model - The rationale for investigating the “ecological niche of the micro-environment”




To “walk in another’s shoes” and see domestic spaces and the “intimate realm” of young families through their eyes ([Irwin et al., 2010](#)).



To help shed light on the complexities and subtleties of the everyday and the pervasive influence that multiple factors exert on parental practices, understandings and values in supporting with children within the family home .



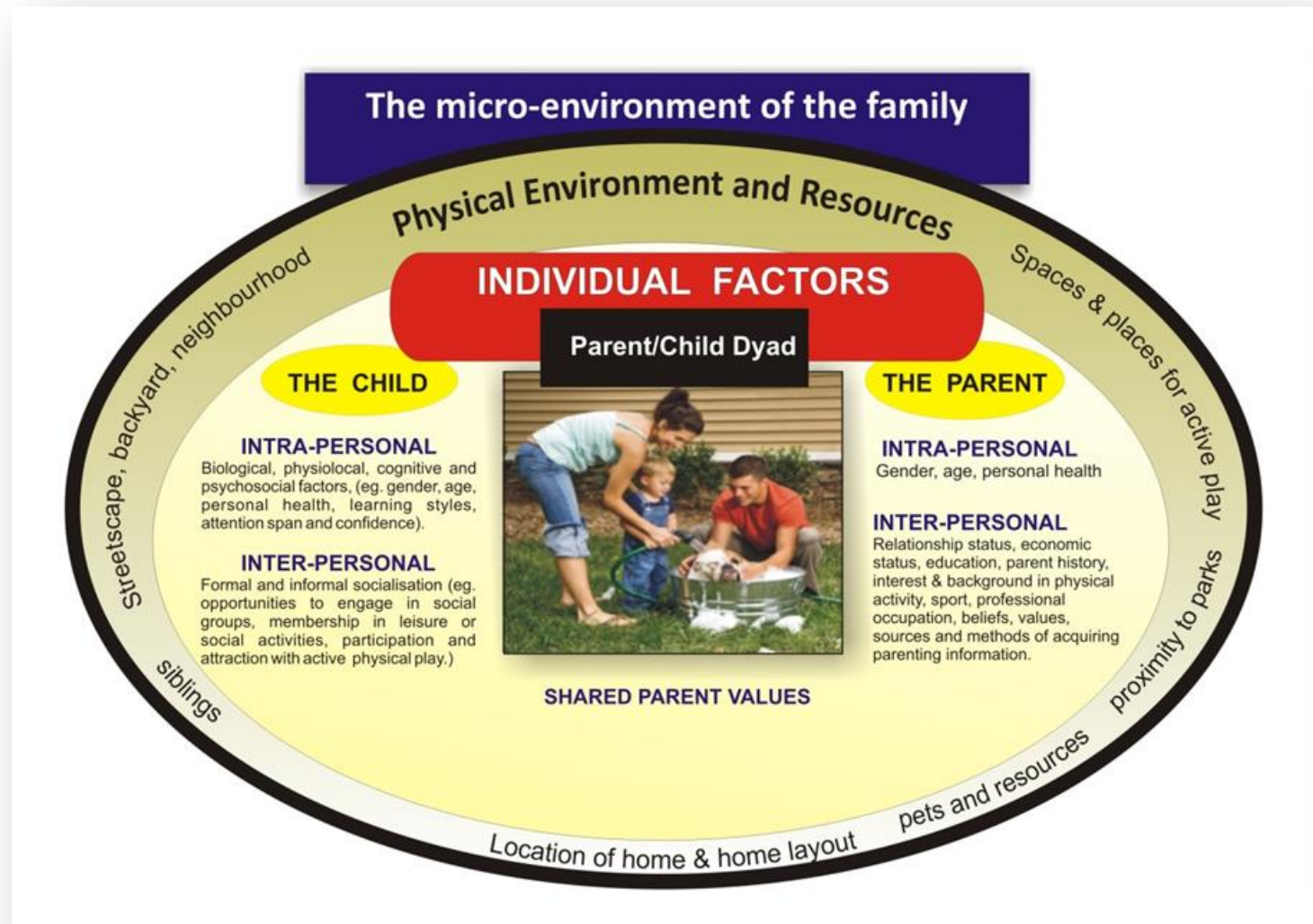
To unravel the contextual nuances that operate on and are embedded in the lives of individuals and give meaning to their thoughts and actions within this domestic space that findings from larger studies may overlook ([Franks et al., 2005](#); [Stokols, 2000](#)).



