

Personality is Fixed - "A Leopard Can't Change Its Spots"

Can people really change who they are? The old saying "a leopard can't change its spots" suggests they cannot. While it's natural to hope that difficult personalities can improve or that shy people can become more confident, scientific research supports this traditional wisdom: our core personality traits stay surprisingly stable throughout our adult lives.

How Scientific Understanding Has Evolved

More than 100 years ago, the famous psychologist William James (1890) remarked that character (personality) was "set like plaster" for most people by age 30¹. Early personality research in the 1960s and 1970s focused on whether personality existed at all. By the 1980s, researchers like Costa and McCrae had clearly proven that personality traits are real and measurable. Since the 1990s, increasingly sophisticated studies have confirmed that personality stability is the rule, not the exception.

The longest and most careful studies consistently show the same pattern: personality becomes more stable with age, not less stable. While some researchers in the 2000s and 2010s have claimed to find personality change, these studies typically have serious methodological problems or measure temporary behavioral shifts rather than true personality transformation.

What Modern Research Shows

The most important evidence comes from Robert McCrae and Paul Costa Jr., who have been studying personality since the 1970s. Their research at the National Institute on Aging has followed the same people for decades. In 1994, they showed that personality traits stay "relatively constant over time"². Their work continues to show remarkable consistency in how people behave and think.

Large studies following people for many years support this view. Sarah Hampson and Lewis Goldberg (2006) studied people for 40 years, from elementary school to middle age³. They found that teachers' ratings of children's personalities predicted how those same people would act as adults decades later. Another major study tracked people for 63 years and found that while small changes happen, the basic patterns of personality remain the same⁴.

The evidence is particularly strong for what researchers call "rank-order stability." This means that if you are more outgoing than your friends at age 25, you will likely still be more outgoing than them at age 45. Studies by various researchers have shown that personality traits demonstrate "increasing rank-order stability" as people age, with adult personality becoming quite fixed⁵.

Addressing Claims About Change

The Neuroplasticity Misunderstanding

Contemporary researchers who claim personality can change often point to neuroplasticity as evidence. However, leading stability researchers have identified problems with this argument. McCrae and Costa (2008) explain that while the brain may be physically flexible, this doesn't mean personality traits change in meaningful ways⁶. The brain's ability to form new connections doesn't automatically translate into personality transformation.

Furthermore, neuroplasticity experts note that most brain plasticity research focuses on recovery from brain injury or learning specific skills like playing piano. This is very different from changing fundamental

personality traits like how anxious or outgoing someone is. The brain changes that happen during skill learning are not the same as the deep changes that would be needed to alter personality.

Problems with Change Studies

Personality stability researchers have also criticized studies claiming personality can change. Costa and McCrae (2008) point out that these studies often suffer from serious problems⁶. First, they are often too short - lasting only weeks or months rather than the years needed to see real personality change. Second, they often measure temporary behavior changes rather than lasting personality shifts.

Costa and McCrae (2008) warn that "individuals should not expect dramatic personality changes" and that "time or aging alone is not likely to change" fundamental personality patterns⁶. Real personality change, if it happens at all, requires years of consistent effort and even then may not be permanent.

Why Personality Stays the Same

Three major factors explain personality stability:

Biological Foundation: McCrae and Costa's *Five-Factor Theory* suggests that personality traits are biological in nature. Their research shows that personality traits "are rooted in biology"⁶. Other studies support this, showing that identical twins raised apart still have very similar personalities.

Environmental Consistency: Once we develop certain patterns of thinking and behaving, they become self-reinforcing. Extroverted people seek out social situations that make them even more social. Anxious people avoid challenging situations, which keeps their anxiety high.

Cognitive Stability: How we think about ourselves and the world becomes fixed over time. These thinking patterns filter all new experiences to fit our existing personality, preventing real change from happening.

Conclusion

The scientific evidence overwhelmingly supports the old saying "a leopard can't change its spots." While people can learn new skills and change their circumstances, their fundamental personality - how outgoing, anxious, organized, or agreeable they are - remains remarkably consistent throughout adult life. More than a century of research, from William James to modern neuroscience, points to the same conclusion: personality is stable. Understanding this helps us accept ourselves and others more realistically, rather than expecting personality transformations that research shows are unlikely to occur.

Footnotes

1. James, W. (1890). *The Principles of Psychology*. New York: Henry Holt.
2. McCrae, R. R., & Costa, P. T. (1994). The stability of personality: Observations and evaluations. *Current Directions in Psychological Science*, 3(6), 173-175.
3. Hampson, S. E., & Goldberg, L. R. (2006). A first large-cohort study of personality-trait stability over the 40 years between elementary school and midlife. *Journal of Personality and Social Psychology*, 91(4), 763-779.
4. Harris, M. A., Brett, C. E., Johnson, W., & Deary, I. J. (2016). Personality stability from age 14 to age 77 years. *Psychology and Aging*, 31(8), 862-874.
5. Various longitudinal studies have demonstrated rank-order stability in personality traits, as summarized in multiple meta-analyses of personality research.
6. McCrae, R. R., & Costa, P. T. (2008). The Five-Factor Theory of Personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 159-181). New York: Guilford Press.

