

# GREAT MYTHS OF PERSONALITY

M. Brent Donnellan & Richard E. Lucas

WILEY Blackwell

### GREAT MYTHS OF PERSONALITY

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# INTRODUCTION

People are different from one another. Some are cautious, whereas others are brave. Some are energetic and sociable, whereas others are withdrawn and shy. Some have high levels of self-control, whereas others are impulsive and rash. No two people are exactly alike, and this diversity is one of the more interesting aspects of human nature. Appreciating and understanding these differences is at the heart of personality psychology. Although personality psychology is also concerned with the common core of human nature that makes people similar to one another, the subfield is most often identified with individual differences in thoughts, feelings, and behaviors. More specifically, personality psychology seeks to understand at least four broad issues:

- 1. How are people different from each other? Research addressing this question seeks to determine the basic dimensions of personality and levels of individuality. Research in this stream also concerns personality assessment and evaluates different ways to measure personality (e.g., self-report surveys vs. reports from knowledgeable informants vs. behavioral tasks).
- 2. Why are people different from each other? Research addressing this question evaluates genetic and environmental contributions to personality and increasingly seeks to understand how biological factors and life experiences work together to shape personality. Work in this area also evaluates how brain systems, hormones, and specific genes are related to personality.
- 3. How and why does personality develop across the life span? Research addressing this question seeks to chart the course of psychological development from infancy to old age. Research in

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this strand of personality psychology addresses classic questions related to stability and change in personality and what processes account for stability and change.

4. Do individual differences matter for consequential life outcome (such as health, wealth, and mortality)? Research addressing this question is ultimately about the importance of personality for everyday life, such as relationship functioning, well-being, physical health, and work-related outcomes. It would be hard to imagine how research on the other three questions would matter if personality attributes themselves did not predict real-world outcomes. Personality would turn out to be a pretty esoteric and irrelevant topic if it did not relate to basic functioning in important life domains.

This book is ultimately about the scientific research that evaluates these kinds of questions by addressing some of the common myths that surround personality. Our global objective is to help you better understand common myths about personality and the actual evidence supporting (or refuting) the myth. However, we also have a couple deeper objectives.

First, we want to help you acquire the skills needed to be a critical consumer of psychological research. Specifically, we want you to understand the process of research and learn to be skeptical about overstated claims you might come across in everyday life, especially with respect to how social science research is conducted. We hope that you routinely ask questions about the quality and robustness of research evidence whenever psychological research is presented in everyday conversation, textbooks, and popular media. Our maxim is that you should not believe everything you read! Curious skepticism is a perfectly acceptable stance to take to psychological research. It is fine to be intrigued by research findings, but there is no reason to ever believe that a single study is definitive. For example, no one should take a hot shower to combat loneliness, to take an example from some of our research raising concerns about this association (see Donnellan, Lucas, & Cesario, 2015). To quote a famous rap lyric from the 1980s, don't believe the hype. And hype can be found in popular press articles as well as journal articles and textbooks.

Second and most importantly, we hope to illustrate that personality psychology is useful for everyday life by helping you appreciate the complexity of psychology and psychological research. We hope you learn new ways to think about enduring questions and perhaps find at least a few reasons to dig deeper and read more about the research investigating the myths we describe in this book. This will further develop your critical thinking skills and let you learn more about psychology. We will have done our job well if we motivate you to read the articles we cite so you can have better informed opinions about the myths we describe. In some cases, you might even disagree with our interpretations. This strikes us as exciting. After all, we just told you that we think skepticism is a virtue. Thus, in the end, we hope this book serves as a travel guide and introduction to the world of contemporary personality psychology. Welcome.

You will soon find that personality psychology investigates many of the basic questions that have captured human attention for centuries. This makes personality research accessible to people in ways that usually do not apply to research into chemistry or physics. Everyone is an armchair personality psychologist! Indeed, most of us interact with others on a daily basis, and we have probably thought about own personalities for at least some portion of our lives. Some of us have probably spent way too much time thinking about personality. We suspect that many of you have thought about many of these myths and the broad answers to the four opening topics at some point in your life. In contrast, few of us smash atoms or work in a chemical laboratory. Thus, the basics of personality psychology are much more familiar to people than, say, the basics of chemistry or particle physics.

