makes the claim and does not give any reasons? A tweet, a
sound bite, a headline, a poster, a passing comment, a billboard, a rumor—there are so many situations in real life in
which people make claims without giving their reasons. Here
are some examples:

1 Salesclerk to customer trying on a sports jacket:
“That looks great on you.”

2 Political commentator speaking about a member of the
opposition party: “So-and-so’s proposal will cripple
the economy.”

3 Person under arrest to police investigator after hearing
that if he implicates others he will receive a lighter sen-
tence: “Well, now that I think of it. There was this guy.
He calls himself “B-Lucky.” The whole thing was his
idea in the first place.”

4 U.S. top military commander: “It will take another
40,000 troops.”

5 Candidate interviewing for a job: “I have a college
degree and three years of experience.”

6 Best friend: “You really need to do something about
how much you drink at parties.”

7 Parent to daughter in the eighth grade: “No, it is not a
good idea to go out with a high school junior.”

8 Co-worker to new employee: “Everybody here plays
fantasy football using their office computer.”

9 Roommate: “The apartment manager was looking for
you this morning.”

10 Doctor to patient: “The lab test came back positive.”

The question that comes to mind for critical thinkers
when they hear a claim made but no reason given is, “Can
I trust this person to be telling me the truth or even to know
the truth?” Looking back over those ten examples, we can
think of reasons why we probably can or probably cannot trust
the speaker in each case. For example, in #1 maybe the sales-
clerk’s compliment is nothing more than an insincere sales
tactic used to get the customer to buy the jacket. Maybe the
salesclerk would have said the same thing if the
jacket looked dreadful.

In #2, unfortunate as it may be, the criticism that
a political commentator representing one party
hurls at a member of the other party is occasion-
ally exaggerated, inaccurate, and alarmist. In #3,
the person who was ar-
rested might say anything
that the police would find credible in order to reduce his sentence. So, in the first three examples we would be inclined to discount the claims because each of the speakers has an ulterior motive: to make a sale, to prevent you from voting for or supporting the other party, to receive a lesser punishment.

On the other hand, in #7 why shouldn’t the daughter trust her parent’s judgment in that case? She may not like the advice at all. And she may ignore it. But there is no obvious reason in normal circumstances to think that the parent has some ulterior motive that makes the parent untrustworthy. In fact, the opposite. Typically a parent has the child’s best interests at heart, even if the child does not like the guidance the parent is offering and even if the parent can anticipate an unpleasant confrontation will ensue. In #10, the doctor example, we would also expect that the doctor has no ulterior motive. In normal circumstances, why would the patient not trust the doctor about the lab results? Yes, we can imagine a scenario or two in which a child should not trust her parent and a patient should not trust the doctor. But more likely than not, such scenarios would be implausible — interesting as movie scripts, but not likely to happen to most people in real life. When we do not know if a claim is true or false, and if we cannot independently evaluate it, then the question becomes one of trust. We ask ourselves how can we use our critical thinking skills to evaluate the credibility of the source of the claim. Whom should we trust? Whom should we not trust?

