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Maternal States of Mind, Reflective Function, Maternal Behavior, and the Mother-Infant Attachment Relationship

Greg Moran
University of Western Ontario, gmoran2@uwo.ca

Erinn Hawkins
University of Western Ontario, ehawkin2@uwo.ca

David R. Pederson
University of Western Ontario, pederson@uwo.ca

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Greg Moran, Erinn Hawkins, and
David R. Pederson

Department of Psychology
University of Western Ontario

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With more than a little assistance from…

- Sandi Bento, Research Coordinator
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- Elspeth Evans
- Acia Blank
- Anneli Sepa
- Deanne Pederson

- and others, including *countless London area mothers and their babies*
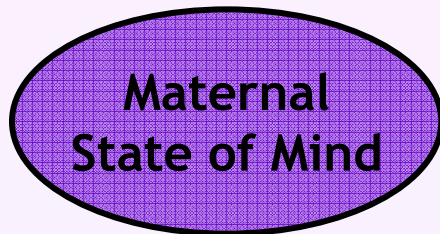
Our Research Program – Overview

Attachment – The First Relationship
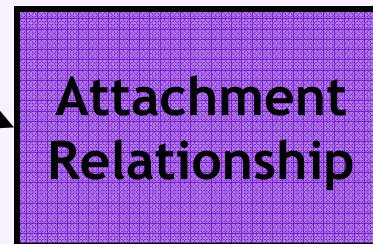
Its origins in the first year and in the mother's childhood experience

The First Relationship

Maternal Childhood Experience *Trauma*

Future Relationships

Organized and Disorganized Attachment Relationships
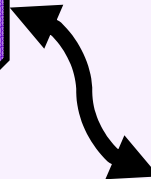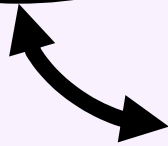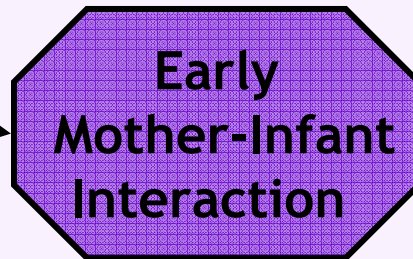
Internal Working Model of Attachment

Maternal State of Mind

Early Mother-Infant Interaction

Attachment Relationship

Maternal Representations and the Transmission of Attachment

- Elaborating on the place of representations in the broader picture

- Beyond the AAI-based Internal Working Model (IWM)

- Need for greater specificity - Representation of
  - different types of relationships
  - Different relationships of the same type

