

# **Persuasive Question-Asking: How Question Wording Influences Answers**

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## **PRÉCIS**

Questions put words in answerers' mouths. Questions shape answers through word choice, response framing, assumptions made, and form. Subtle changes in language influence how people understand and answer questions. Response framing suggests and excludes answers, limiting the answers that are acceptable and influencing which answers respondents make. Presumptuous questions that are unbalanced (one-sided) and/or assumptive lead people to think differently, and so respond differently. A question's form amplifies and diminishes tendencies people have to agree or disagree, to speak openly or save face, and to feel threatened or comfortable. Question-asking is a skill, and changes in word choice, suggested responses, presumptions, and form affect answers people provide.

**Keywords:** question-asking, suggestive questions, suggestive questioning, leading questions, misleading questions

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## **HOW DO QUESTIONS SHAPE ANSWERS?**

Questions do more than ask: they solicit and convey information, and focus and suggest answers. By influencing answers, questions alter what is understood by others.

Questions shape answers when fighting with your spouse and teaching your child as well as when mediating a case, convincing a judge, understanding a client, getting your bill paid, deposing witnesses, influencing opposing counsel, "voir-diring" jurors or examining experts.

Questions shape answers in four ways:

(1) Answers are not truths needing merely to be recalled by motivated and careful respondents. People's ability to report their own behavior is unreliable and context dependent. Minor changes in question wording have a major impact on responses (Schwarz & Oyserman, 2001). Question wording puts words in answerers' mouths.

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(2) Questions frame acceptable answers, suggesting some and excluding others. For example, confirmatory questioning (i.e., questions whose answers can only support a point) can obtain answers suggesting people are either extroverted or introverted, independent of how outgoing they actually are (Snyder & Swann, 1979). Questions making people look introverted include *In what situations do you wish you could be more outgoing?* and *Tell me about some time when you felt left out from some social group?* Questions making people look extroverted include *What would you do if you wanted to liven things up at a party?* and *In what situations are you most talkative?*

Confirmative questioning can be useful in negotiations, interrogations and cross-examinations, and dangerous in voir dire. Confirmatory questioning produces non-representative answers, and listeners fail to realize that the answers they hear are shaped by the questions asked (Swann, Giuliano & Wegner, 1982).

Confirmatory questioning explains why jurors find coerced confessions compelling. Even when the confession is obviously extracted by highly leading, biased and presumptuous questioning, the misleading nature of the confirmatory questioning is ignored by jurors (Shuy, 1998).

Leading questions are effective with less powerful negotiators. When less powerful negotiators are asked leading questions about their willingness to cooperate, they respond with lower demands. Less powerful negotiators respond with higher demands when asked leading questions about their willingness to compete (De Dreu & Van Kleef, 2004).

By suggesting and limiting responses, questions put specific words in answerers' mouths.

(3) Questions carry assumptions that influence answers. Direct questions want *yes* or *no* answers about truths in issue. When being prepared to testify, witnesses are asked *Do you understand?*, *Do you have any questions?*, or *Was that it?* Assumptive questions presume these truths and ask for additional information. Assumptive questions ask *What don't you understand?*, *What questions do you have?*, and *What else happened?*

People answer direct and assumptive questions differently (Lucas & McCoy, 1993).

Direct questions have "default answers" that require no mental effort to make, and that questioners, answerers and listeners alike expect to hear. The default answers to *Do you understand?*, *Do you have any questions?*, or *Was that it?* are the easy ones of *Yes, I understand*; *No, no questions*; and *Yes, that's it*. Direct questions "invite" default answers, people more often give default answers, and listeners mistakenly recall default answers even when non-default answers are given (Fillenbaum, 1968; Zillman, 1972).

Assumptive questions take "non-default responses" as a given and ask answerers to search mentally for substantive replies. When asked *What don't you understand?*, *What questions do you have?*, and *What else happened?*, answerers search for what isn't understood, the questions they have, and what more exists to report. The more effortful mental searches of assumptive questions lead people to find answers that would otherwise be denied with default responses to questions asked directly.

Direct and assumptive questions invite different answers, that take different mental effort, and that put different words in answerers' mouths.

(4) A question's form influences answers by inviting agreement or disagreement, openness or evasion, and threat or comfort.