In some ways, familiarity with personality is an asset when it comes to learning about research in this field. But it can get in the way, so we ask that you try to keep an open and critical mind. This is important because you might already have strong opinions about one or more of the myths we discuss. These opinions might be examined or unexamined, reasonable or not. Indeed, simple observations about the world without careful scientific investigations can often lead people astray: People used to believe that the sun rotated around the Earth, after all. Ideas like this seemed reasonable enough at the time because they seemed to match with simple observations about how the universe worked, but they are simply wrong. Keep this mantra in mind as you read our book—it is possible to be wrong, so it is a good idea to test your insights with data. This approach is at the heart of the scientific method.

Indeed, this book is grounded in the science of personality psychology. Entire books, college courses, and even academic careers have been devoted to understanding what it means to take a scientific approach to a specific topic. We cannot do the topic justice in a few short paragraphs. But we can try to emphasize the importance of *empiricism*. You have probably developed your own insights about the topic of personality by reflecting on past experiences, by thinking about people you have known, or perhaps by learning from books or articles. These are all potentially useful ways of acquiring knowledge, but personality psychologists conduct systematic investigations and collect verifiable data on these topics. This means that personality research is grounded in empirical findings. Testing ideas with data allows personality psychologists to draw conclusions about whether our beliefs about how personality works are supported by evidence or not. As personality scientists, we are open to the possibility that data will challenge our assumptions. We know we can be wrong, and we care about evidence.

The focus on empiricism is why researchers appear to be obsessed with measurement, research design, and statistics. We promise to keep the statistics simple and grounded in the correlation coefficient (a concept we explain later), but we cannot promise to avoid all technical topics related to measurement (topics such as *reliability* and *validity*). This preoccupation with research methods is critical because it pertains to quality of the evidence generated by a given study. We want you to learn how to evaluate the quality of the evidence so it can be appropriately weighted when it comes time to drawing conclusions about research.

Uncertainty is always present, but researchers do their best to quantify and ideally minimize uncertainty when drawing conclusions. In fact, you might be surprised about how much uncertainty actually exists in personality psychology when it comes to the myths we discuss. This can cause alarm in some people, and it might even strike some readers as demoralizing. But this type of uncertainty is a feature, not a bug, of science, and most scientists actually find this uncertainty exciting. Our strategy is to give you a sense of the evidence against each myth so you are better able to judge the evidence for yourself. This could lead you to accept or reject a myth. But this process might also motivate you to reserve judgment on a myth until more data are available. This is a perfectly acceptable reaction and even rational-it is often much better to admit you don't know something rather than blindly accepting a wrong idea. Uncertainty is not necessarily a bad thing. You don't always have to make up your mind about something. Sometimes you need to wait until more information is available.

We also want to add that we sometimes tackle myths that are present in academic psychology rather than popular thinking. Some of the ideas we interrogate might be present in textbooks for other classes. Hopefully this book helps make you a critical consumer of other findings and ideas that exist within psychology. We think this is a good thing. Again, sometimes textbooks are overstated and outdated. The goal is to help you become a more critical consumer of all research. Given that this book is ultimately about the science of personality psychology, we need to touch on some issues in statistics and research methodology before discussing specific myths. This material is not intended as a substitute for one of those long chapters on research methods that can be found near the early parts of any of the outstanding personality textbooks on the market. Our point here is to explain the set of tools that personality researchers use to research the myths we describe.