Levels of Thinking and Knowing

| (7) “Sages” — We can seek and discover many truths and we can address ill-structured problems with greater or lesser levels of success. But even what we call “knowledge” inevitably contains elements of uncertainty, for as we build from the known toward the unknown, new ways of organizing knowledge often yield unforeseen conceptual revolutions. Even well-informed opinion is subject to interpretation and reasoned revision. Yet, justifiable claims about the relative merits of alternative arguments can be made. We can assert with justifiable confidence that some judgments are rightly to be regarded as more reasonable, more warranted, more justifiable, more sensible, or wiser than others. We solve problems the way a truth-seeker does, but we realize that judgments must often be made in contexts of risk and uncertainty, that some issues admit greater precision than others, that at times we must reconsider our judgments and revise them, and that at other times we must hold firm in our judgments. Wisdom comes as we learn which are which. |
| (6) “Truth-Seekers” — Some claims are true and some are not; some evaluations or approaches are not as good as others. Some reasons, perspectives, and theories are actually superior to others. Information is essential, uncertainty is real, and context is important. But not everything is context bound. We can reasonably and rationally compare evidence, opinions, theories, and arguments across contexts. We solve problems by following the reasons and the evidence with courage wherever they lead, by asking the tough questions, by being inquisitive, by being open-minded and tolerant about a wide range of ideas and possible explanations, by being persistent and systematic in our inquiry, and by not fearing what this process will turn up as possible answers. |
| (5) “Relativists” — Facts exist, but always and only in context. Everything is relative. There are no absolutes. Ill-structured problems abound. Every theory and every perspective is as good as every other theory or perspective. Proof and evidence are entirely context dependent. Disagreements about basic theories and fundamental principles cannot be resolved by any rational means because the criteria themselves are perpetually contested. |
| (4) “Collectors” — All knowledge is idiosyncratic — a collection of isolated facts to be memorized for later retrieval if needed. There are many separate databases — for example, scientific, business, political, and religious. They are not combinable. Information in one of them may or may not be consistent with information in another one of them. Uncertainty is real; external validation is impossible. So-called authorities and experts are just as limited as everyone else. To solve any problem, look for all the information you can find about that topic. |
| (3) “Feelers” — Authorities know everything that can be known now, but the evidence is incomplete, even to the authorities. Some things may never be known because of the limitations of the human mind. Uncertainty is real, so we need to be cautious or we are apt to stray and make mistakes. The best policy is to stick with beliefs that feel right to us because they are familiar, comfortable, and conform to what everyone else in our peer group thinks. |
| (2) “Trusters” — Truth is knowable. We have absolute confidence in the authorities who share the truth with us. All problems have solutions, and all questions have answers. What we do not know today will someday be known by somebody. Anyone who disagrees with the truth as presented by our authorities must be wrong. To question any element of the truth is to abandon all of it. We must learn to defend ourselves from any person or idea that threatens the truth. |
| (1) “Touchers” — To touch is to know. Knowledge is nothing but direct personal experience. Facts are absolute, concrete, and readily available. There are no lenses on experience; things are exactly as they appear to be. |

COGNITIVE DEVELOPMENT AND HEALTHY SKEPTICISM

The issue of trust—in particular, trust of authorities—is connected to our maturation. The below table “Levels of Thinking and Knowing” describes seven stages of maturation. For children in those early stages, trust in authority figures—primarily
their parents and teachers—is a major factor in shaping what young minds believe. Karen Kitchener and Patricia King, on whose work the “Levels of Thinking and Knowing” table is primarily based, report that most students entering college are stage 3 or stage 4, what we are calling “Feelers” and “Collectors.” Many college students become “Relativists” as their studies progress. And there is still room for growth. Even the “Truth-Seeker” stage, which critical thinkers greatly value, is not the highest we can achieve.

Strong critical thinkers cultivate a healthy sense of skepticism. They do not trust the word of authority figures in the same uncritical way that those in the early stages of their cognitive development might. Nor are strong critical thinkers satisfied merely to collect information, even though it is important to be well informed. While valuing context and perspective, strong critical thinkers understand that some reasons, perspectives, and theories are actually superior to others. Strong critical thinking habits of mind—such as truth seeking, inquisitiveness, and judiciousness—impel us to try to apply our critical thinking skills to the question of trustworthiness. We know that there are many reasons why we should not always trust everything that anyone might tell us. Some people lie, some speak of things about which they have no expertise, some say things under duress that are not true, and some may have been deceived themselves and pass on misinformation unwittingly. We can be skeptical without being cynical. And certainly one good time to keep this in mind is when it comes to evaluating the credibility of sources.

**AUTHORITY AND EXPERTISE**

We have been using the word *authority* to refer to a person who is potentially a trustworthy source of information and good advice. In the context of cognitive development, the typical examples of authorities for children would be parents, grandparents, teachers, ministers, and police officers. But that is where “authority,” as we have been using it, begins to reveal its problematic ambiguity and problematic vagueness.

“Authority” can also mean “a person with the rightful power to control the behavior of another.” Parents and teachers have authority, in that sense of the word, over children. But as we mature, we realize that a police officer, our boss at work, our landlord, or even a teacher or parent may have the rightful power to control our behavior, but that does not necessarily make the person more knowledgeable than we are on a given topic.