A Reconceptualization of the Developmental Path
View I

Level of Individual
Mental Representation

Level of
Interaction

Maternal
Representation
of
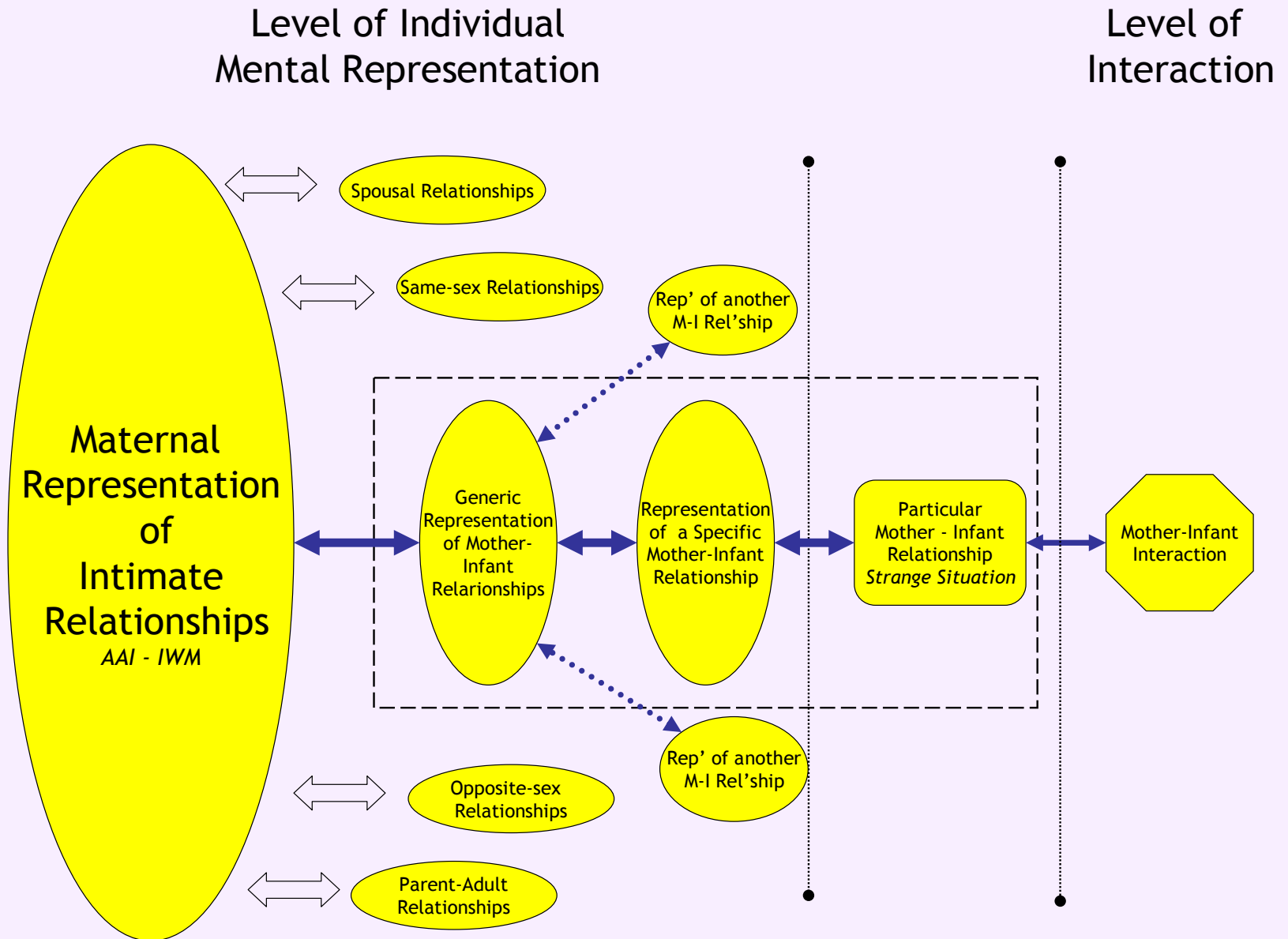Intimate
Relationships
AAI - IWM

Spousal Relationships

Same-sex Relationships

Rep' of another
M-I Rel'ship

Generic
Representation
of Mother-
Infant
Relarionships

Representation
of a Specific
Mother-Infant
Relationship

Particular
Mother - Infant
Relationship
Strange Situation

Mother-Infant
Interaction

Rep' of another
M-I Rel'ship

Opposite-sex
Relationships

Parent-Adult
Relationships

Maternal Representation

Maternal Generic Representation of Mother-Infant Relationship

M's Representation Particular Mother - Infant Relationship

Mother-Infant Interaction

M's Representation Rel'ship with Another Child

M's Representation Rel'ship with Another Child

Mother-Infant Relationship *Strange Situation*

I's Representation of Mother-Infant Relationship

Infant Generic Representation of Caregiver-Infant Relationship

Infant Representation

The Concept of Reflective Function

- Fonagy's introduction of the concept
  - Capacity to understand one's own and others actions in terms of mental states
  - Thus, allows for adaptive adjustment of interactive behaviour and, therefore,
  - Critical element in the process underlying the development of secure attachment relationships

Current Conceptualization of Role of Reflective Function in Transmission of Attachment