For social reasons, people prefer to agree more than disagree with others. Questions that ask people to "agree or disagree" receive more agreement than actually exists (Schuman & Presser, 1996).

Prospective jurors want to be agreeable, and so shade their answers in voir dire toward what they believe the judge and attorneys want to hear. Prospective jurors having difficulty detecting "desired" answers choose not to answer (Marshall & Smith, 1986).

Many jurors fail to respond affirmatively to any question during jury selection. Judge Gregory Mize (2003) warns that attorneys and judges should be cautious of silent jurors. Judge Mize found that in private questioning, 28% of silent jurors in criminal and civil cases revealed information they were unwilling to admit to in open court. The information was sufficient to excuse many for cause.

Direct questions that ask *who*, *what*, *when*, *how* and *why* often sound confrontational or intrusive, and people's resistance to such questions can prevent them from responding with accurate answers.

A substantial proportion of jurors report that questions asked orally in voir dire make them uncomfortable (27%), are intrusive (27%) and/or are unnecessary (43%) (Rose, 2001). The questions jurors point to as discomforting and intrusive ask about:

- (1) experiences with the court (e.g., *Have you ever been to court before, for any reason?, Have you ever hired an attorney?*)
- (2) crime experiences (e.g., *Have you or anyone you know ever been a victim of a violent crime?, Do you know anyone charged with a crime similar to the one at issue today?*)
- (3) family questions concerning one's marital status, children and spouse (e.g., *Do you have children?, What are their ages? What do your children do?, What does your spouse do for a living?, Where does your spouse work?*)
- (4) interests and associations (e.g., religious affiliation, voluntary organizations, hobbies, gun ownership)

The form of a question can encourage or discourage both agreement and discomfort. A question's form influences if words come out of answerers' mouths, and what words come out.

The wording, framing, presumptuousness, and form of the questions that are asked influence the answers that are obtained.

## WORD CHOICE

Re-wording questions alters answers. Changing seemingly neutral words (*a* versus *the*, *tall* versus *short*, *and* versus *but*, *not allow* versus *forbid*) can powerfully impact answers.

## Seemingly Simple Words Aren't So Simple

Common words do not always have shared meanings. Witnesses and jurors have different understandings of even simple activities such as *reading a magazine* or *smoking cigarettes*.

People interpret *reading a magazine* as (a) having seen the magazine at a newsstand, (b) having read the magazine cover-to-cover, and (c) subscribing to the magazine (Belson, 1981).

People interpret *smoking cigarettes* as anything from (a) taking even a single puff to (b) cigarettes they have finished, and from (c) cigarettes they have borrowed to (d) only those they have bought. Fully 10% of answers change from *yes* to *no*, or *no* to *yes*, when given a standard definition of what counts as smoking a cigarette (Suessbrick, Schober & Conrad, 2001).

Many common words are variously construed, including *you* (just me or also my family?), *household* (does that include our mother-in-law suite?), and *weekday* (does that include Saturday?) (Belson, 1981). Payne (1951) offers a long list of common and problematic words that begins with *about* and ends with *you*.

Evaluative and numerical words in questions pose problems for answerers. People share a common understanding for evaluative words such as *extremely* and *totally* (the positive end of the evaluative scale), but not for evaluative words such as *not quite* and *slightly* (the negative end) (Bartram & Yielding, 1973). Certain numeric words have relatively stable meanings for people (e.g., *lots*, *almost all*, *virtually all*, *nearly all*, *a majority of*, *not very many*, *almost none*, *hardly any*, *a couple*, *a few*), while others have highly variable meanings (e.g., *most*, *numerous*, *large proportion of*, *significant number of*, *considerable number of*, *several*).

When you phrase questions, you are deciding how much leeway to give answerers. Answerers can question words or interpret them in ways beneficial to themselves. By the words used, questioners can avoid (or suffer from) self-serving answers.

Bill Clinton declared he had not had *sexual relations* with Monica Lewinsky because no intercourse occurred (although other sexual activities had); and he infamously noted that one answer depended on what the meaning of the word *is* is.

Questions with familiar words are answered more accurately than questions with unfamiliar words (Blair, Sudman, Bradburn & Stocking, 1977). Questions with complex vocabulary can confuse lay witnesses. Lay witnesses rarely ask for confusing questions to be explained, nor do they qualify their answers. Confusing questions reduce an eyewitness' accuracy (Kebbell & Johnson, 2000).