Personality is Changeable: "Leopards Can Change Their Spots"

The old saying "a leopard can't change its spots" has long been used to suggest that personality is fixed forever. This belief is one of psychology's most dangerous myths. This old-fashioned view has prevented people from reaching their potential and has been challenged by modern research. Today's science shows a different truth: personality is far more flexible and changeable than we once believed, and leopards can indeed change their spots.

How Scientific Understanding Has Evolved

Early psychology, influenced by William James's 1890 claim that personality was "set like plaster" by age 30, focused on measuring stable traits¹. This view dominated the field for nearly a century. However, starting in the 1990s, new research methods and longer studies began to reveal a different picture.

The turning point came in the 2000s when researchers like Brent Roberts at the University of Illinois began conducting more careful analyses of personality change. Unlike earlier researchers who looked for stability, these scientists specifically examined how and when personality could change.

What Current Research Reveals

Brent Roberts, one of the world's leading personality researchers, has revolutionized our understanding of personality development. His research shows that "people show increased self-confidence, warmth, self-control, and emotional stability with age" and that "personality traits can change at any age"².

In a groundbreaking 2017 study, Roberts and his team reviewed over 200 studies involving thousands of people. They found that interventions were "associated with marked changes in personality trait measures over an average time of 24 weeks"³. This was the first clear proof that personality change is not only possible but can happen relatively quickly.

Carol Dweck's research at Stanford University has shown how our beliefs about change actually create change. Since 2006, her studies have proven that "the view you adopt for yourself profoundly affects the way you lead your life. It can determine whether you become the person you want to be and whether you accomplish the things you value"⁴.

The Science Behind Change

The key to understanding personality change lies in neuroplasticity - the brain's ability to rewire itself throughout life. Norman Doidge (2007), a leading neuroscience researcher, explains that neuroplasticity describes the human brain as "changeable, malleable, modifiable"⁵.

This brain flexibility follows what scientists call a "fire together, wire together" principle. When we consistently practice new behaviors or thinking patterns, we literally change our brain structure⁶. As Dweck (2006) notes, "More and more research is suggesting that, far from being simply encoded in the genes, much of personality is a flexible and dynamic thing that changes over the life span and is shaped by experience"⁷.

Evidence for Change

Roberts and his colleagues have shown that "seeing a therapist changes your personality"⁸. People who undergo therapy don't just learn coping skills - they actually become different people in measurable ways.

Jessica Schleider and John Weisz (2022) demonstrated that even a single 30-minute session teaching teenagers about personality change led to significant reductions in depression nine months later⁹. This shows that personality change doesn't require years of effort.

Wiebke Bleidorn and other researchers have found that personality change happens across different cultures and age groups. Their 2021 research shows that "trait levels can and do change at any age throughout the lifespan"¹⁰. They argue that a natural capacity for growth begins in infancy and continues throughout adulthood.

Addressing Claims About Personality Stability

Researchers who argue that personality *can* change have identified problems with research that finds personality *cannot* change. These problems are related to the design of the studies. First, Roberts and his colleagues (2017) argue that other scholars were looking for stability, not change, so they designed their studies to find stability¹¹. They say that when researchers only look for one thing, that's usually what they find. Second, Bleidorn (2021) points out that researchers who found personality stability often measured personality over just a few years - too short to see meaningful change¹².

Conclusion

The scientific revolution in personality research over the past 20 years has clearly shown that the old saying about leopards and spots is wrong. Modern science proves that personality change is not only possible but natural and ongoing throughout life. As Carol Dweck beautifully puts it, "Becoming is better than being"¹³. Rather than accepting limitations based on outdated research, we can embrace our scientifically-proven capacity for growth and transformation.

1. James, W. (1890). *The Principles of Psychology*. New York: Henry Holt.
2. Roberts, B. W., & Mroczek, D. (2008). Personality Trait change in adulthood. *Current Directions in Psychological Science*, 17(1), 31-35.
3. Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A systematic review of personality trait change through intervention. *Psychological Bulletin*, 143(2), 117-141.
4. Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.
5. Doidge, N. (2007). *The brain that changes itself: Stories of personal triumph from the frontiers of brain science*. New York: Viking.
6. Kandel, E. R. (2001). The molecular biology of memory storage: A dialogue between genes and synapses. *Science*, 294(5544), 1030-1038.
7. Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.
8. Bleidorn, W., Hopwood, C. J., Back, M. D., Denissen, J. J., Hennecke, M., Hill, P. L., ... & Zimmermann, J. (2021). Personality trait stability and change. *Personality Science*, 2, e6009.
9. Schleider, J. L., & Weisz, J. R. (2022). A 30-minute lesson in the malleability of personality has long-term benefits for anxious, depressed teenagers. *Clinical Psychological Science*, 10(4), 721-739.
10. Bleidorn, W., Hopwood, C. J., Back, M. D., Denissen, J. J., Hennecke, M., Hill, P. L., ... & Zimmermann, J. (2021). Personality trait stability and change. *Personality Science*, 2, e6009.
11. Roberts, B. W., Luo, J., Briley, D. A., Chow, P. I., Su, R., & Hill, P. L. (2017). A systematic review of personality trait change through intervention. *Psychological Bulletin*, 143(2), 117-141.
12. Bleidorn, W., Hopwood, C. J., Back, M. D., Denissen, J. J., Hennecke, M., Hill, P. L., ... & Zimmermann, J. (2021). Personality trait stability and change. *Personality Science*, 2, e6009.
13. Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York: Random House.