Reflective Function *mediates* *impact of maternal state of mind and the attachment relationship*
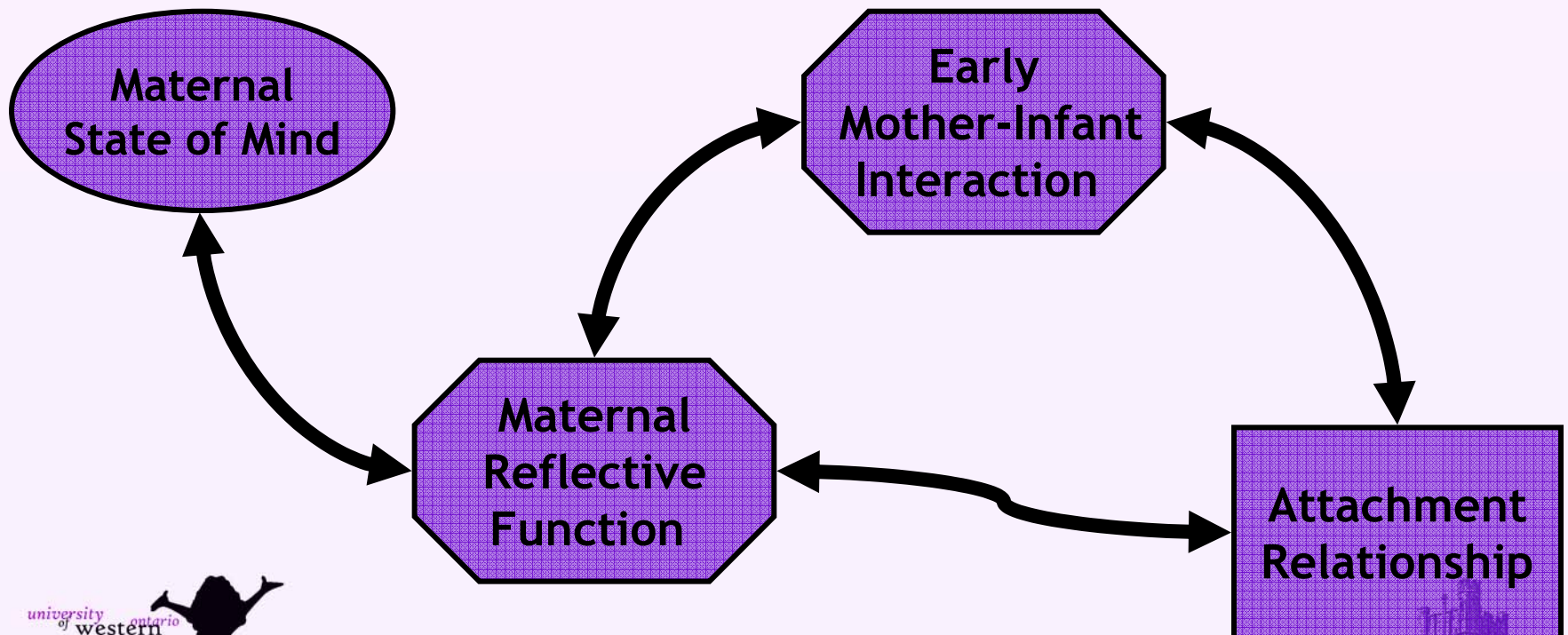
Research to Date on Reflective Function

- Basic Predictions
  - Reflective Function/Attachment Security
    - Fonagy et al, 1991:
      - Secure attachment associated with higher RF
    - Slade (2005)
      - Replicate FonagyRF/AAI
  - Reflective Function/AAI-State of Mind
    - Fonagy et al (1998)
      - Coherency and Autonomy associated with higher RF
    - Replicated by Slade et al (2005)

Research to Date – RF as Mediator

- Slade et al. (2005)

    - Statistical evidence of Reflective Function as mediator between AAI-IWM and Attachment Security is inconclusive

- But even if established, begs question of link between RF and quality of interactive behaviour – Maternal Sensitivity

    - Grienenberger et al. (2005)

        - Problems

            - AMBIANCE and Security...??!!

