

Age & Stability or Change in Intelligence

Directions:

- 1) Answer the prediction questions (never mind, we did this as a warm-up)
- 2) Take **TWO bullet points** of notes for each blue “phase” below, ensure that it is the main idea *make sure that you have the words cross-sectional evidence and longitudinal evidence somewhere in your bullet point
- 3) Find **ONE** person aged 65 or older and write about one of their major accomplishments, this should be something impressive, 1 paragraph. Describe whether they have fluid or crystalized intelligence.

Your Paper Should Look Like This Example:

<p style="text-align: center;">Age & Stability or Change in Intelligence (#___)</p> <p>Phase 1: Cross-Sectional Evidence for Intellectual Decline</p> <ul style="list-style-type: none">• Older adults give fewer correct answers on intelligence tests• This concept went unchallenged for a long time <p>Phase II: Longitudinal Evidence for Intellectual Stability</p> <ul style="list-style-type: none">• Notes• Notes <p>Phase III: But, intelligence does start to decline</p> <ul style="list-style-type: none">• Notes• Notes <p style="text-align: center;">_____’s Major Accomplishment</p> <p><i>After researching individuals whom are 65 and older, I found _____, who is famous for _____. Describe in a paragraph why they have either crystalized or fluid intelligence.</i></p>
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Predict: What do you think happens to our intellect as we age? Does our intelligence decline, as does our body's strength? Or does our brain remain constant? ...write down your answer.

Phase 1: Cross-Sectional Evidence for Intellectual Decline

In *cross-sectional studies*, researchers have compared people of various ages. Researchers consistently found that older adults give fewer correct answers on intelligence tests than do younger adults. For a long time, this view went unchallenged.

Phase II: Longitudinal Evidence for Intellectual Stability

Psychologists began testing the same **cohort--the same group of people--**over a period of years. What they found was a surprise: Until late in life, intelligence remained stable. On some tests, it even increased.

So why were the people in the cross-sectional studies wrong earlier. Well, because as they compared 70 year olds with 30 year olds, they weren't using comparable populations. The 30 year old might have gone to college while the 70 year old was a McDonald's worker, thus, of course the 30 year old will do better on an exam. So they skewed their own results. Tests have to compare people of similar populations, not just age.

Final Verdict

Old people can and often are smarter than younger people. At age 70, John Rock developed the birth control pill. At age 81, Amos Alonzo Stagg was named coach of the year. At age 89, architect Frank Lloyd Wright designed New York City's Guggenheim Museum.

Thus, you are never too old to learn.

Phase III: But, intelligence does start to decline

After 85, one's intelligence does start to decline. Older adults are at a disadvantage because of slower neural processing.

Crystallized intelligence: our accumulated knowledge as reflected in vocabulary and analogies tests--increases with old age

Fluid intelligence: our ability to reason speedily and abstractly, as when solving novel logic problems--decreases beginning in the twenties and thirties, slowly up to age 75 or so, then more rapidly as we get to age 85.

Thus, we lose recall memory and processing speed, but we gain vocabulary knowledge, increased social reasoning, such as by taking multiple perspectives, and offering wisdom.