The sense of the word *authority* we are looking for is “person with expertise.” To a child, parents, ministers, teachers, and police officers are authorities in both senses of the term; children perceive them to be experts with the power to control behavior. Okay. But we are not children anymore. The authorities we may wish to trust are those with expertise.

*Wikipedia* offers a useful starting point for a discussion of expertise, including this characterization:

An expert is a person with extensive knowledge or ability in a particular area of study. Experts are called in for advice on their respective subject, but they do not always agree on the particulars of a field of study. An expert can be, by virtue of training, education, profession, publication or experience, believed to have special knowledge of a subject beyond that of the average person, sufficient that others may officially (and legally) rely upon the individual’s opinion. Historically, an expert was referred to as a sage. The individual was usually a profound thinker distinguished for wisdom and sound judgment. . . . An expert is someone widely recognized as a reliable source of technique or skill whose faculty for judging or deciding rightly, justly, or wisely is accorded authority and status by professional peers or the public in a specific well distinguished domain. . . . Experts have a prolonged or intense experience through practice and education in a particular field.iv

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**Thinking Critically**

The bitter irony of citing *Wikipedia* in a discussion about the trustworthiness of sources screams out. Why should we trust *Wikipedia*, you may well wonder. *Wikipedia* is not a source; it’s a vehicle. Anyone can edit a *Wikipedia* entry. How can we know if what it says is actually true? It might be plagiarized, it might be wrong in some important but subtle ways. Hey, it might be outright fiction! In fact, that’s the same problem we have for everything we see on the Internet or in print: Who wrote that, and can we trust that person (or that government agency, corporation, or organization)? These days there is so much untruth, disinformation, misdirection, propaganda, and outright deceit on the Internet that we dare not believe it simply because we see it in *Wikipedia* or anywhere else on the Internet or in a tweet, text message, or TV infomercial.

Your challenge in this exercise is to fact-check the *Wikipedia* entry for “expertise” for its accuracy. We suggest you use three different ways to do this: (1) Go to the entry itself and see if you can tell who wrote it and what references it uses. Fact-check those references and Google the authors using Google Scholar to see if they are credible authorities on the topic of expertise. (2) Seek independent confirmation by looking up “expertise” in other, more trusted sources, including dictionaries, encyclopedias, and books on expertise. (3) Show the *Wikipedia* characterization of “expertise” to people who have expertise in their various fields, like your professors, and ask them if they would agree with the *Wikipedia* interpretation. If all three ways point to the accuracy of the entry, then good, we’ll go with it. If the three ways diverge or contradict each other, we have problems. Use your analytical and interpretive skills to articulate an accurate understanding of “expertise” if the one in *Wikipedia* is defective.
Learned and Experienced

Two things a person must establish in order to be recognized as an expert on a given topic are that he or she is learned with regard to that topic and that he or she has significant relevant experience. The first condition, being learned, can be accomplished through formal education or through training under the guidance of good mentors and coaches. The second condition, having relevant experience, means that the person is not a novice or a beginner when it comes to the activities and practices associated with that topic.

We will use the word expert to refer to someone who is both experienced and learned in a given subject matter area or professional practice area. Establishing that a person is both learned and experienced is important in the legal context, because that person’s expert testimony on matters within the domain of his or her expertise can be relied upon by juries when they deliberate the guilt or innocence of a person accused of a crime. We all have seen courtroom dramas where a pathologist, a fingerprint expert, or a psychiatrist is put on the witness stand to provide expert opinion with regard to the cause of death, the match of the fingerprints found at the scene of the crime and the fingerprints of the accused, or the mental state of the accused at the time of the crime. In standard examples, the people that the defense or the prosecution introduce as expert witnesses are considered to be qualified due to their many years of professional experience, formal education, and relevant state licenses.

As the movie My Cousin Vinny so aptly illustrates, on-the-job training and many years of practical experience can qualify a person as an expert in certain domains. Marisa Tomei, who plays a hairdresser and the fiancée of the defense attorney, played by Joe Pesci, is put on the witness stand as an expert in automobiles. The prosecuting attorney tries to discredit her as an expert, but fails. The judge accepts her as an expert on automobiles. We’re told that this clip might be on YouTube.com or Hulu.com, but you can access it through Netflix or at www.mythinkinglab.com.