Problems with Current Model

- What is determinant of maternal behaviour – IWM or RF?
- Are IWM and RF invariantly linked?
- IWM and RF are distinct concepts!
    - Qualitative vs quantitative influences...

- A re-conceptualization of the place of Reflective Function in the transmission of attachment – back to basics

Reformulated Model: RF as Moderator
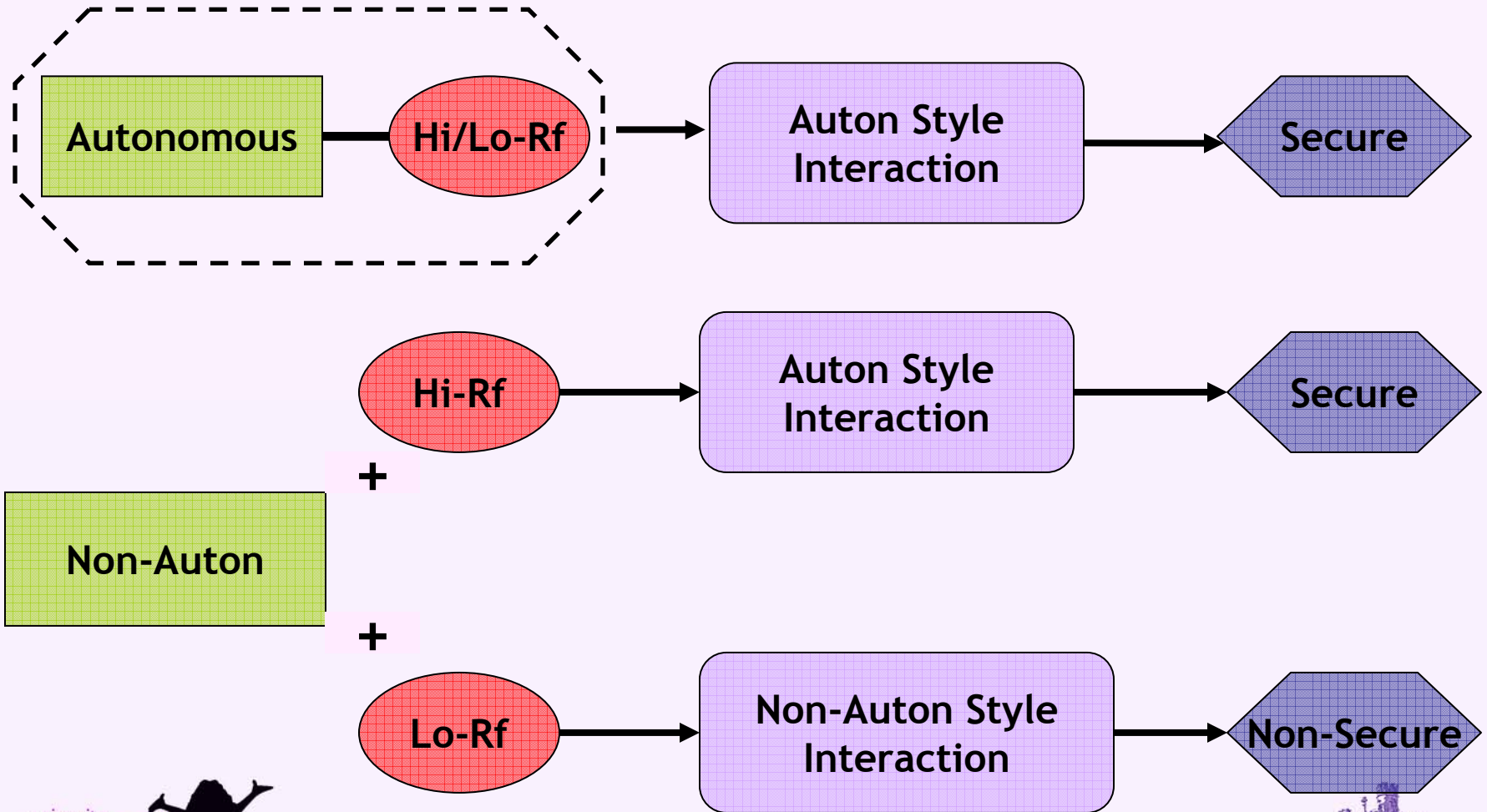
The Current Study