When clarity is desired, words that have different meanings for different people are less effective. When ambiguity is desired, words with variable meanings for people can be powerful for allowing agreement *or* argument *or* confusion *or* evasion.

**Nouns: What’s in a Name?**

Nouns used in questions influence both understandings and answers. At times, attorneys consciously label key events and people to achieve persuasive purposes.

The defense in the O. J. Simpson case called *domestic incidents* that which the prosecution called *wife beating* and *abuse*.

The word *victim* (which assumes injury), rather than *accuser* (which does not assume injury), is used by plaintiffs and prosecutors in personal injury and criminal cases, even when the status of a person as a victim is a factual question for the jury (e.g., child molestation and rape cases).

Asking jurors if they support *euthanasia*, *physician assisted suicide*, *voluntary assisted suicide*, *mercy killings*, or *the right to die* activates different understandings: *mercy killing* encourages people to think about death, negative emotions and faith; *voluntary assisted suicide* encourages thinking about helping end misery; and *physician assisted suicide* studiously avoids religious associations (O’Hara & Schober, 2004).

The nouns used in questions to label events and people have implications, and influence understandings listeners, such as jurors and judges, develop.

Noun choice also influences answers, sometimes dramatically.

Two questions from the General Social Survey arise from time to time in voir dire, and show the power of nouns in influencing answers (see, for analysis, Reichardt, 2004).

The first question asks about spending on public assistance, though in two different ways:

- (1) *Are we spending too much, too little, or about the right amount on welfare?*
- (2) *Are we spending too much, too little, or about the right amount on assistance to the poor?*

The second question asks about spending on crime, also in two different ways:

- (1) *Are we spending too much, too little, or about the right amount on halting the rising crime rate?*
- (2) *Are we spending too much, too little, or about the right amount on law enforcement?*

The answers people provide are “skewed” by the questions they are asked. Far more people (47% versus 11%) think *too much* is spent on *welfare* than on *assistance to the poor*. Far more people think

**TABLE 1. Welfare vs. Assistance to the Poor**

<i>Are we spending too much, too little, or about the right amount on <u>welfare</u>?</i>		<i>Are we spending too much, too little, or about the right amount on <u>assistance to the poor</u>?</i>	
Too little	20%	Too little	64%
About right	33%	About right	25%
Too Much	47%	Too Much	11%

*too little* (64% to 20%) is spent on *assistance to the poor* than on *welfare*. An additional 11% of people think *too little* is being spent on halting the rising crime rate than on law enforcement. Nouns in questions skew answers.

Skewed responses are helpful in jury selection. The *welfare* question identifies jurors most strongly supportive of public assistance (while protecting those most strongly opposed in a larger group). The *assistance to the poor* question identifies jurors most strongly opposed to welfare (while protecting those most strongly in favor in a larger group).

**TABLE 2. Halting Rising Crime Rate vs. Law Enforcement**

<i>Are we spending too much, too little, or about the right amount on halting the rising crime rate?</i>		<i>Are we spending too much, too little, or about the right amount on law enforcement?</i>	
Too little	68%	Too little	57%
About right	26%	About right	36%
Too Much	6%	Too Much	8%

The nouns employed in questions can shape answers, skewing responses toward one extreme or another. Which question is asked depends on one's goals.

**Verbs: Defining the Action**

Verbs used in questions influence answers. Some verbs are intense (e.g., *collide, rape, vomit*) while others are not (e.g., *contact, sex, be sick*). Some verbs have positive associations (e.g., *allow, protect*), while others have negative associations ( e.g., *forbid, prohibit*). Both the intensity and direction of verbs shape the answers people provide.

**Intensity.** Questions with verbs of greater intensity lead people to provide answers reflecting that intensity. For example, using differentially intense verbs (e.g., *smashed, collided, bumped, hit, contacted*) in a question asking about a traffic accident alters witnesses' answers.

Loftus and Palmer (1974) showed people a videotaped multiple-car accident. The question, *How fast were the cars going when they smashed into each other?*, consistently elicited a higher estimate of speed than when *smashed* was replaced by *collided, bumped, hit* or *contacted*. Estimates were, on average, 9 miles per hour (25%) higher with *smashed* than with *contacted*. Further, when asked one week later, *Did you see any broken glass?*, people estimating higher speeds were more likely to affirm the presence of broken glass, even though no broken glass was shown in the videotape.