Determining that a person qualifies as an expert witness is a matter of serious concern for strong critical thinkers because the person’s expertise, if established, gives us a good reason to consider putting our trust in what the person has to say regarding the area of his or her expertise.

Assuming that a person qualifies as an expert on X by virtue of prolonged, relevant experience, training, or education, what else could go wrong that would lead us not to find the person credible? Lots of things!

- The expert on X may be speaking about some other topic.
- The expert, having qualified long ago, may have failed to stay current on X.
- The expert on X may not be able to articulate exactly how X is done.
- The expert may be biased.
- The expert may lie or mislead.

On-Topic, Up-to-Date, and Capable of Explaining

Expertise with regard to a topic, X, implies that the expert is knowledgeable about X. But suppose that someone—say, an accomplished musical virtuoso—makes the claim, “The best way to eliminate pesky aphids from a rose garden is by spraying on a mix of water, mineral oil, and Murphy’s soap.” That concoction might work. But wait—gardening is not the virtuoso’s area of expertise. Whatever measure of trust we would reasonably extend to the expert, were she or he speaking about music, does not carry over to claims the expert may make that are off-topic. Regarding gardening, the musical virtuoso is no more nor less of an expert than any other person. To be credible, the expert must be speaking on-topic.

A good friend of ours was an accomplished physician. She retired about 15 years ago and moved to Sarasota to enjoy her retirement playing golf and bridge. One of her friends asked her the other day about a cancer treatment that another physician had recommended. Unlike traditional chemotherapy, the treatment was one of the newer pharmacological approaches that targets the protein receptors on the cancer cells. Our friend rightly declined to offer an expert opinion about the new treatment method. Why? Because she knew that she had not kept up-to-date about advances in cancer treatment since her retirement. Although as a doctor she had the credentials to
An Expert on Hate in America?

Who keeps track of the haters? The shocking news stories about how some who hate express themselves through criminal violence always alarm and disappoint. Our hearts go out to the victims of hate attacks, like the awful events in Norway where a hate-filled extremist killed workers and injured passersby when he bombed the government building in Oslo and then, on the island, massacred so many innocent children at the youth camp.

There may be no one organization monitoring every hate group in the world, but at least one is trying to identify hate groups in America. The Southern Poverty Law Center is “a nonprofit civil rights organization dedicated to fighting hatred and bigotry, and to seeking justice for the most vulnerable members of society. Founded by civil rights lawyers Morris Dees [pictured at the beginning of this chapter] and Joseph Levin, Jr. in 1971, the SPLC is internationally known for tracking and exposing the activities of hate groups.” To promote tolerance and respect in our nation’s schools, “the Center produces and distributes documentary films, books, lesson plans and other materials free of charge.” The disturbing but engaging 2011 documentary film, Erasing Hate, “chronicles the redemptive story of a violent, racist skinhead” who risks his life to renounce the white power movement. Over a period of almost two years “he undergoes an excruciating series of laser treatments to remove the racist tattoos that covered his face and hands.”

In 2010 the SPLC identified 1,002 active hate groups in the United States. The SPLC defines a hate group as an organization that has “beliefs or practices that attack or malign an entire class of people, typically for their immutable characteristics.” The Center compiled its 2010 list “using hate group publications and Web sites, citizen and law enforcement reports, field sources and news reports.”

According to the SPLC, “hate group activities can include criminal acts, marches, rallies, speeches, meetings, leafleting or publishing.”

Appearing on the SPLC list “does not imply a group advocates or engages in violence or other criminal activity.” While over one thousand hate groups were identified, the list does not attempt to represent everyone engaged in spewing hateful messages. The SPLC notes “Web sites appearing to be merely the work of a single individual, rather than the publication of a group, are not included in this list.”

Citations are from the Southern Poverty Law Center Web site: http://www.splcenter.org. Dr. Facione, the lead author of Think Critically, has been a financial supporter of the SPLC for decades and has arranged for the Center’s founder, Morris Dees, to speak on college campuses and to national organizations of academic leaders. Knowing where you can learn more about the SPLC for yourself, and knowing about Dr. Facione’s endorsement and support of the Center’s work, evaluate this claim made by Dr. Facione: “The SPLC is an expert on hate in America.” www.mythinkinglab.com.