#### Research methods 101

Personality psychologists use systematic methods to address research questions. The objective is to develop a procedure that other scientists can follow to answer the same question. In the ideal case, outside researchers would follow that script and come to the same conclusions (the process of replication). Personality psychologists (and other scientists) often distinguish between experimental and correlational procedures or methods. Experimental methods involve exposing participants (typically humans in psychology, but not always) to precise manipulations and then observing the impact of those manipulations on specific variables. The prototypical example of an experiment is a drug trial in which participants either receive a pill with the active ingredient (the experimental condition) or a sugar pill (the control condition or placebo condition) to evaluate the effectiveness of the drug on a medical condition. The critical element of an experiment is the process of randomly assigning participants to experimental conditions. Participants in our drug trial example should either receive the drug pill or placebo based on a coin flip. This ensures there is no connection between background characteristics and the conditions of the experiment. Who you are should not influence whether you receive the active pill or the sugar pill. Imagine what would happen if researchers only gave the active drugs to sick participants. This procedure would seriously cloud (or, as scientists might say, confound) the interpretation of any observed difference between the experimental and control conditions. If only sick people got the drug and only healthy people got the sugar pill, what could we conclude when researchers observed differences between the two groups? It would be impossible to determine whether any differences in symptoms that emerged were due to the drug or to the preexisting differences in health between those who got the drug and those who did not.

Experiments are the most basic tool for making causal inferences in the social sciences. The ability to use random assignment makes it much

more straightforward to attribute some sort of causal agency to the experimental condition or treatment. The problem is that experiments are often impractical, unethical, or both when it comes to personality research. It would be very difficult and morally problematic to randomly assign individuals to the experience of childhood trauma or to a control "happy childhood" condition to determine whether early traumas impact adult personality outcomes. Experiments can also feel quite artificial because the types of things that psychologists can easily manipulate (especially in the lab) may not map well on to real-world experiences and events. Finally, when it comes to personality psychology, some of the manipulations that personality researchers might want to do can be extremely difficult, if not impossible, to carry out. Remember, personality traits are relatively stable even over long periods of time; researchers might want to study whether high levels of extraversion cause some outcomes like happiness, but how could they manipulate the stable personality trait of extraversion itself?

The limitations of correlational designs are legion, and most people have heard the phrase (or some variant) that *correlation does not prove causation*. Just knowing that extraversion is positively associated with happiness does not allow researchers to determine whether extraversion actually causes happiness. Happiness could cause extraversion, or a third variable could cause both. For example, physical attractiveness might cause both happiness and the tendency to be outgoing. This could explain a positive correlation between happiness and extraversion. This is an instance of the classic "third variable" problem with correlational findings.

The range of potential third variable possibilities motivates the use of more sophisticated correlational approaches, including those that examine many different variables at once (such analyses are referred to as "multivariate" approaches). The idea behind these approaches is that one can take the statistical associations of other variable into consideration when evaluating correlations (hence the name multivariate for multiple variables). For instance, researchers could statistically predict happiness from both attractiveness and extraversion at the same time. If extraversion is still related to happiness even after accounting for the fact that attractive people might be more extraverted than average and happier than average, then it might help to rule out the possibility that the correlation between extraversion and happiness is due simply to attractiveness. The trick to using multivariate analyses successfully is to come up with measures of all possible confounders to include in the statistical analyses. This is no easy task.

Indeed, the biggest limitation of multivariate analysis of correlational designs is that it is nearly impossible to imagine all possible third variables, let alone take good measurements of all of these factors. Therefore, the best that can be done is to think of a number of plausible (or reasonable) additional variables that might explain an association and then attempt to measure those variables in a given study. The task for critics and skeptics is to evaluate what was left out of the multivariate model. Judgment calls are critical at this stage.

Regardless of the statistical mechanics, the basic goal of these multivariate approaches is to help with causal inferences. Although correlation does not prove causation, causal relationships between two variables often produce correlations between two variables (or at least some statistical connection). Accordingly, researchers who do their best to design a good study and fail to find any sort of statistical connection between their variables of interest might start to change their minds about the possibility of a causal connection between two variables. For example, if researchers consistently find that extraversion is statistically unrelated to happiness, they might rethink the plausibility of a causal connection between the two.