**TABLE 3. Accident Question Verbs**

<i>How fast were the cars going when they _____ into each other?</i>	<b>Average Estimated Speed</b>
Smashed	41 mph
Collided	39 mph
Bumped	38 mph
Hit	34 mph
Contacted	32 mph

My own experience concurs with mock trial research that demonstrates that jurors misremember witnesses testifying to events and actions that occur only in an attorney's questions. Such false recollection is not offset by cautionary instructions warning of possible misleading effects of an attorney's questions (Holst & Pezdek, 1992).

Tort reform is an attitude predictive of juror leaning in both civil and criminal cases (Hans & Lofquist, 1994; Moran, Cutler & De Lisa, 1994). In 1986, Louis Harris and Associates

conducted a national survey on public attitudes toward the civil justice system and tort reform for Aetna Life and Casualty, as part of Aetna’s litigation research. Respondents were asked whether they *find acceptable* specific proposals for tort reform. The *New York Times* (March 7, 1987) reported the results as *favoring* reform, and quoted spokespeople from Aetna, the Tort Reform Institute and the Insurance Information Institute characterizing the results as demonstrating strong public *support* for reform. However, when people directly are asked if they *find acceptable*, or *favor*, or *support* specific proposals for tort reform, far fewer people express *support* than *accept* or *favor* proposals for reform. Using the word *support* (a more intense verb) to characterize answers to questions asking about *acceptability* or *favoring* (less intense verbs) strengthens answers beyond what people said, and in a manner that often goes unnoticed (Krosnick, 1989).

Questions using verbs of greater intensity stimulate answers reflecting that intensity, distort memories in the direction of those answers, and permit descriptions of those answers that can deviate substantially from people’s actual beliefs.

**Direction.** People are more willing to *not allow* something than to *forbid* it, and to *not protect* something than to *prohibit* it. The direction of a verb in a question influences the answers people provide.

As early as 1940, this directional *allow-forbid* effect was noticed when people were asked one of two questions:

- (1) *Do you think the United States should allow public speeches against democracy?* or
- (2) *Do you think the United States should forbid speeches against democracy?*

Many more people (21%) were willing to *not allow* speeches against democracy than were willing to *forbid* them

**TABLE 4. Not Allow vs. Forbid**

	<i>Do you think the United States should <u>allow</u> public speeches against democracy?</i>		<i>Do you think the United States should <u>forbid</u> public speeches against democracy?</i>	
	<b>1940</b>	<b>1976</b>	<b>1941</b>	<b>1976</b>
No (not allow)	<u>75%</u>	48%	Yes (forbid)	<u>54%</u> 21%
Yes (allow)	25%	52%	No (not forbid)	46% 79%

(Rugg, 1941). In 1976, this *allow-forbid* effect was replicated, with an additional 27% of people wanting to *not allow* such speeches than *forbid* them (Schuman & Presser, 1996). On purely logical grounds, the two questions should generate identical answers for the *not allow* and *forbid* choices, yet they do not. Instead, a seemingly innocuous change in the direction of the verb shifts answers substantially.

Differential answering to questions also occurs for related verbs such as *protect* and *prohibit* (Reichardt, 2004). For example, an additional 10% of people are willing to *not protect* than *prohibit* when asked either:

- (1) *Do you think there should be a constitutional amendment to the Constitution protecting the life of the unborn child, or shouldn’t there be such an amendment?* or
- (2) *Do you think there should be an amendment to the Constitution prohibiting abortions, or shouldn’t there be such an amendment?*

Although differential responding to questions using *forbid* rather than *allow* has been

demonstrated for a wide range of issues, strong effects do not always occur. Only a small percentage of people were more willing to *not allow* the showing of X-rated movies (a 5.4% difference) and cigarette advertisements on television (a 4.5% difference) than to *forbid* them (Schuman & Presser, 1996).

The more people lack an opinion on a topic (would say *don't know* if given that option) or the more indifferent (unconcerned) they are, the more likely the verb *forbid* in a question generates different answers than the verb *allow* (Hippler & Schwarz, 1986; Schuman & Presser, 1996). Nonetheless, the effect of questions using *allow* versus *forbid* remains consistent, with more people willing to *not allow* an action than to *forbid* it.