Norway children massacre story: www.bbc.co.uk/news/world-europe-14265094


We trust experts when they speak within their areas of expertise in part because we assume that, were they challenged, they could explain exactly why their claim is true or their advice
is good. The capacity to explain why is a critical component of expertise. The second half of the My Cousin Vinny video clip illustrates this. Marisa Tomei offers the expert opinion that the defense’s theory of the crime does not hold water. So the defense attorney, Joe Pesci, who had called her as a defense witness, demands that she explain exactly why she thinks that. She draws upon her extensive knowledge and experience as an expert to provide a factual, precise, and cogent explanation. And, in the process, the explanation she offers exonerates the defendants as well.

What if the expert cannot articulate the explanation? For example, a superstar athlete fails as a head coach and we learn afterward that the star was not able to teach others all that he or she knew about the game. The successful head coach turns out, instead, to be a former athlete who was good but not great. Unlike the person blessed with extraordinary natural ability, this person had to think constantly as a player about how to maximize his or her own talents to compete effectively against other, more skilled players. And those years of reflective practice translate later into the ability to teach and coach others.

There are many reasons why experts may fail to provide adequate explanations.

• Some may never have developed the practice of reflecting on their experiences to explain to themselves why events occurred as they did.
• Lacking the critical thinking habit of being foresightful, they may have failed to anticipate the likely effects of decisions and actions.
• Lacking the critical thinking habit of inquisitiveness, they may have failed to examine the implications of new information for their field of expertise.
• Experts who have weak skills in self-monitoring and self-correcting may not take the time to be sure that they can explain their current beliefs to themselves.
• Being unreflective, they may describe their own thinking using expressions like “I go with my gut” or “I just instinctively knew what I had to do.” Unfortunately, statements like those explain nothing and teach nothing.  

It is difficult to place trust in experts when they cannot explain why they believe what they believe or why they do what they do. For the same reason, it is challenging to learn from these experts. Although we may be able to copy what they are doing, and it may even work, what we most need for learning is to know why it works. And these experts have a difficult time communicating that.

Consider this example: Suppose it is the first day of class and your Biology professor says, “This course will require more time than most other courses. So if you haven’t got a job, don’t bother getting one. If you thought you could work and study Biology in my class, think again.” Suppose that someone asks the professor to explain the basis for that advice. Here are two possible responses:

Professor #1: “Why did I say that? Because I say it to everyone every class to warn them. I give out F’s to people who can’t perform in my class.”

Professor #2: “Working puts great demands on your time. In this course, you have three lectures hours each week plus a required lab each week. I demand experiments in each lab, and the reports from these experiments must be submitted in written form each week. If you do not pass in-class pop quizzes, I require you to attend review sessions. Our goal together is for you to learn biology, and I provide you with every opportunity to be successful. But I will not lower my standards, nor will I accept any excuses about your being too busy with other obligations. I grade on a curve and this course attracts the most serious and academically competitive students in biology. You will have to put a lot of time into this course just to get a passing grade. So I recommend that you not take on other responsibilities, like a job, that will pull you away from your studies.”

Unbiased and Truthful

Experts are human beings and, like the rest of us, they may have biases. Olympic gymnasts and figure skating judges, every one an expert in his or her sport, are often accused of being biased in favor of athletes from some countries or against athletes from other countries. Or they are accused of showing favoritism toward more experienced athletes and being tougher when evaluating the performances of athletes who may be newer to that high level of competition. Ask anyone who has tried to umpire a baseball game or referee a high school basketball game, and they will tell you that accusations of bias are a regular feature of officiating.

If an expert is called as a witness in a trial and that expert happens to be biased in favor of or against defendants of a certain race or age or socioeconomic status, that fact alone should be enough to cause the jury not to trust that expert’s testimony. Expert claims are supposed to be grounded in learning and experience, not in prejudices, biases, or favoritism of any kind.