At this point in the book, it is important to be honest about a critical issue: Causal inference in personality research is very challenging (see Shadish, Cook, & Campbell, 2002; West & Thoemmes, 2010). This is partly due to the fact that experiments are difficult in personality research, but the difficulties extend beyond this simple issue. Even fields that rely on experiments may have trouble drawing strong causal conclusions if the experiments that researchers in these fields conduct lack fidelity to the real world. Causal inference in the broadest and most important sense involves generalizations from research to the real world. The controlled aspects of experiments can make real-world generalizability tricky. The artificial conditions of many experiments raise questions about whether conditions in the lab have anything to do with the real world.

In short, no design is perfect when it comes to causal inference. The solution is to use multiple methods and hope that they all point to similar conclusions. This is known as the strategy of finding converging lines of evidence. It is the one that we endorse when thinking about personality research findings. Don't trust a claim based on a single piece of evidence. Instead look for claims that are based on multiple pieces of evidence that all support the same conclusion.

This background should give you the basic tools to understand the research we will discuss for the remainder of this book. Remember to keep an open mind and even try to have fun. We have arranged the different myths in an order that we think makes sense, but we tried to write each chapter after this introduction and Chapters 1 and 2 to mostly stand on their own. So feel free to jump around and pick the myths you find most interesting. The next section describes the organization of this book to help guide your reading. The last section provides a glossary of key terms that will appear again and again in the chapters.

#### **Organization of chapters**

#### Foundational material

Chapters 1 and 2 cover foundational issues in personality research. Chapter 1 describes the myth that personality traits are unimportant factors when considering behavior. This chapter also discusses the personsituation debate and addresses the possibility that personality itself is a myth. Chapter 2 continues the themes in Chapter 1 by specifically quantifying the prediction of behavior from personality attributes. It explains effect sizes in detail so the material on correlations discussed here in the introduction is also emphasized in Chapter 2. We return to many of the themes in Chapters 1 and 2 later, so they are probably useful to read as a foundation for the other material in the book.

#### Biological aspects of personality

Chapters 3 and 4 delve into personality myths related to biological considerations covering genes and evolutionary processes. We introduce some methods used to study genetic influences in Chapter 3 and then discuss big-picture issues with evolutionary approaches to personality in Chapter 4.

#### Personality assessment

Chapter 5–11 are broadly about myths related to personality assessment. Chapter 5 describes debates about types versus dimensions and is relevant for considering a famous personality measure described in Chapter 8—the Myers–Briggs Type Indicator. Chapter 6 discusses the difficulties in measuring personality but makes an argument that it is possible to measure attributes if done with appropriate expectations and empirical rigor. Chapters 7, 9, and 10 describe specific issues with personality assessment in terms of faking, using projective techniques, or unstructured interviews. We attempt to make a broad point about human judgments in Chapter 10. Chapter 11 covers basic issues in psychometric research to understand myths about the utility of personality quizzes found in magazines and on Internet sites.

#### Personality development

Chapters 12–17 detail myths related to personality development. Chapters 12 and 13 discuss whether traits are lacking in any consistency over time or completely set in stone by age 30. Some of the themes discussed in Chapter 1 reappear in Chapter 12. Chapter 14 evaluates whether life events impact personality trait development. Chapter 15 covers myths about adolescence. Chapters 16 and 17 describe myths related to family dynamics, including birth order and parenting. The material in Chapter 17 has parallels to the discussion about genetic influences covered in Chapter 3.

#### Well-being/happiness

Chapters 18–21 describe myths related to happiness and these chapters cover issues related to stability and change in happiness as well as the impact of life events on happiness. The material about life events and happiness echoes themes in Chapter 14 and even Chapter 3 regarding genetic influences on personality. Chapter 21 evaluates a myth about well-being in terms of the ideal ratio of positivity to negativity in psychology. This chapter provides some useful lessons about the importance of skepticism when consuming popular psychology books.