Acknowledges the vital role that parents and other significant adults play as ‘gatekeepers’ in the formative stages of a young child’s development ([Campbell et al., 2008](#); [Hinkley, Crawford, Salmon, Okely, & Hesketh, 2008](#); [The National Obesity Taskforce Secretariat, 2003](#); [Trost & Loprinzi, 2010](#)).

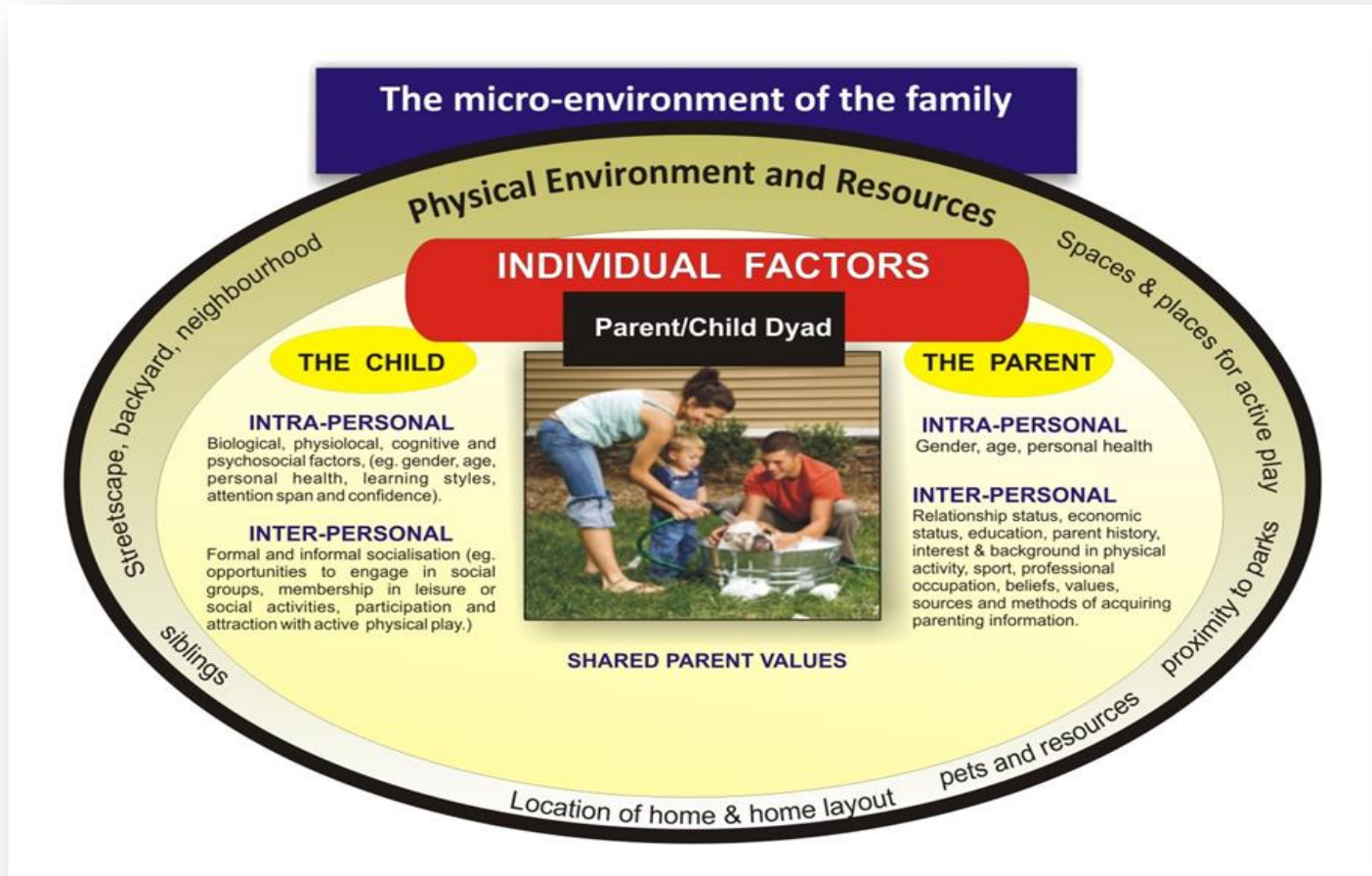


**The importance of the
adult/child dyad**

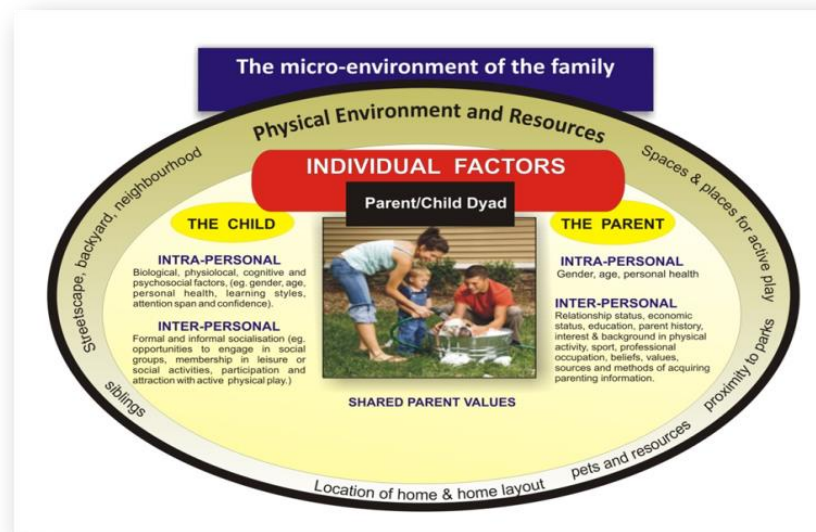


The micro-environment, a component of the PMEM model, is a valuable reference point for interpreting data and understanding various factors of influence unique to a family. The first two considerations that make up the central focus of the multidimensional framework of the PMEM model include: (1) the physical environment and resources; and (2) the individual characteristics of the child and parents.

The micro-environment of **the family home** is only one of a number of environments that influence individuals, but represents a significant place in which the parent (primary carers)/child dyad are located.



Although only one part of a multiple level system, Siddiqi, Irwin, & Hertzman ([2007](#)) reinforce that investigating more proximal systems are of critical importance to better understanding factors impacting on the way parents in young families live, think, engage with others and how this then translates into behaviours of parenting, health, and nurturant conditions.