The intensity and direction of verbs in questions alters answers.

### **Adjectives and Adverbs: Modifying Estimates**

People often are asked to estimate distances, heights, times and frequencies. Questions using words that imply more of a quality or characteristic (e.g., *high, tall, heavy, far, frequently*) lead respondents to make bigger estimates. Questions using words implying less of a quality or characteristic (e.g., *low, short, light, near, occasionally*) lead respondents to make smaller estimates.

When being questioned about a car accident, a witness could be asked either:

- (1) How fast was the car going? or How slow was the car going?
- (2) How long were the skid marks? or How short were the skid marks?
- (3) How much damage was done to the car? or How little damage was done to the car?
- (4) How many bruises did the driver suffer? or How few bruises did the driver suffer?

People report higher speeds, longer skid marks, more property damage and more bruises when asked the *fast, long, much* and *many* questions. People report lower speeds, shorter skid marks, less property damage and fewer bruises when asked the *slow, short, little* and *few* questions (Lipscomb, McAllister, & Bregman, 2001).

Harris (1973) asked people questions about height and length. People were asked:

- (a) How tall was the basketball player? or How short was the basketball player?
- (b) How long was the movie? or How short was the movie?
- (c) How high was the office building? or How low was the office building?

Questions that used *taller, longer* and *higher* generated answers that were taller, longer, and higher. The basketball player was 79" inches *tall* and 69 inches *short*, the movie was 130 minutes *long* and 100 minutes *short*, and the office building was 26 stories *high* and 13 stories *low*.

Loftus (1975) asked people questions about frequency. People were asked either:

- (1) Do you get headaches frequently, and, if so, how often? or
- (2) Do you get headaches occasionally, and, if so, how often?

People asked the *frequently* question reported an average of 2.2 headaches per week, whereas people asked the *occasionally* question reported an average of only .7 headaches per week.

Adjectives and adverbs that imply more of a quality or characteristic can influence people to

estimate more of that quality or characteristic, particularly for matters people find difficult to assess (e.g., time, distance, length, speed).

### Articles and Possessives: Creating Memories

Which would you ask:

- (1) *Did you see a stop sign? or Did you see the stop sign?*
- (2) *Did he touch a gun? or Did he touch the gun?*
- (3) *Did you feel a scar? or Did you feel his scar?*

The indefinite article *a* seems a minor change in wording from the definite article *the* or a possessive (e.g., *his*) in a question. Yet, more people answer *yes* to questions using the definite article *the* and possessives than to questions using the indefinite article *a*, even when a *yes* answer is inaccurate.

Loftus and Zanni (1975) showed people a videotape of a multiple-car accident, and then asked 22 questions about what they had seen, 6 of which varied in the article used (*the* or *a*), and 3 of these 6 questions asking about events that were not shown in the videotape. For example, people were asked either *Did you see a broken headlight? or Did you see the broken headlight?* People asked questions that used the definite article *the* were more likely to report having seen something, whether or not it had really appeared in the videotape, than were people asked questions using the indefinite article *a*.

In other research, people were three times as likely to affirm the presence of nonexistent moustaches, eyeglasses, accents, and lisps when asked about “*the* moustache”, “*the* eyeglasses”, “*his* accent” and “*his* lisp” in a person they had seen (Davis & Schiffman, 1985).

People answer *yes* more to questions using definite articles.

### Conjunctions: Affirming and Challenging

The conjunctions *but* and *and* are often used interchangeably, despite having opposite implications for what is stated before the conjunction – *but* negates or casts doubt on what comes before, whereas *and* affirms what comes before (Lucas & McCoy, 1993). *You saw John at the door, but you didn't let him in?* challenges whether John was really seen at the door; by contrast, *You saw John at the door and you didn't let him in?* accepts that John was seen at the door and questions or seeks confirmation for not letting John in.

Too often questions use the conjunction *but* when *and* is meant, and vice versa. When speaking to an opposing attorney or a client, saying *I like you, but can you give me space?* or *You are an intelligent person, but how could you not know this?* sends very different messages than saying *I like you and can you give me space?* and *You are an intelligent person and how could you not know this?* The first set of questions come across as criticism, because *but* negates the compliments initially made. The second set of questions are reacted to more positively and are more readily accepted (Lucas & McCoy, 1993).