#### Applications of personality

Chapters 22–28 cover a range of issues in personality psychology that do not fit neatly into the five other sections. Chapters 22 and 23 describe myths related to personality similarity and relationships. Chapter 24 covers a myth about self-esteem and narcissism. Chapters 25 and 26 details myths related to national stereotypes and cross-cultural aspects of personality. Chapter 27 evaluates a myth related to sex difference. Last, Chapter 28 describes personality disorders and challenges the myth that personality disorders are untreatable.

#### **Basic vocabulary**

*Agreeableness*. One of the Big Five personality trait domains. Captures attributes such as cooperative and kind.

*Big Three*. A model of the structure of personality traits that consists of three broad domains of human individuality: negative emotionality or negative affectivity (susceptibility to distressing emotions and adversarial interpersonal interactions; see also Neuroticism), positive emotionality or positive affectivity (susceptibility to positive emotions and social potency; see also Extraversion), and constraint or low disinhibition (self-control and inhibition; see also Conscientiousness). Negative emotionality is similar to neuroticism, positive emotionality is similar to extraversion, and constraint is similar to conscientiousness in the Big Five trait model.

*Big Five*. A model of the structure of personality traits that consists of five broad domains: extraversion, agreeableness, conscientiousness, neuroticism (or low emotional stability), and openness.

*Characteristic adaptations*. Elements of personality that are narrower than dispositional traits such as attitudes, skills, motivations, and attachment styles. Researchers often think that characteristic adaptations are influenced by dispositional traits and environmental circumstances. Although characteristic adaptations are important elements of personality, much of this book focuses on traits.

*Conscientiousness.* One of the Big Five personality trait domains. Captures attributes such as responsible, dependable, and orderly.

Correlation coefficient. A statistic that ranges from -1 to 1 and summarizes the strength of the linear association between two variables. A zero correlation indicates no linear association. A positive correlation coefficient indicates that higher scores on one variable are associated

with higher scores on another variable (e.g., conscientiousness and grade point average). A negative correlation coefficient indicates that higher scores on one variable are associated with lower scores on another variable (e.g., test anxiety and test performance). Correlation coefficients are statistical summaries of association and do not (by themselves) establish cause-and-effect relations.

*Extraversion.* One of the Big Five personality trait domains. Captures attributes such as talkative, energetic, and enthusiastic.

*Neuroticism.* One of the Big Five personality trait domains. Captures attributes such as being easily upset, anxious, and nervous.

*Openness*. One of the Big Five personality trait domains. Captures attributes such as curious and intellectual.

*Subjective well-being*. Feelings of personal happiness and satisfaction with life.

*Traits*. Relatively stable patterns of thinking, feeling, and acting that characterize the individual. Also called dispositional traits.

#### References

- Donnellan, M. B., Lucas, R. E., & Cesario, J. (2015). On the association between loneliness and bathing habits: Nine replications of Bargh and Shalev (2012) study 1. *Emotion*, 15(1), 109–119.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.
- West, S. G., & Thoemmes, F. (2010). Campbell's and Rubin's perspectives on causal inference. *Psychological Methods*, 15, 18–37.

## SITUATIONAL FACTORS OVERWHELM PERSONALITY WHEN PREDICTING BEHAVIOR

We start this book off with the biggest myth in all of personality psychology the idea that situational forces overwhelm the effects of personality traits when it comes to explaining people's behavior. People who believe this idea argue that features of the situation and environment play a stronger role in determining behavior than the characteristics of the person. Taken to the extreme, proponents of this idea might even argue that personality does not exist at all, and that our perception that people have stable personalities is an illusion. This myth was so powerful and was so widely accepted that it almost destroyed the field of personality psychology as an academic discipline starting in the 1970s. Thus, this is a critical myth to address. If personality itself is a myth, then there isn't much point to the rest of the book. In addition, in addressing this myth, we set the stage for many other myths that we cover in this book. Questions about the stability of personality over the life span, for instance, necessarily build on issues regarding stability from one moment to the next, one day to the next, and one month to the next. Therefore, we will try to introduce some basic ideas about what personality is and what we should expect from people's personalities.