- 60 mothers and infants
  - community sample avg M age – 31 yrs
  - I age - 13 mos at SSP and home visit; AAI within following 6 mos
- Strange Situation (12-14 mos)
- Mat Beh Q-Sort in home (12-14 mos)
- Adult Attachment Interview (12-18 mos)

Interactive Behaviour Domains

- Conceptually related to specific state of mind

- Scales based on rational selection of MBQS items

  - Autonomous → Responsive (Secure)
  - Dismissive → Withdrawn (Avoidant)
  - Preoccupied → Intrusive (Ambivalent)

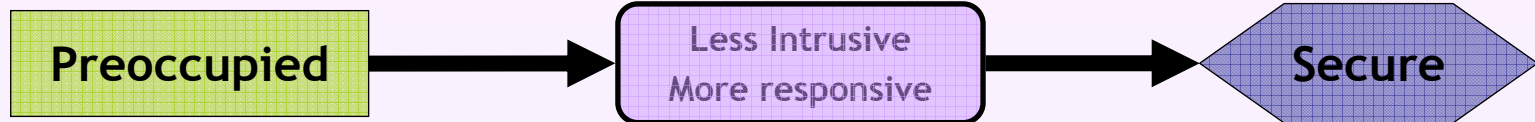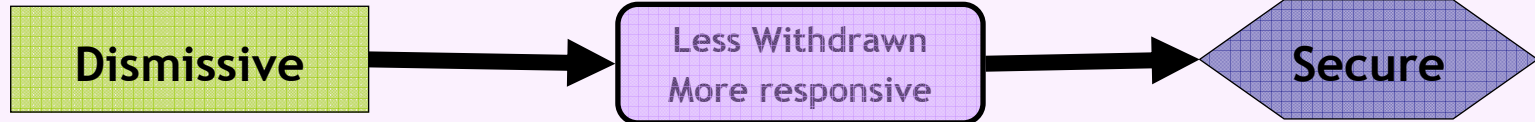- Viewed as IWM-driven pattern of interaction

Specific Predictions

RF Independent

Autonomous → Responsive → Secure

High RF: Dyadic Shaping

Dismissive → Less Withdrawn More responsive → Secure

Preoccupied → Less Intrusive More responsive → Secure

Low RF: IWM Driven

Dismissive → Withdrawn → Avoidant

Preoccupied → Intrusive → Ambivalent

Results of the Current Study

- Basic Inter-correlations
  - RF and Autonomy or coherency
    - Failure to replicate