Sher and McKenzie (2006) discuss a hypothetical case where someone has been diagnosed with a serious illness, and encounters one of 4 treatment descriptions from a doctor:

- (1) The new treatment has strong negative side effects but leads to 80% survival/20% mortality;
- (2) The new treatment has strong negative side effects and leads to 80% survival/20% mortality
- (3) The new treatment has no negative side effects but leads to 80% survival/20% mortality
- (4) The new treatment has no negative side effects and leads to 80% survival/20% mortality

These researchers note that people are more likely to prefer the new treatment when told statement (1) than (2), or when told statement (4) than (3). Sher and McKenzie's discussion is relevant to asking questions in medical malpractice and related cases. An attorney can ask: *Were you told X?...But you were also told Y?* or the attorney can ask *Were you told X?...And you were also told Y?* to influence whether people prefer or reject medical procedures.

*And* accepts and affirms. *But* rejects and challenges. A conscious choice of *but* and *and* influences what is denied, what is affirmed, what is understood and what is preferred.

### **Voice: Who Did It?**

When jurors apportion responsibility or hear the "some other guy did it" defense, they ultimately must decide who caused what happened. Use of active versus passive voice influences who is seen as the "do-er" and who is seen as the "done-to".

The grammatical subject of a question is seen as the "do-er", and this person changes with active or passive voice (Johnson-Laird, 1968a,b). Active voice means that the subject of a question performs the action expressed in the verb. Passive voice means that the subject of a question receives the action expressed in the verb.

Consider two questions, one in active voice and one in passive voice:

(1) *Did the woman kiss the man?* (active voice)

(1) *Was the man kissed by the woman?* (passive voice)

In the active voice question, the woman is the subject of the sentence, and she is seen as the "cause" or "reason" for the kiss. In the passive voice question, the man is the subject of the question, and he is seen as the "cause" or "reason" for the kiss.

Use of active and passive voice changes whose actions become prominent (Johnson-Laird, 1968a,b). The more prominent person is assigned greater responsibility for the action.

### **Why Words Matter**

Subtle, and seemingly minor, changes in wording can have major and profound effects on answers. Choosing different nouns, verbs, adjectives, adverbs, articles, conjunctions and voice (passive, active) affects whether respondents (a) answer *yes* or *no*; (b) provide smaller or larger estimates of height, length, time, speed and amount; (c) support various proposals; (d) think non-existent events happened; (e) take back just stated compliments; and (f) assign causal responsibility to your client for what happened.

## RESPONSE FRAMING

Response framing occurs by questions explicitly suggesting, limiting and/or excluding possible answers. Questions can specify alternatives to be compared or prompt respondents with possible answers. For example, witnesses might be asked *How many times did you call Jane before October 13, 2003 – more than once? more than five times? more than ten times?*

Respondents often assume that if alternatives are stated or suggested, that at least one is true, and that the question-asker has knowledge about the likely answers. This assumption leads people to base their estimates around the alternatives and promptings stated in the questions, rather than on accurate recall from memory.

Questions suggest, limit, and exclude answers in a number of ways:

With *response scaling*, a question specifies a range of possible responses when the question is asked, which encourages some answers and discourages others.

The allowance or not for *middle positions* (e.g., *neutral, about right, neither increase nor decrease, equally credible*) and *don't know* answers is particularly powerful in shaping answers.

With *response ordering*, responses suggested in questions are listed in a particular order so as to encourage some answers and discourage others.

Through response scaling and response ordering, and allowance (or not) of middle and *don't know* positions, response framing puts words into answerers' mouths.

### **Response Scaling: What Are You Suggesting?**

Response scaling refers to providing, as part of a question, a range of possible answers to the question being asked. A “low” scale range can be distinguished from a “high” scale range. For example, when asking people to estimate the number of hours of TV viewing in a day, a low scale can be offered that ranges from *less than half an hour* to *over 2.5 hours* or a high scale can be offered ranging from *less than 2.5 hours* to *over 4.5 hours*.

People use the range of suggested responses included in a question to estimate the frequency and duration of their own, and others', behavior. This strategy results in higher estimates being provided to questions that include high, rather than low, response scales.

