3.2 Caregiver-Infant Interactions: Reciprocity and Interactional Synchrony

AQA 7182 · about 55 minutes · Write-in edition

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions.

1 Define 'interactional synchrony' in the context of caregiver-infant interactions and early attachment. Include what behaviours are matched during synchrony.

(Total for Question 1 is 2 marks)

2 A researcher hypothesises that higher caregiver-infant interactional synchrony at 3 months predicts stronger social engagement at 12 months. Identify the appropriate statistical approach to test this hypothesis and justify your choice in one sentence.

(Total for Question 2 is 3 marks)

3 Explain one clear difference between reciprocity and interactional synchrony when describing caregiver-infant interaction. Use an example to illustrate the difference in practice.

(Total for Question 3 is 4 marks)

4 Explain one strength of using detailed video recording when studying caregiver-infant synchrony and one limitation of relying on video recordings for this research.

(Total for Question 4 is 3 marks)

5 Explain why findings that link early synchrony to later attachment quality are correlational and discuss one implication of this for interpreting the results.

(Total for Question 5 is 3 marks)

6 Discuss caregiver-infant interactions in the development of attachment. In your answer refer to reciprocity, interactional synchrony, relevant research such as Meltzoff and Moore and Isabella et al., and evaluate strengths and limitations of this research for understanding early attachment.

(Total for Question 6 is 16 marks)

7 Isabella et al. (1989) observed 30 mother-infant pairs and reported that pairs with higher interactional synchrony in infancy tended to have higher-quality attachment at a later assessment. Briefly state the design type used in this research and identify two limitations of the method in making causal claims.

(Total for Question 7 is 6 marks)

8 Researchers aim to observe fine-grained facial and hand movements in caregiver-infant interactions. Explain three methodological problems that make reliably observing and interpreting these behaviours difficult, and say why each issue matters for research conclusions.

(Total for Question 8 is 6 marks)

Mark scheme · 3.2 Caregiver-Infant Interactions: Reciprocity and Interactional Synchrony

Question 1

identifies interactional synchrony as mirroring or matching of rhythm, facial expressions or body movements between caregiver and infant oe **B1**

states that behaviour is coordinated in time so both partners display similar actions simultaneously oe **B1**

Answer: Interactional synchrony is when caregiver and infant mirror each other's facial expressions, gestures or rhythms so their behaviour is coordinated and matched in timing.

Question 2

identifies correlation as the appropriate statistical approach oe **B1**

justifies that both synchrony and later social engagement are measured variables not manipulated oe **M1**

adds that a correlational test (e.g. Spearman's or Pearson's depending on data level) would assess the relationship between the two measures oe **A1**

Answer: A correlational approach is appropriate because both synchrony at 3 months and social engagement at 12 months are measured variables; use Spearman's or Pearson's correlation depending on the measurement level to assess their association.

Question 3

states a valid difference, e.g. reciprocity is turn-taking and contingent response while synchrony is simultaneous mirroring oe **M1**

explains reciprocity: one partner responds after the other, producing a back-and-forth sequence oe **A1**

explains synchrony: both partners show similar behaviour at the same time, matching rhythm or expression rather than alternating oe **A1**

gives an example illustrating the difference, e.g. reciprocity like a mother smiles then waits for the infant to smile back; synchrony like mother and infant smiling at the same time and making matching movements oe **A1**

Answer: Reciprocity involves turn-taking and contingent responses, with one person responding after the other; interactional synchrony involves simultaneous mirroring of facial expressions, rhythm or movements. For example, reciprocity is a mother who smiles and waits for her baby to smile back before speaking, whereas synchrony is mother and baby smiling and moving together in time.

Question 4

strength: video recording allows slow-motion and repeated viewing to capture subtle synchrony oe **M1**

explains why that is beneficial, e.g. increases accuracy and inter-rater reliability when coding brief gestures oe **A1**

limitation: cameras may alter natural behaviour or miss context outside the frame, reducing ecological validity oe **B1**

Answer: Video allows slow-motion and repeated viewing so subtle matching can be captured reliably, improving accuracy and inter-rater agreement. However, presence of cameras may alter natural behaviour and recordings may miss context outside the frame, reducing ecological validity.

Question 5

explains that studies measure synchrony and later attachment without experimental manipulation, so they are correlational oe **M1**

identifies implication: cannot conclude that synchrony causes better attachment oe **M1**

explains a consequence, e.g. third variables or bidirectional influences may account for the association, so claims about interventions to increase synchrony improving attachment should be cautious oe **A1**

Answer: These studies are correlational because they measure synchrony and later attachment without manipulating variables. Therefore we cannot infer causation; third variables or two-way influences might explain the association, so claims that increasing synchrony will cause better attachment need to be made cautiously.