But even unbiased experts may elect not to speak the truth. Recall that great scene in the 1992 film A Few Good Men where Jack Nicholson tells Tom Cruise that he couldn’t handle the truth. Nicholson’s character, a senior military officer and clearly an expert by training and experience, loses his temper. In his outburst, he explains why Tom Cruise, like so many of his
complacent countrymen, does not want to know the truth about what, in Nicholson’s opinion, the military must do to keep this nation safe and free. In other words, Nicholson’s character is condoning our nation’s defense experts’ practice of misdirecting and lying to the American people. Access this clip at www.mythinkinglab.com.

We can interpret Nicholson’s character as practicing the “Noble Lie,” as proposed by Plato in The Republic.

In Plato’s opinion, most people do not recognize their own best interests, nor can they fully comprehend what is in society’s best interests. Plato’s recommendation was that well-informed leaders who know the whole truth should guide the rest of us by using, when necessary, the “Noble Lie.” That is, Plato proposes that the leaders should flat out lie to the people, if they are impelled by the most beneficent and purest of motives. In other words, the Noble Lie is a lie our leaders tell us because the lie is in our best interests. Not knowing the truth, we would be passive, content, and compliant. Social harmony would be preserved, unrest and discontent prevented. Of course, when the lie is discovered, the people may

Thinking Critically

We tend to think of our elected leaders and those who comment regularly on Washington issues as people with expertise and experience. But because of conflicts of interest, we have reason to be skeptical. After all, aren’t the first three rules of politics “Get Elected, Get Re-elected, and Get Re-Re-elected”? And aren’t the first three values in broadcasting “Ratings, Ratings, and Ratings”? So when we hear claims like these, what can we do to check the facts?

“In the first year of the Obama administration, more jobs were created in the private sector than in the eight years of the Bush administration.”—Rep. Nancy Pelosi, Speaker of the House, 2007–2011.

The Bush tax cuts “created about 8 million jobs over the first 10 years that they were in existence. We’ve lost about 5 million of those jobs during this recession.”—Rep. John Boehner, Speaker of the House, 2011–

“The clear majority of Republican voters think that any deficit reduction package should have a balanced approach and should include some revenues.”—President Barack Obama

Nevada will be “energy independent within the immediate future.”—Senator Harry Reed, Majority Leader of the U.S. Senate.

“A clause hidden in the Obamacare bill, which is now law, gives Obama the right to form a private army.”—Victoria Johnson, columnist for the WorldNetDaily (and former SNL cast member).

“The only growth sector that we’ve had in the last two years in America is government growth.”—Senator Kay Bailey Hutchison, Texas

To see which of the above statements were “ Barely True” and which were “Pants on Fire False,” visit the Web site of the 2009 Pulitzer Prize–winning St. Petersburg Times, www.Politifact.com. When you are there, look at the evidence that is presented in order to back up the evaluation. That Web site pulls together documentation and statistical evidence to support its assessment about the truth or falsity of the claims being made—far more work than any of us individually could undertake on our own, but necessary to the democracy so we voters can make informed decisions.

We were talking with a political observer the other day who cynically suggested that one or both of the major political parties might intentionally dissuade young people and independents from voting. Here is what that person said:

By repeatedly making outlandish claims, one of the parties, or maybe both, is trying to turn off independents and young voters. That party wants these two groups to become so cynical about Washington politics that they decide not to support any candidate. Because this party (or these parties) believes that young voters and independents will not support their party’s slate, they just want those voters out of the mix entirely. “If they will not vote for us, let’s be sure that they don’t vote for the other guys either” seems to be the strategy. “So let’s turn them off and tune them out.” The tactic is to make Washington politics so scummy and fraudulent that young people and independents will not want to be contaminated by the rot and the stench. “It’s not important that what we say is true, it’s only important that we get media attention, excite our base to go out and vote for us, and to repel independent thinkers and young people from voting at all.”

What do you think? Are the two major U.S. political parties (the Democratic Party and the Republican Party, including the Tea Party) trying to drive young people and independents away from the national political process? Or, the opposite? Is one or both trying to appeal to those groups? Since opinions without reasons are thin soup at best, how might you investigate this question and get some hard evidence upon which to base an informed opinion? www.mythinkinglab.com.
become more than a little disenchanted with their “benevolent” leaders. The leaders would surely lose all credibility. We should not trust an expert source who believes that lying and misdirecting are acceptable when making expert claims and offering expert opinions.