  - RF and Attachment security or rel'ship quality
    - Failure to replicate

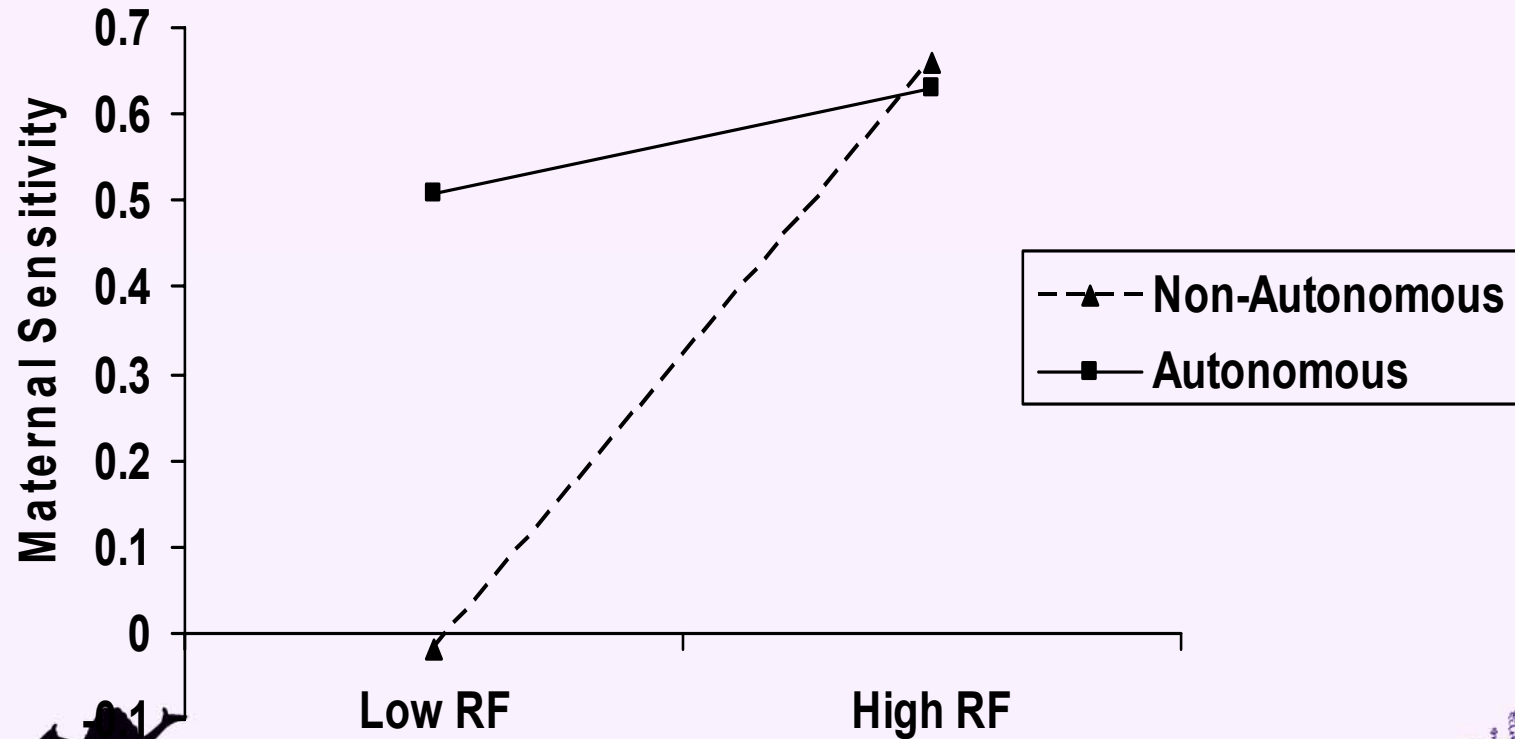 - Why???

Results of Current Study

- Exploring the Moderator Model

Reflective Function and:

- 1. MBQS Sensitivity - Autonomous vs non-Autonomous

- 2. Quality of interactive behaviour (Behavioural Domains) by AAI categories and Reflective Function... and

- 3. Quality of the attachment relationship

Maternal Sensitivity and Reflective Function

Correlations Between Maternal Reflective Function and Maternal Behavioral Domains by Adult Attachment Interview Classification
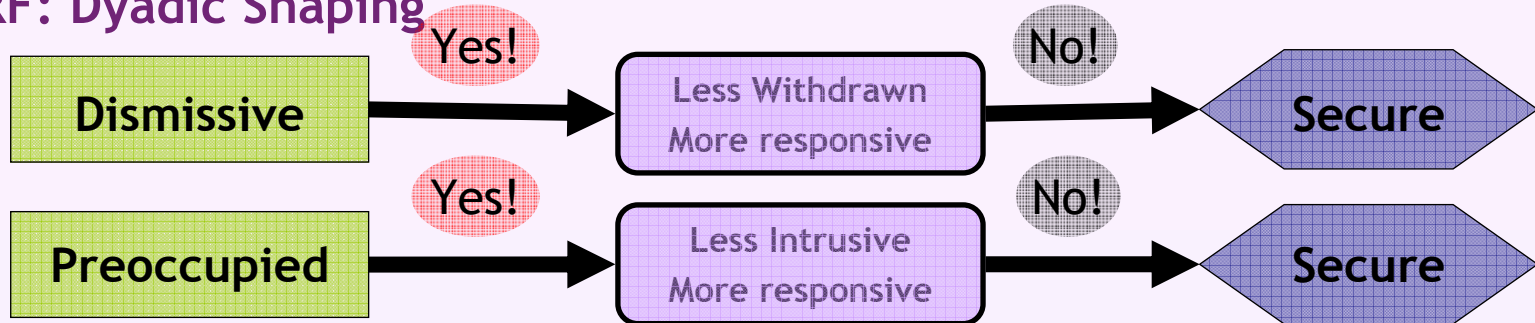
AAI Category	Maternal Behavioral Domains		
	Responsive	Withdrawn	Intrusive
Autonomous	.06	-.11	-.14
Dismissing	.49*	-.62**	-.19
Preoccuppied	.72	-.73*	-.78*