Reading Comprehension Strategy Guide

Before You Read:

1. Preview the text - Read the title, headings, and first/last paragraphs
2. Predict the content - What do you think this essay will argue?
3. Activate background knowledge - What do you already know about this topic?

While You Read:

1. Identify the main argument - What is the author's main point?
2. Look for evidence - What facts, studies, or examples support the argument?
3. Notice text structure - How is the essay organized? (introduction → evidence → counterarguments → conclusion)
4. Pay attention to transition words - "However," "Furthermore," "In contrast" show relationships between ideas
5. Question the text - Do you agree? Is the evidence convincing?

After You Read:

1. Summarize the main points - Can you explain the argument in your own words?
 2. Evaluate the evidence - Was it strong or weak? Why?
 3. Connect to other texts - How does this compare to other things you've read?
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Reading Comprehension Questions—"Personality is Fixed"

Main Ideas & Details:

1. According to the essay, what does the old saying "a leopard can't change its spots" suggest about personality?
2. Who are the two main researchers mentioned as supporting personality stability since the 1970s?

Reading Comprehension Questions—"Personality is Changeable"

Main Ideas & Details:

1. How does this essay challenge the saying "a leopard can't change its spots"?
2. What is "neuroplasticity"?

Comparison Questions (Both Essays):

1. How do the two essays use the proverb "a leopard can't change its spots" differently?
 2. Both essays discuss McCrae and Costa's research. How does each essay interpret their work?
 3. Essay A says personality becomes "more stable with age" while Essay B says people show "increased self-confidence, warmth, self-control, and emotional stability with age." How can both be true?
 4. Which essay do you find more convincing and why? Use specific evidence from your chosen essay.
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Personality Vocabulary Integration Activities

Pre-Reading Vocabulary Activity: Personality Self-Assessment

Instructions: Before reading the essays, rate yourself on these personality traits (1 = not at all like me, 5 = very much like me). After reading, discuss: Do you think these traits could change over time?

Core Personality Traits:

- Organized (keeps everything neat and in order): 1 - 2 - 3 - 4 - 5
- Anxious (constantly worried about what might go wrong): 1 - 2 - 3 - 4 - 5
- Optimistic (sees the glass half full): 1 - 2 - 3 - 4 - 5
- Competitive (must win and hates to lose): 1 - 2 - 3 - 4 - 5
- Creative (full of original ideas and imagination): 1 - 2 - 3 - 4 - 5
- Easygoing (relaxed and not easily upset by problems): 1 - 2 - 3 - 4 - 5
- Ambitious (has big dreams for success): 1 - 2 - 3 - 4 - 5
- Caring (shows kindness and concern for others): 1 - 2 - 3 - 4 - 5
- Independent (prefers to do things without help): 1 - 2 - 3 - 4 - 5
- Energetic (full of enthusiasm and physical vigor): 1 - 2 - 3 - 4 - 5

Post-Reading Discussion Questions with Vocabulary:

1. Change vs. Stability: If someone is naturally pessimistic and anxious, do you think they can become more optimistic and easygoing? Why or why not?
2. Real-Life Examples: Think of someone you know who has become more disciplined, responsible, or compassionate over time. What caused this change?
3. Professional Settings: Should employers hire people who are organized and ambitious, or should they focus on training people to become more productive and logical?
4. Personal Growth: Which personality traits do you think are most important to develop: being courageous, creative, caring, or analytical? Explain your choice.

Writing Extension Activity:

Prompt: Choose 5 personality trait words from the vocabulary list. Write a paragraph describing how you have changed (or stayed the same) in these areas over the past few years. Use specific examples and connect your experiences to the arguments made in both essays.

Sentence starters:

"I used to be more _____, but now I am more _____..."

"However, some traits like _____ have remained constant in my personality..."

Discussion Questions for Class

After reading both essays, consider:

1. Which argument did you find more convincing? Why?
2. Both essays use scientific evidence - how can they reach opposite conclusions?
3. How might these different views affect how we treat children, students, or employees?
4. What are the advantages and disadvantages of each perspective?
5. How has the research on this topic evolved over time according to each essay?
6. Is it possible that both essays contain some truth? How might personality be both stable AND changeable?