Response scaling influences answers through *prompt scaling, time period scaling* and *decomposition*.

***Prompt scaling.*** Many questions require people to report on the frequency with which they engaged in a specific behavior in a specified time period. Attorneys often expect witnesses to identify the intended behavior, search memory for relevant episodes, date these episodes, and count them up to arrive at a numeric answer for a specified time period. This course of action is the one witnesses are least likely to follow.

Unless the behavior is rare and important, people are unlikely to have detailed memories of each time they undertook a particular action. Individual instances of frequent behaviors blend into general memories. People answer by estimating, and they use the prompts provided in questions to do so.

For example, people’s estimated frequency of use of headache products depends on the frequencies used as prompts in the question asked:

(1) *In terms of the total number of products, how many other headache products have you tried? 1? 2? 3?*

(2) *In terms of the total number of products, how many other headache products have you tried? 1? 5? 10?*

On average, people asked the *1? 2? 3?* question said they had tried other headache products approximately 3 times, while people asked the *1? 5? 10?* question said they had done so approximately 5 times (Loftus, 1975). Higher suggested frequencies in the question generated higher frequency estimates in answers.

The length of time people estimate they spend in common activities is also affected by the prompts included in the questions that are asked. Think about asking a witness or a prospective juror *How many hours of TV do you watch on a typical day?* If the question includes

response options that range from *less than half an hour to more than two and a half hours*, one study found that only 16% will say they watched more than 2.5 hours of TV. If the question includes response options that

**TABLE 5. TV Viewing Prompt Scales**

*How many hours of TV do you watch in a typical day?*

Low Frequency Scale		High Frequency Scale	
Up to .5 hours	7%	Up to 2.5 hours	63%
.5 – 1 hour	18%	2.5 – 3 hours	23%
1 – 1.5 hours	26%	3 – 3.5 hours	8%
1.5 – 2 hours	15%	3.5 – 4 hours	5%
2 – 2.5 hours	18%	4 – 4.5 hours	2%
2.5 + hours	16%	4.5 + hours	0%

range from *less than two and a half hours to more than 4.5 hours*, 38% will say they watched more than 2.5 hours on a typical day (Schwarz, Hippler, Deutsch & Strack, 1985).

Even people’s estimates of their own mental health symptoms, sexual behavior and drug use are influenced by the response scales used in the questions to prompt for answers. People with psychiatric problems reported the frequency of 17 different mental health symptoms in answers to questions that prompted with one of two response scales: (1) *never, about once a year, about twice a year, twice a month, and more than twice a month*; or (2) *twice a month or less, once a week, twice a week, daily, and several times a day*. For 17 symptoms, 62% of respondents reported average frequencies of more than twice a month when prompted with the (second) high frequency response scale, whereas only 39% did so when prompted with the (first) low frequency response scale (Schwarz & Scheuring, reported in Schwartz & Oyserman, 2001).

Men and women report more sexual partners and drug use when prompted with a high, rather than a low, frequency response scale in the question (Tourangeau & Smith, 1996).

Questions that prompt for answers with high and low frequency response scales generate answers that reflect those prompts.

People also assign meaning to words in questions based on the response scale. When words are vague, unclear or open to interpretation, people rely on the response scale included in the question to determine the words' meaning.

Suppose you ask someone claiming PTSD how frequently they feel "really irritated," a phrase open to interpretation. When your question offers possible responses of *less than once a year* to *more than once a month*, answerers infer that you want to know only about major annoyances, whereas when possible responses range from *less than once a month* to *weekly*, answerers infer you want minor annoyances included. People answer based on inferences, and less extreme prompts in this question lead to less extreme irritations included in answers (Schwarz, Strack, Miller & Chassein, 1988).

Prompts included in questions affect understandings of what is being requested, and the substance of answers people provide.

**Time Period Scaling.** Questions can influence frequency estimates through time references that limit responses to a particular time span, such as *last week* or *last year*.

For example, consider asking someone claiming PTSD either:

- (1) *How many times have you felt angry in the last year?* or
- (2) *How many times have you felt angry in the last week?*

People report a lower frequency of anger for a one year period (because *last year* cues them to focus on major annoyances only) than would be expected on the basis of their reports for a one week period (because *last week* cues them to focus on both major and minor annoyances) (Winkielman, Knauper & Schwarz, 1998).