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#### **Defining personality**

So what is personality? As we noted in the introduction, personality focuses on the ways that people differ from one another. One widely cited definition was proposed by Gordon Allport (see 1937, 1961). Allport was a famous personality psychologist who wrote one of the first major texts on the topic, and he is often regarded as founding father of the field. According to Allport (1961, p. 28), "Personality is the dynamic organization within the individual of those psychophysical systems that determine [the person's] characteristic behavior and thought." If we break this definition down into its component parts, we can identify a few key features that will be important for our discussion about personality in this book.

Most importantly, personality is "within the individual." It is something that the person carries around from situation to situation. Thus, this implies that there will be at least some form of stability over time and across situations. Note that we do not yet explain precisely what form of stability we expect to see-this will become important as we discuss the responses to the myth addressed in this chapter. Furthermore, these features that are within the individual determine that person's "characteristic behavior and thought." In an earlier version, Allport (1937, p. 48) wrote that personality determines a person's "unique adjustments to [his or her] environment." In other words, depending on their personalities, people will react differently to the same situation. This part of the definition also implies that all behaviors reflect the interaction between the person and his or her environment. Personality does not exert its effects in a vacuum. Finally, Allport notes that personality reflects a "dynamic organization" of features within the individual. This means that the different characteristics that people have may work together in a unique manner to create their reactions to the world. In other words, one personality characteristic may have a different influence on behavior depending on the other personality characteristics that the person has. Consider a person who is both anxious and highly self-controlled. How might that person react to news that he or she is at higher risk for heart disease compared to someone who is anxious but quite low in self-control?

Allport's definition suggests that knowing something about a person's personality will allow us to predict (with some degree of uncertainty) how that person will respond to a specific situation in the future. As you can imagine, this is extremely useful information. At the most basic level, if personality exists and has a reasonably important influence on behavior, then we can expect at least some consistency when we encounter the same person in the same situation on two occasions. When you choose a person who has been kind and considerate to you in the past to be your roommate or even your spouse, you are doing so precisely because you believe this person has some stable personality characteristics that will cause them to act similarly in the future. In short, anytime you choose to interact with someone based on your expectations of how they will behave in the future, you are implicitly endorsing the idea that personalities exist and affect behavior.

As a science of human behavior, personality psychology goes even further than the ideas reflected in this belief. Personality psychologists believe that if they can begin to understand the "dynamic organization" of personality characteristics within people, they can not only expect stability across similar situations, they can also predict new behaviors in new situations based on the understanding of that person's personality characteristics (along with an understanding of the features of the new situation). This expectation explains why personality psychologists often examine the connections between specific personality traits (like conscientiousness) and theoretically relevant and practically important real-world outcomes like success in school or work (Ozer & Benet-Martinez, 2006; Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007; Wilmot & Ones, 2019). If personality exists and has a reasonably powerful effect on behavior, then you can see why researchers might want to document the strength of any connections in a systematic fashion.

#### Personality and assessment

However, in the late 1960s, something happened that led people to call into question the most basic tenets of personality psychology. Specifically, Walter Mischel published an influential book called *Personality and Assessment* (Mischel, 1968). In this book, Mischel laid out a set of critiques about the state of personality research and theory at the time. It is important to understand the nature of these critiques, along with the ways that these critiques were interpreted, to understand the myth about the power and primacy of situational factors we cover here. This is also a place where some of our discussion of myths touches upon how personality research is presented in other parts of psychology.

Mischel (1968) was highly critical of "broad" personality traits, especially those that were "decontextualized" or not linked to a specific situation. When researchers talk about broad traits, they usually refer to abstract ideas that capture individual differences in a range of specific attributes that are thought to reflect a general underlying tendency.