WikiLeaks notwithstanding, there are a great many things that corporations, governments, and individual people have good reason not to make public—for example, the plans for developing and marketing new products, military battle strategies and contingency plans, the vulnerabilities of public buildings, the answers to the final exam, personal medical information, bank account PIN numbers. But hold on for a moment! The Noble Lie! My, how convenient for totalitarian leaders intent above all on maintaining power for themselves. Surely they would be able to rationalize just about any propaganda they wished to put out as being “in the best interests of the people.” A little healthy skepticism would be very useful about here!

Free of Conflicts of Interest, and Acting in the Client’s Interest

If an expert’s personal interests diverge from the interests of the person he or she is advising, then there is good reason not to trust what that expert may have to say. Suppose you go to a mortgage broker seeking guidance about how to finance a condo you want to buy. The broker offers you three options with three different banks: A, B, and C. The broker strongly recommends bank B, saying that in his expert judgment bank B best meets your needs. At this point you may be inclined to accept the broker’s expert opinion because mortgages are complicated and difficult for many of us to understand.

What if, unbeknownst to you, bank B has agreed to pay your broker a large fee for bringing his mortgage clients to that bank? And suppose that neither bank A nor bank C will pay the broker nearly as much. This puts the broker in a conflict-of-interest situation. It is in the broker’s interest for you to go with bank B because he will get a larger fee. But would the broker have been so enthusiastic about bank B if bank B paid the same fee that banks A and C pay? If the answer is “no,” then this broker’s conflict of interest has made him an untrustworthy source of advice. Many professionals take it upon themselves, or are required by law, to disclose conflicts of interest to their clients. That way, the client can take that into consideration when evaluating the trustworthiness of the professional whose advice is being sought.

In an effort to protect us from unscrupulous experts who might give us bad advice, there are laws that require that health care professionals, real estate professionals, bankers, lawyers, high-level executives, and members of governing boards act in the interests of their clients or in the interests of their organizations. Under the law, this obligation is called their fiduciary responsibility. The president of the university has a fiduciary responsibility as the institution’s chief executive officer to make decisions that are in the best interests of the university. A doctor has a fiduciary responsibility to make medical decisions and offer medical advice that is in the best interests of the patient.

If the university president makes decisions that are not in the university’s best interests, but rather are in the best interest of some other organization (e.g., the city, the employees of the institution, the department of athletics, or to some other organization to showcase his own reputation) to the detriment of the university as a whole, then the president has failed to fulfill his or her legal obligations. Having broken trust with the institution by that decision, the president might be fired. If a doctor gives medical advice that is in the best interest of a scientific experiment but not in the best interest of the patient, then the doctor has broken trust. In cases where the expert makes claims or offers opinions that are not in the best interest of the person or organization to which the expert owes a fiduciary responsibility, the expert cannot be trusted as a reliable source of truthful information or sound advice.

Unconstrained, Informed about the Case at Hand, and Mentally Stable

Constrained: When being tortured, people are apt to say anything to stop the pain. Intelligence services, knowing this, have devised other tactics to extract accurate and useful information. Torture is one form of constraint that can cause an expert to make claims that are not reliable. Also, an expert may be legally constrained from offering advice or information on a given topic. For example, the expert may have signed an agreement with a former employer that prohibits the expert from revealing proprietary business secrets that are the property of the former employer for a certain period of time, typically a year or two. In this case, even if the expert goes to work for a new employer, the expert cannot legally violate the agreement with the previous employer. Under this constraint, the expert’s claims will not rely on the expert’s full range of knowledge. This is a reason not to fully trust what the expert has to say.
Informed about the Case at Hand: A friend of ours is a personal trainer with great expertise. People he happens to meet often ask him casually for advice. They want to know which exercises to do in order to gain greater strength, speed, or endurance. He could give them broad general answers, but he declines. Why? Because in these causal encounters, he does not have the opportunity to fully evaluate the person’s physical status, so he worries that any advice he may offer or any claims he may make might be wrong for this particular person. As an expert, he realizes that knowing a lot about exercise in general is not always enough to give this particular person the right advice. The expert must also become informed about this particular person’s individual circumstances and condition. To use another example, general advice about how to prepare for a job interview may or may not be the right advice to give one particular person who is preparing for one specific interview for one specific job. An expert’s claims and advice gain credibility if the expert has taken the time to inform himself or herself about the specific case at hand.