Overview of Results - Moderation

RF Independent

Autonomous → Yes! → Responsive → Yes! → Secure

High RF: Dyadic Shaping

Dismissive → Yes! → Less Withdrawn More responsive → No! → Secure

Preoccupied → Yes! → Less Intrusive More responsive → No! → Secure

Low RF: IWM Driven

Dismissive → Yes! → Withdrawn → No! → Avoidant

Preoccupied → Yes! → Intrusive → No! → Ambivalent
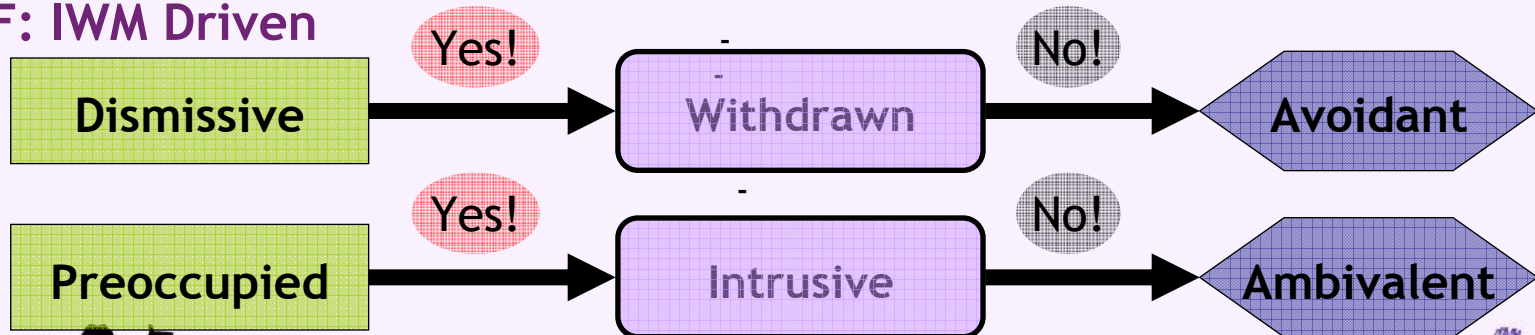
Summary

- Failure to replicate previous findings of simple associations between RF & AAI, and RF & Attach Security
    - Obviously, then, no evidence that RF is a mediator between IWM and Attach Sec
- BUT found strong evidence of RF as moderating impact on IWM as it affects maternal behaviour
    - Especially impressive given that interactive behaviour measured in the home with a totally different instrument

Discussion Points

- Failure to replicate
  - Sample variation – really only 2 other samples studied, or….
  - Coding confound – AAI-trained or sophisticated coders
    - Coding to implicit knowledge of AAI coherence and autonomy….
    - Unusually hi correlations (.73) and could substitute RF for AAI in any results….

- Strong evidence of a model in which RF moderates impact of IWM on maternal behaviour
  - Conceptually coherent and consistent with basic concept of RF and extant attachment theory

Supplementary Slides

Level of Representation

Figure 6

Level of Interaction