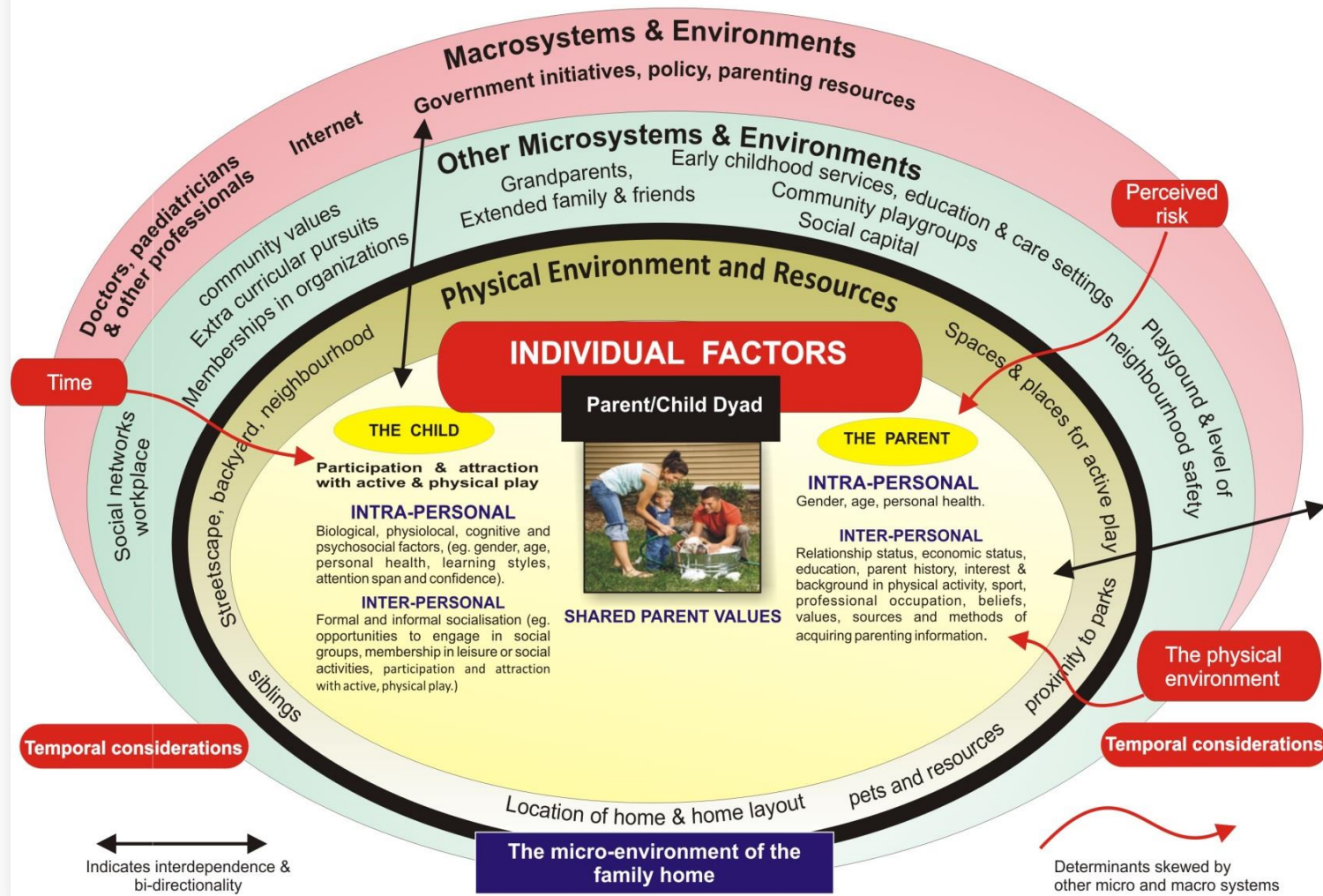
Component 1

- Recognises one of the most salient features of the micro-environment of the family- *the physical environment and resources* (including immediate personal, physical and economic resources present within the family home).

Component 2

- The second component within the micro-environment is that of individual characteristics of the child/children and parent/carer. Childhood factors could include their temperament, health, interests, intrapersonal details and interpersonal characteristics. For parents, factors could include parental health, ages, marital status, income, education, background and prior social history of relationships and family life. Note that component 2 includes detailed consideration of intra and interpersonal factors. It would also include their work status/occupation, parenting beliefs and values.