Mentally Stable: We have come quite a long way in developing our list of things to think about when evaluating the credibility of a source. And there is only one more issue to add, and that is that the expert is mentally competent, unimpaired, and, to use a layman’s term, “stable.” Drugs and alcohol can impair judgment, including expert judgment. Psychosis, severe clinical depression, and recent traumatic experiences can cause people who may ordinarily have good judgment to make mistakes. And, as research with health care providers and pilots shows, long hours in stressful situations and sleep deprivation are associated with increased risk of errors. An expert who is not mentally stable cannot be trusted to provide reliable information or advice.

Twelve Characteristics of a Trustworthy Source

In summary, when evaluating a trusted source on topic X, it would be reasonable for us to trust a person (or the words of a person) who fulfills all twelve of the criteria below.

1. Learned in topic X
2. Experienced in topic X
3. Speaking about X
4. Up-to-date about X
5. Capable of explaining the basis for their claim or their advice about X
6. Unbiased
7. Truthful
8. Free of conflicts of interest
9. Acting in accord with our interests
10. Unconstrained
11. Informed about the specifics of the case at hand
12. Mentally stable

This may seem like a formidable list, but asking people who have a healthy skepticism to take one’s claims and advice on faith is a sizable request. So it is reasonable that we should have high standards when it comes to establishing and maintaining trust. You may already have noted many of these positive characteristics in people whose advice you trust.

Autism is a heartbreaking diagnosis and a growing medical problem. How do the 12 characteristics of a trustworthy source factor into a parent’s decision about seeking care for an autistic child? In its January 14–21, 2011 issue, the San Francisco Business Times ran a story, “In Autism’s Storm,” about a wealthy CEO and philanthropist, Zach Nelson, and his wife, who are advocates for families with autistic children. The Nelsons support the work of British physician, Andrew Wakefield, who claims, contrary to what many physicians and medical researchers believe, that autism originates from digestive problems and can be cured. Dr. Wakefield has written a book, Callous Disregard: Autism and Vaccines—The Truth Behind the Tragedy, and the Nelsons, along with filmmaker Elizabeth Horn, have produced a film, setup a Web site, and raised money in support of his work. Meanwhile, the British Medical Journal published an editorial denouncing Wakefield, and Wakefield has been stripped of his license to practice medicine by the British medical authorities. Read the article and apply the 12 characteristics to evaluate the trustworthiness of claims made by the Nelsons, Ms. Horn, and Dr. Wakefield. http://www.bizjournals.com/sanfrancisco/print-edition/2011/01/14/in-autisms-storm.html

Dr. Mark Geier of Maryland developed a drug called Lupron for the treatment of autism and he is marketing the “Lupron Protocol” across the country by opening clinics in several states. Dr. Geier’s theory is that autism is caused by a harmful link between testosterone and mercury, according to a story that appeared in the Los Angeles Times on May 24, 2009. Leading pediatric endocrinologists say that the Lupron Protocol is baseless. Experts warn that the protocol can have harmful effects on young children, “disrupt normal development, interfering with natural puberty and potentially putting children’s hearts and bones at risk.” But the protocol is FDA approved, albeit for the treatment of an extremely rare condition that has little if anything to do with autism. Like Dr. Wakefield, defenders of Dr. Geier claim that mainstream medicine condemns his work because he has been vocal about his criticism of “pediatricians, health officials, and drug companies” for “covering up the link between vaccines and autism.” What is a desperate parent to do? Who should a parent believe? How can parents who love their autistic child and want only the best, decide whether or not to try the Lupron Protocol? Research the Lupron Protocol and Dr. Geier on the Internet, and then apply the 12 characteristics of a trustworthy source to Dr. Geier’s claims.