For instance, extraversion is a broad trait that reflects not just whether you enjoy parties (a narrow tendency) but also whether you are highly active, whether you tend to experience positive emotions, whether you enjov exciting activities, and whether you are assertive with others. Although not every person who is assertive also enjoys parties, these characteristics tend to go together to form the broad trait of extraversion. Furthermore, decontextualized traits are those that are thought to lead to the same or very similar behaviors across a wide range of contexts. The fact that people who are extraverted might be sociable at parties, at work, in the classroom, and even with a bunch of strangers means that their extraverted behavior does not depend all that much on the specific context-it is decontextualized. It is these broad, decontextualized traits that Mischel targeted with his critique (though some people took his ideas even further and argued that we should be skeptical of the idea of stable personality characteristics as a whole). Other broad traits include the Big Five attributes described in the introduction and other attributes such as aggressiveness, self-control, and shyness.

Mischel acknowledged that when people were asked to describe their personality across different situations or on different occasions, their responses were quite stable. In other words, people believed that decontextualized and cross-situationally stable personality traits existed. However, according to the research that Mischel reviewed, when psychologists actually looked at the specific behaviors that people exhibited, this behavior was not especially stable either across different situations or even in the same situation at different times. This discrepancy between what people believe about the consistency of their behavior and what they actually do across situations was an important part of this critique because it suggested that people fool themselves about how consistent they are. People might not actually know themselves at all.

What was the evidence that Mischel identified to buttress his claims about personality traits? One of the most famous studies that Mischel reviewed was conducted by Hartshorne and May (1928). In this study, researchers tested the honesty of a group of children<sup>1</sup> using a variety of different behavioral tests. If honesty is conceptualized as a broad trait, then it should be reflected in a range of specific behaviors. After all, these specific behaviors are thought to reflect a general tendency to be

<sup>&</sup>lt;sup>1</sup>In retrospect, it might have been something of a mistake to focus on children as opposed to adults given that researchers have learned that personality in children is more of a work in progress than personality in adults. The generalizations of this classic study might say more about personality in children than personality in adolescents or adults per se.

truthful, forthcoming, and morally upstanding. For example, the children in these studies were presented with opportunities to cheat on tests, but the precise behavior that was required to cheat (like copying answers from an answer sheet vs. copying from a friend) differed. Hartshorne and May found that these dishonest behaviors were not especially stable from one situation to the next; those children who cheated in one situation were not necessarily those who cheated in a different situation. In fact, the correlations between any two behaviors were often extremely low, sometimes close to zero (meaning that you could not predict how one child would behave from his or her behavior in a different type of cheating opportunity). This and other evidence led Mischel to conclude that despite people's perception that broad traits like "honesty" exist, specific honest acts are not especially stable from one situation to the next. Instead, because behavior varied—even across subtly different situations-situations must have more power than something like a broad, decontextualized personality trait. In stark terms: There isn't much utility in thinking there is a construct like "honesty" that can be used to predict behavior.

Mischel even went so far as to suggest a maximum size for the crosssituational correlation between the same behavior in two different situations. (Note: Mischel did not conduct a systematic review, nor did he use modern meta-analytic techniques to generate a figure based on the results of many studies. Thus, this number should be interpreted cautiously). He suggested that cross-situational consistency coefficients rarely exceeded .30. This number (or "effect size") was interpreted as being very small. The reason for this evaluation has to do with a somewhat technical point about statistics. If this sort of thing tends to make your eyes glaze over, feel free to skip this next paragraph.

The statistical reason that .30 was considered tiny was that if you take the square of a correlation (i.e., you multiply the size of the correlation by itself), you get the amount of variability in an outcome that can be explained by that predictor (at least according to the conventional way that many psychologists treat correlations; but see Funder & Ozer, 2019). In this case, a correlation of .30 would mean that only 9% of the variance  $(.30 \times .30 = .09 \text{ or } 9\%)$  in a single behavior could be explained by a person's behavior on a previous occasion. Simplistically, researchers assumed that the remaining 91% of the variance could be explained by situational factors, though this belief was never tested explicitly. In any case, this number of .30 was labeled the "personality coefficient," a derogatory label that, intentionally or not, served to diminish the importance of personality as a predictor of behavior.