Recognition for other spheres of influence in the PMEM model

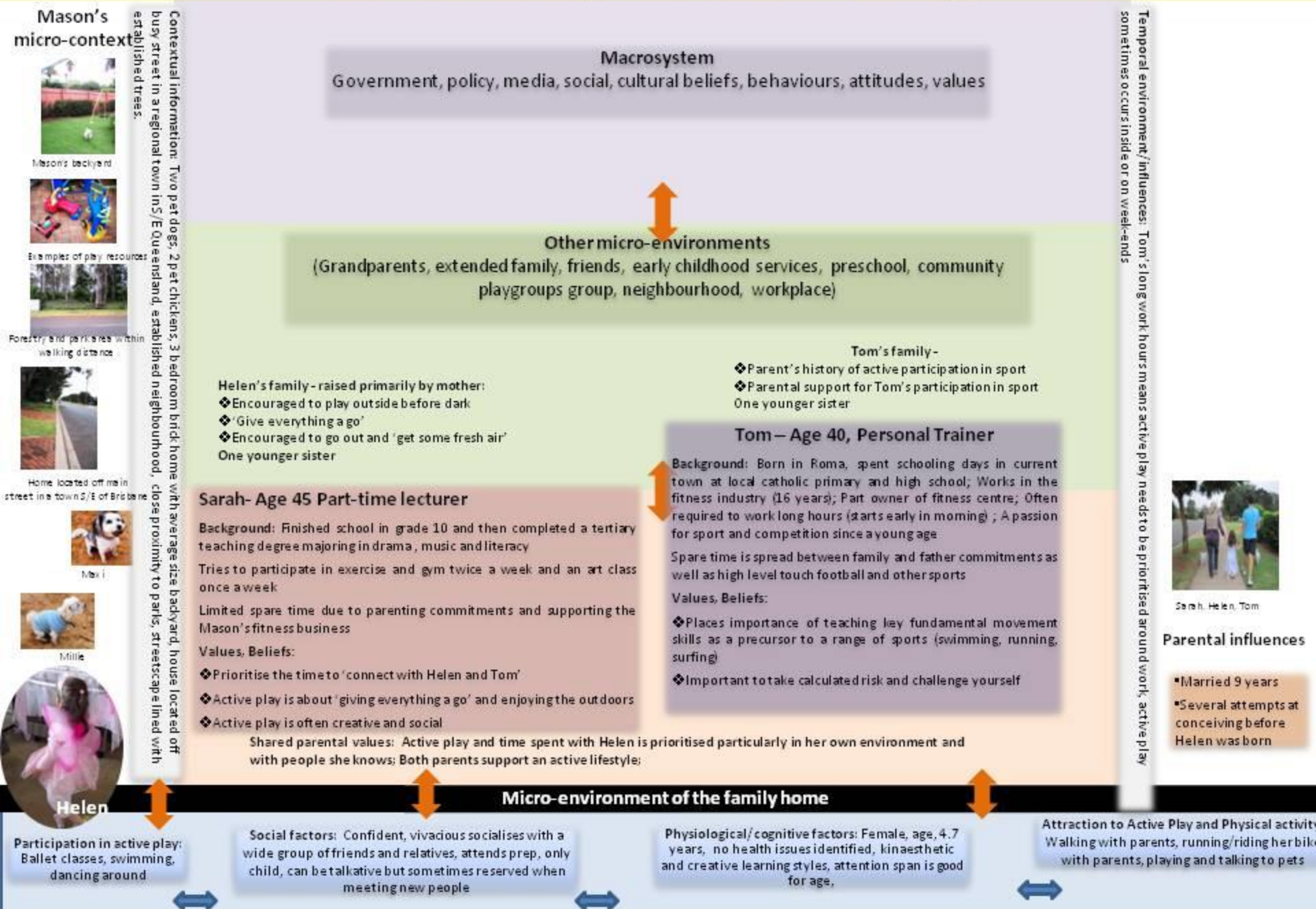


Human behaviours do not occur in a social vacuum, rather they are influenced by a complex set of determinants that emerge from multiple environments including that of the micro-environment of the family home ([Kolar & Soriano, 2000](#)).

