## Autobiographical Memory

Think back to your childhood and try to identify your earliest memory. How old were you? Most people are not able to recount memories for experiences prior to the age of three years, a phenomenon called infantile amnesia. The question of why infantile amnesia occurs has intrigued psychologists for decades, especially in light of ample evidence that infants and young children can display impressive memory capabilities. Many find that understanding the general nature of autobiographical memory, that is, memory for events that have occurred in one's own life, can provide some important clues to this mystery. Between ages three and four, children begin to give fairly lengthy and cohesive descriptions of events in their past. What factors are responsible for this developmental turning point?

Perhaps the explanation goes back to some ideas raised by influential Swiss psychologist Jean Piaget—namely, that children under age two years represent events in a qualitatively different form than older children do. According to this line of thought, the verbal abilities that blossom in the two year old allow events to be coded in a form radically different from the action-based codes of the infant. Verbal abilities of one year olds are, in fact, related to their memories for events one year later. When researchers had one year olds imitate an action sequence one year after they first saw it, there was correlation between the children's verbal skills at the time they first saw the event and their success on the later memory task. However, even children with low verbal skills showed evidence of remembering the event; thus, memories may be facilitated by but are not dependent on those verbal skills.

Another suggestion is that before children can talk about past events in their lives, they need to have a reasonable understanding of the self as a psychological entity. The development of an understanding of the self becomes evident between the first and second years of life and shows rapid elaboration in subsequent years. The realization that the physical self has continuity in time, according to this hypothesis, lays the foundation for the emergence of autobiographical memory.

A third possibility is that children will not be able to tell their own "life story" until they understand something about the general form stories take, that is, the structure of narratives. Knowledge about narratives arises from social interactions, particularly the storytelling that children experience from parents and the attempts parents make to talk with children about past events in their lives. When parents talk with children about "what we did today" or "last week" or "last year," they guide the children's formation of a framework for talking about the past. They also provide children with reminders about the memory and relay the message that memories are valued as part of the cultural experience. It is interesting to note that some studies show Caucasian American children have earlier childhood memories than Korean children do. Furthermore, other studies show that Caucasian American mother-child pairs talk about past events three times more often than do Korean mother-child pairs. Thus, the types of social experiences children have do factor into the development of autobiographical memories.

A final suggestion is that children must begin to develop a "theory of mind"—an awareness of the concept of mental states (feelings, desires, beliefs, and thoughts), their own and those of others—before they can talk about their own past memories. Once children become capable of answering such questions as "What does it mean to remember?" and "What does it mean to know something?" improvements in memory seem to occur.

It may be that the developments just described are intertwined with and influence one another. Talking with parents about the past may enhance the development of the self-concept, for example, as well as help the child understand what it means to "remember." No doubt the ability to talk about one's past represents memory of a different level of complexity than simple recognition or recall.

Paragraph 1: Think back to your childhood and try to identify your earliest memory. How old were you? Most people are not able to recount memories for experiences prior to the age of three years, a phenomenon called infantile amnesia. The question of why infantile amnesia occurs has intrigued psychologists for decades, especially in light of ample evidence that infants and young children can display impressive memory capabilities. Many find that understanding the general nature of autobiographical memory, that is, memory for events that have occurred in one's own life, can provide some important clues to this mystery. Between ages three and four, children begin to give fairly lengthy and cohesive descriptions of events in their past. What factors are responsible for this developmental turning point?

1. The word "ample" in the passage is closest in meaning to（3）

* surprising
* convincing
* plentiful
* questionable

2. According to paragraph 1, infantile amnesia has intrigued psychologists because （4）

* the ability to recount memories prior to three years of age seems to be connected to intelligence in adulthood
* psychologists do not understand why some people are able to recount memories from before the age of three years, while others are not able do so
* psychologists do not understand the connection between infantile amnesia and autobiographical memory
* although psychologists have evidence that infants have memory abilities, most people cannot remember life events that happened before the age of three years

3. According to paragraph 1, what is the evidence that a child has developed autobiographical memory?（2）

* The child is able to remember past events from before the age of three years.
* The child is able to describe past events in a sufficiently lengthy and cohesive manner.
* The child is aware that he or she does not remember experiences from before the age of three years.
* The child is able to give a basic description of the nature of autobiographical memory.

Paragraph 2: Perhaps the explanation goes back to some ideas raised by influential Swiss psychologist Jean Piaget—namely, that children under age two years represent events in a qualitatively different form than older children do. According to this line of thought, the verbal abilities that blossom in the two year old allow events to be coded in a form radically different from the action-based codes of the infant. Verbal abilities of one year olds are, in fact, related to their memories for events one year later. When researchers had one year olds imitate an action sequence one year after they first saw it, there was correlation between the children's verbal skills at the time they first saw the event and their success on the later memory task. However, even children with low verbal skills showed evidence of remembering the event; thus, memories may be facilitated by but are not dependent on those verbal skills.

4. In paragraph 2, why does the author provide the information that children with low verbal skills showed evidence of remembering a past event?（1）

* To provide evidence that memories do not depend only upon verbal skills
* To challenge the idea that one year olds are too young to form memories
* To argue that the memory of one year olds depends only on action-based codes
* To suggest that Piaget later revised his findings on the correlation between memory and verbal ability

Paragraph 3: Another suggestion is that before children can talk about past events in their lives, they need to have a reasonable understanding of the self as a psychological entity. The development of an understanding of the self becomes evident between the first and second years of life and shows rapid elaboration in subsequent years. The realization that the physical self has continuity in time, according to this hypothesis, lays the foundation for the emergence of autobiographical memory.