Mischel (1968) was careful to note that his critique was not an attack on personality as a whole, only on the idea of broad, decontextualized traits described above. Indeed, until the time of his death in 2018, Mischel identified as a personality psychologist, and his primary goal in writing Personality and Assessment was to convince other personality psychologists that to understand behavior, researchers must focus on narrower psychological units. Specifically, he argued, researchers should focus on narrow cognitive and affective units (quite specific ways of thinking and feeling) that interact with specific features of situations to drive behavior (Mischel & Shoda, 1995). For instance, some of the children in the Hartshorne and May study described earlier may have had a fear of authority or perhaps even a very specific fear of elementary school teachers. This specific fear might have prevented them from cheating on an honesty test whenever that authority figure was around (which would lead to temporal stability in the exact same situation), but it might not have affected them when they were given a different opportunity to cheat while alone or in the presence of other adults. Thus, the child might exhibit honest behavior in one situation and dishonest behavior in other situations, depending on whether this narrow cognitive/affective unit was activated. The child is not globally fearful but rather only fearful of a specific teacher.

Note that Mischel's proposed alternatives to traits did not challenge the existence of personality, the strength of personality effects, or even the stability of personality characteristics over time. Instead, it was a challenge to a specific way of doing personality research and to the lay belief that broad, decontextualized dispositions are an actual feature of human nature. However, some psychologists latched on to the idea that the belief in strong, stable, and cross-situationally consistent patterns of behavior (broad or narrow) was an illusion. This seemed to be taking the critique of personality traits much further than Mischel had proposed. For instance, Nisbett and Ross (1980) argued that "personality theorists' (and the lavperson's) conviction that there are strong cross-situational consistencies in behavior may be seen as merely another instance of theory-driven covariation assessments operating in the face of contrary evidence" (p. 112). In other words, not only do lay people mistakenly believe that they have cross-situationally consistent personality traits but also that personality psychologists themselves are fooled by their own intuitions and flawed judgments. Many academic psychologists bought into Nisbett and Ross's ideas and started turning away from personality psychology as a legitimate field of research. Here is an instance of a myth about personality traits that may exist in other areas of psychology and perhaps even in textbooks for those courses.

As a result of the Nisbett and Ross critique and similar others, interest in personality research waned in the 1970s (Swann & Seyle, 2005). Many psychology departments disbanded their personality psychology programs, and research increasingly focused on social determinants of behavior, rather than internal, personality-based determinants. One interesting aspect of recent history is the fact that some of the classic studies purporting to demonstrate the overwhelming power of the situation, such as the Stanford prison experiment, are being reevaluated in light of concerns about experimenter demand effects and selection effects (e.g., Bartels, 2019; Carnahan & McFarland, 2007; Le Texier, 2019). Fortunately, personality research did not die completely during this period, and there has been a resurgence of interest in recent years (again, see Swann & Seyle, 2005). However, in the years following the publication of Mischel's (1968) book, skepticism about the utility of personality psychology increased, and research on the topic declined.

#### Responding to personality and assessment

Was this reaction in academic psychology justified? Did Mischel (1968) identify a fundamental truth that broad personality traits were limited in their predictive ability, at least when compared to the overwhelming power of the situation? Well, given that we have identified this as the most important myth of our book, it is probably clear that we believe that the answer to these questions is "No."

First, even if we accept that the personality coefficient is really .30, one could make the argument that this is really not that small at all (see also Funder & Ozer, 2019). Indeed, the very idea that it is small comes from conventions for interpreting correlations that are just that-conventions. Some very small correlations can have extremely large practical importance; and in fact, some large correlations can have almost no practical importance. Thus, falling back on the idea that the effect of personality is small simply because the average correlation has traditionally been described as "small" is not especially convincing. As just one example, Roberts et al. (2007) reviewed the literature on the power of personality traits to predict future outcomes such as mortality, divorce, and occupational attainment. Rather than just relying on their own impressions about which effect sizes are large and which are small, the authors explicitly compared effect sizes for personality to those effect sizes from other areas of research that are known to be important for these outcomes, such as socioeconomic status and intelligence. In a result that would probably be quite