Question 6

Level 4 Knowledge of caregiver-infant interaction is accurate and detailed, including clear explanations of reciprocity and interactional synchrony and reference to relevant studies. Evaluation is thorough and balanced, addressing methodological and conceptual strengths and limitations and considering implications. Application to research and real-world understanding of attachment is integrated and coherent. Specialist terminology is used appropriately. **13-16**

Level 3 Knowledge is clear with some detail and reference to key studies. Evaluation is evident and mostly balanced, covering several relevant points. Application to the question is present but may be less fully developed. The answer is generally well organised and uses psychological terms appropriately. **9-12**

Level 2 Knowledge is present but may be limited in depth or include minor inaccuracies. Evaluation is superficial or partial, and application to studies or implications is limited. The answer may be unevenly organised and use specialist terms inconsistently. **5-8**

Level 1 Knowledge is minimal and may be descriptive rather than explanatory. Evaluation is minimal or absent. Application to studies is limited or missing. Answer lacks structure and specialist terminology is largely absent or incorrect. **1-4**

Level 0 No creditable content. **0**

Indicative content:

- AO1: Define reciprocity as contingent, turn-taking exchanges where caregiver and infant respond to each other's signals; define interactional synchrony as temporal mirroring of facial expressions, gestures and rhythms.
- AO1: Describe Meltzoff and Moore's (1977) neonatal imitation findings suggesting infants can match adult facial and manual gestures, supporting early social responsiveness.
- AO1: Describe Isabella et al. (1989) observation linking higher early synchrony with better-quality later attachment, noting observational longitudinal design.
- AO2: Apply these concepts to explain how reciprocity may build mutual responsiveness and predict sensitivity in caregiving, and how synchrony may support emotional attunement and regulation between caregiver and infant.
- AO3: Methodological strengths include detailed observation, use of video to increase reliability, and longitudinal designs that track developmental outcomes rather than single timepoints.
- AO3: Methodological limitations include difficulties reliably coding rapid infant actions, potential observer bias, the problem of inferring intention from fleeting movements, and the limited ecological validity of some lab procedures.
- AO3: The correlational nature of links between synchrony and attachment means causality cannot be assumed; third variables such as parental sensitivity, temperament or socioeconomic factors may explain associations.
- AO3: Consider alternative explanations, for example innate infant temperament driving both synchrony and later attachment, or caregiver characteristics shaping both behaviour and attachment outcomes.
- AO3: Practical implications include potential for interventions that train caregiver sensitivity and responsiveness, but caution is needed because evidence for causal benefit is limited.
- AO3: Evaluate generalisability issues: many studies use small or culturally restricted samples, so findings may not apply across societies; note supporting and challenging replications where relevant.

Question 7

identifies the design: correlational or longitudinal observational study oe **M1**

explains that the study measured synchrony in infancy and later attachment quality without manipulating variables oe **A1**

identifies the limitation: correlation does not establish causation oe **M1**

explains that a third variable (e.g. caregiver temperament or socioeconomic factors) could account for both high synchrony and better attachment oe **A1**

identifies another limitation: small sample size or observer bias in ratings oe **M1**

explains the consequence: small samples reduce generalisability and observer bias can inflate apparent links between synchrony and attachment oe **A1**

Answer: Isabella et al. used an observational, correlational/longitudinal design, measuring synchrony in infancy and later attachment without manipulating variables. A limitation is that correlation does not prove causation; a third variable such as caregiver temperament could explain both high synchrony and better attachment. A further limitation is the small sample and potential observer bias, which reduce generalisability and may exaggerate the apparent relationship.

Question 8

identifies a problem: difficulty of reliably coding rapid, subtle infant movements oe **M1**

explains why this matters: rapid movements may be missed or inconsistently recorded, reducing inter-observer reliability and making findings less trustworthy oe **A1**

identifies a second problem: inferring intentionality from infants' movements is problematic oe **M1**

explains why this matters: matching movements may be reflexive or coincidental rather than intentional social responses, so conclusions that infants intentionally coordinate with caregivers may be unwarranted oe **A1**

identifies an additional observational issue: observer effects or unnatural lab settings affecting behaviour oe **M1**

explains why this matters: infant or caregiver behaviour may change under observation or in an unfamiliar setting, reducing ecological validity and limiting generalisability oe **A1**

Answer: Problems include the difficulty of reliably coding rapid, subtle infant movements, which can reduce inter-observer reliability if different coders miss or record actions differently; and the problem of inferring intentionality from brief movements, since matching can be reflexive or coincidental rather than deliberate social coordination. An additional issue is observer effects or artificial lab settings, which can alter behaviour and reduce ecological validity, meaning findings may not reflect normal caregiver-infant interaction.