5. The word "reasonable" in the passage is closest in meaning to（2）

* consistent
* sufficient
* apparent
* deep

6. The word "elaboration" in the passage is closest in meaning to（1）

* development
* specialization
* use
* transformation

7. According to paragraph 3, what is the relationship between autobiographical memory and the development of an understanding of the self?（3）

* Autobiographical memory aids in the development of an understanding of the self.
* Children possess an understanding of the self when they can talk about past events in their lives.
* The realization that the self continues through time may aid in the onset of autobiographical memory.
* The development of autobiographical memory helps children gain an understanding of their roles in their social relationships.

Paragraph 4: A third possibility is that children will not be able to tell their own "life story" until they understand something about the general form stories take, that is, the structure of narratives. Knowledge about narratives arises from social interactions, particularly the storytelling that children experience from parents and the attempts parents make to talk with children about past events in their lives. When parents talk with children about "what we did today" or "last week" or "last year," they guide the children's formation of a framework for talking about the past. They also provide children with reminders about the memory and relay the message that memories are valued as part of the cultural experience. It is interesting to note that some studies show Caucasian American children have earlier childhood memories than Korean children do. Furthermore, other studies show that Caucasian American mother-child pairs talk about past events three times more often than do Korean mother-child pairs. Thus, the types of social experiences children have do factor into the development of autobiographical memories.

8. All of the following are mentioned in paragraph 4 as ways in which parents help their children understand the structure of narratives EXCEPT （3）

* talking with their children about past events
* telling stories to their children
* having their children repeat stories back to them
* showing their children that they think memories are important

9. According to paragraph 4, the studies of Caucasian American and Korean children suggest which of the following?（4）

* Autobiographical memories develop similarly across all cultures.
* Parents from different cultures tell their children different kinds of stories about the past.
* Children's pleasure in hearing stories varies from culture to culture.
* The kinds of interactions children have with their parents affect the development of autobiographical memories.

Paragraph 5: A final suggestion is that children must begin to develop a "theory of mind"—an awareness of the concept of mental states (feelings, desires, beliefs, and thoughts), their own and those of others—before they can talk about their own past memories. Once children become capable of answering such questions as "What does it mean to remember?" and "What does it mean to know something?" improvements in memory seem to occur.

10. According to paragraph 5, what evidence is there that a "theory of mind" is a factor in the development of autobiographical memory?（4）

* Even children who are not aware of their mental states are still able to talk about past events.
* Autobiographical memory decreases when a child’s feelings and mental state are upset.
* Older children who are unable to achieve awareness of mental states lack autobiographical memory.
* Children's memory of past events grows once children can answer questions about what it means to know and remember.

11. The organization of the passage can best be described as （2）

* the presentation of an argument followed by the evidence for and against it
* a description of a phenomenon followed by several possible theories about how it develops
* the definition of a psychological term followed by a history of its usage
* an explanation of a process followed by a discussion of its practical applications

Paragraph 6: It may be that the developments just described are intertwined with and influence one another. Talking with parents about the past may enhance the development of the self-concept, for example, as well as help the child understand what it means to "remember." No doubt the ability to talk about one's past represents memory of a different level of complexity than simple recognition or recall.

12. The passage supports which of the following statements about the development of autobiographical memory?（1）

* It is unlikely that a single factor is responsible for the development of autobiographical memory.
* Jean Piaget was the first psychologist to understand the development of autobiographical memory.
* Understanding the development of autobiographical memory will help psychologists eliminate infant amnesia
* Understanding what it means to remember is the most important factor in the development of autobiographical memory.

Think back to your childhood and try to identify your earliest memory. How old were you? ■Most people are not able to recount memories for experiences prior to the age of three years, a phenomenon called infantile amnesia. ■The question of why infantile amnesia occurs has intrigued psychologists for decades, especially in light of ample evidence that infants and young children can display impressive memory capabilities. ■Many find that understanding the general nature of autobiographical memory, that is, memory for events that have occurred in one's own life, can provide some important clues to this mystery. ■Between ages three and four, children begin to give fairly lengthy and cohesive descriptions of events in their past. What factors are responsible for this developmental turning point?

13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

**It is unlikely that this memory will be from the first two years of life.**

Where would the sentence best fit? Click on a square to add the sentence to the passage.（1）

14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

**The ability to construct autobiographical memories—coherent narratives about events from one's past—is probably the joint product of several social and intellectual developments.**

●Although children are capable of

●Verbal skills and familiarity with

●Children who ...

Answer Choices

* Although children are capable of simple recognition and recall very early in life, they do not develop the capacity for autobiographical memory until the age of three or four years.
* Verbal skills and familiarity with narrative structures probably aid in the construction of autobiographical memories.
* Children's earliest autobiographical memories are usually about social interactions with parents.
* Research suggests that infantile amnesia occurs in some cultures but not in others and may be linked to children's social experiences.
* The development of autobiographical memory allows children to appreciate the fact that memories are an important part of their cultural experience.
* Children who have acquired a concept of the self and of various mental states are generally able to talk about their own past memories.