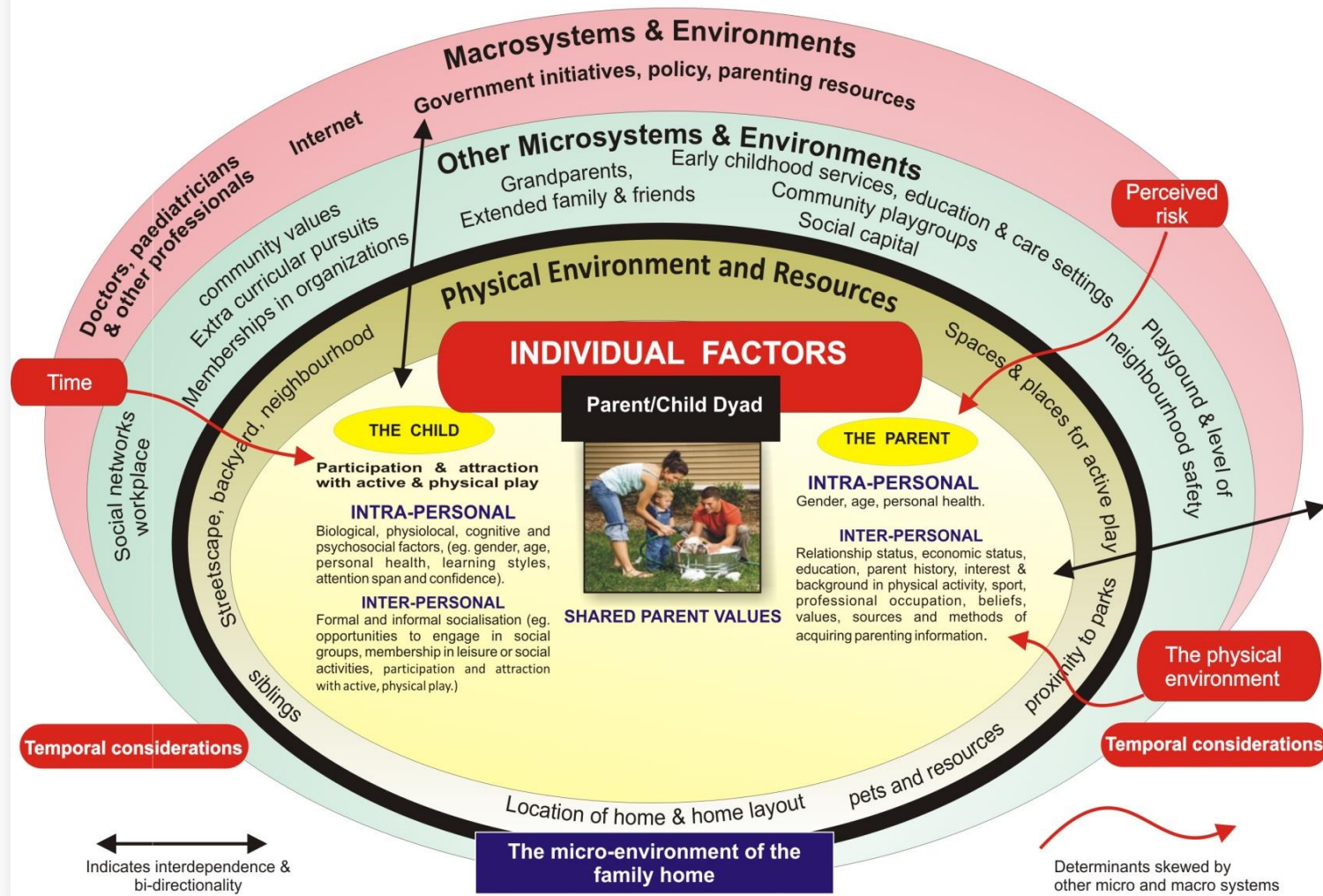


Meet the Masons: Sarah, Tom & Helen

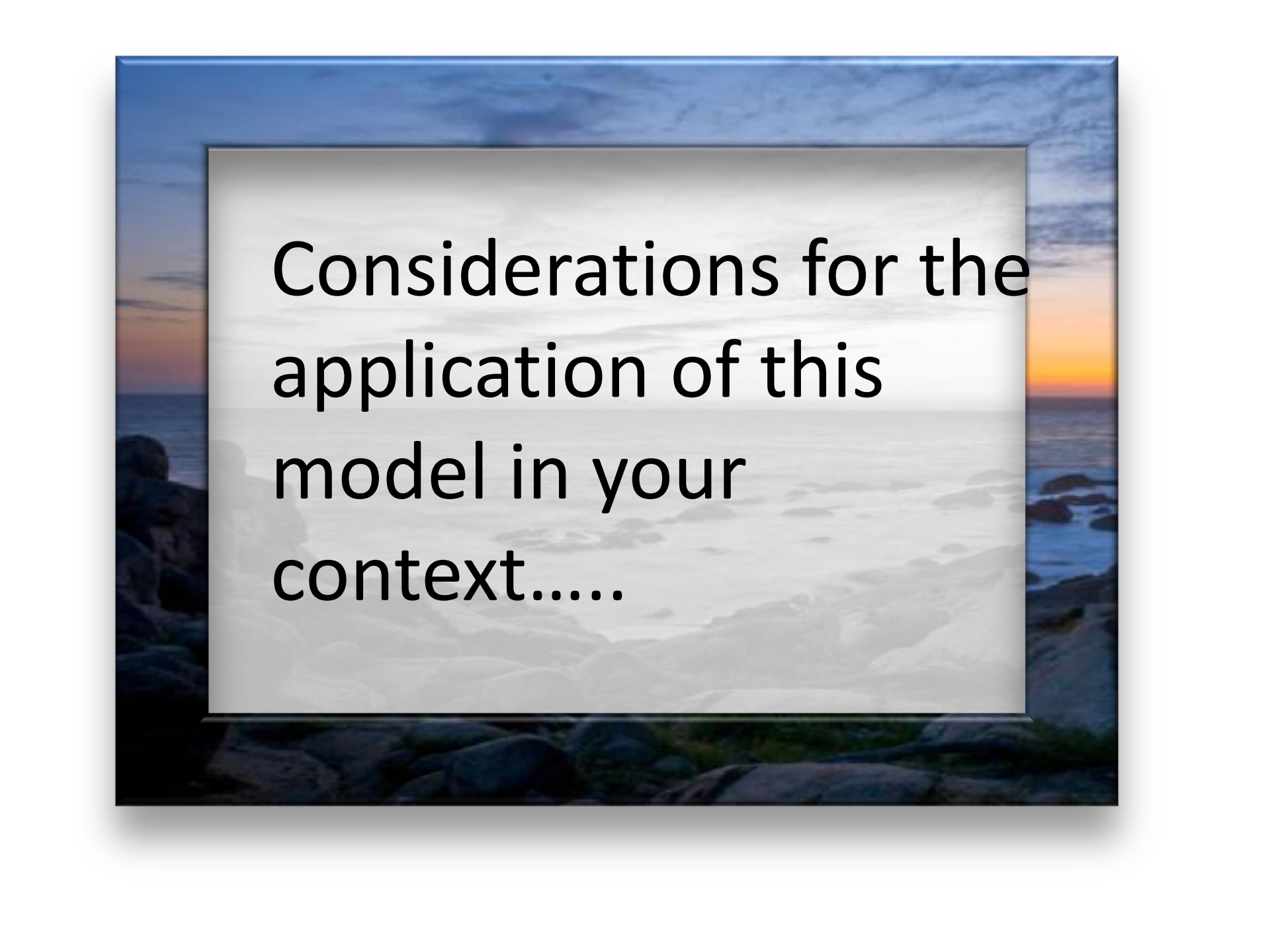
Multidimensional model of parental influence on children's active play




Recognition for other spheres of influence in the PMEM model



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Considerations for the
application of this
model in your
context.....



The development of our human capital is our future, the development of a healthy population is our future (Shonkoff, 2013).

In order to help position families in terms of a strong future we need to better understand them and the nuances that occur at the micro level. This involves developing and enhancing the skills of the people who work or research with young children and their families.