A question about the number of times an event has taken place in a shorter time span (e.g., *in the last 2 months*) can be asked directly, or can be preceded by the same question asking about a longer time span (e.g., *in the last 6 months*). When a question that asks about a longer time span (e.g., *in the last 6 months*) immediately is re-asked using a shorter time span (e.g., *in the last 2 months*), answers for the shorter time span become more accurate (Loftus, Klinger, Smith & Fiedler, 1990).

Time references cue people how to understand words in questions, and can be re-asked to improve accuracy of answers.

**Decomposition.** When attorneys decompose questions into conceptual parts, witnesses overestimate. A question about *drinking alcohol* might be decomposed into three questions about *drinking wine*, *drinking beer* and *drinking liquor*, or as has been done by prosecutors in the Phil Spector case, about drinking at each of a number of different restaurants.

Decomposed questions increase the reported frequency of a behavior. The sum of answers across *beer*, *wine*, and *liquor* is higher than the frequency reported in response to the more general *alcohol* question (Blair & Burton, 1997; Sudman & Schwarz, 1989).

Decomposition increases the reported frequency of behavior – it does not increase the accuracy of the answers. For example, people report fewer telephone calls when asked how many times they used the phone in the *last week* than when they had to report separately

on each day of the week; and they reported fewer calls when the questions asked about *yesterday* than when they had to report on eight different time periods on the previous day. Record checks indicated that the decomposition of the general question did not increase the accuracy of the reports; it only increased frequency estimates (Belli, Schwarz, Singer & Talarico, 2000).

Specific and narrow decomposed questions (e.g., about *wine, beer and liquor*; about *each day*) foster overestimates, while more general composed questions (e.g., about *alcohol*; about *last week*) foster underestimates.

**When Response Scaling Affects Answers.** Questions that scale responses through use of prompting, time references and decomposition do not always influence answers.

People look to questions for possible answers when:

- (1) a matter is difficult to assess, such as are estimates of time, distance, length and speed for most people; or
- (2) the event or behavior is not well represented in memory, such as behaviors that occur frequently (e.g., sex, TV viewing, phone calling), but not completely regularly (not “every Sunday” or “every hour”).

When people estimate well (e.g., regular behaviors) and remember well (e.g., rare events), answers are less likely to be influenced by the response scales embedded in questions.

**Middle Positions: Do I Have to Choose?**

Many questions require respondents to choose between two contrasting alternatives. For example, *In your opinion, should the penalties for using marijuana be more strict or less strict than they are now?* Frequently, there is a logical middle position that some people might prefer to either of the contrasting alternatives, such as *In your opinion, should the penalties for using marijuana be more strict, less strict, or about the same as they are now?* The provision, or not, of a middle position influences how people answer questions.

Offering a middle position increases the likelihood that people will affirm a middle position as their answer. When asked in 1976 whether marijuana laws should be more or less strict, an additional

20% of people said marijuana laws should stay the *same as now* when the question provided that alternative, than when it did not (Schuman & Presser, 1996).

**TABLE 6. Middle Position: Marijuana**

<i>In your opinion, should the penalties for using marijuana be <u>more strict or less strict</u> than they are now?</i>		<i>In your opinion, should the penalties for using marijuana be <u>more strict, less strict, or about the same as they are now?</u></i>	
More strict	50%	More strict	42%
Less strict	41%	Less strict	31%
Same as now (volunteered)	6%	Same as now (provided)	26%

Similarly, when asked in 1979 whether divorce should be easier or more difficult to obtain, an additional 35% of people answered *stay as is* when the question included that middle

position as a possible response. Across 16 different studies, offering a middle position significantly increases its choice, with increases ranging from 11 to 39 percentage points, and the most common increase in the neighborhood of 10 to 20% (Schuman & Presser , 1996).

**TABLE 7. Middle Position: Divorce**

<i>Should divorce in this country be easier or more difficult to obtain than it is now?</i>		<i>Should divorce in this country be easier to obtain, more difficult to obtain, or stay as it is now?</i>	
Easier	40%	Easier	21%
More difficult	50%	More difficult	34%
Stay as is (volunteered)	10%	Stay as is (provided)	45%

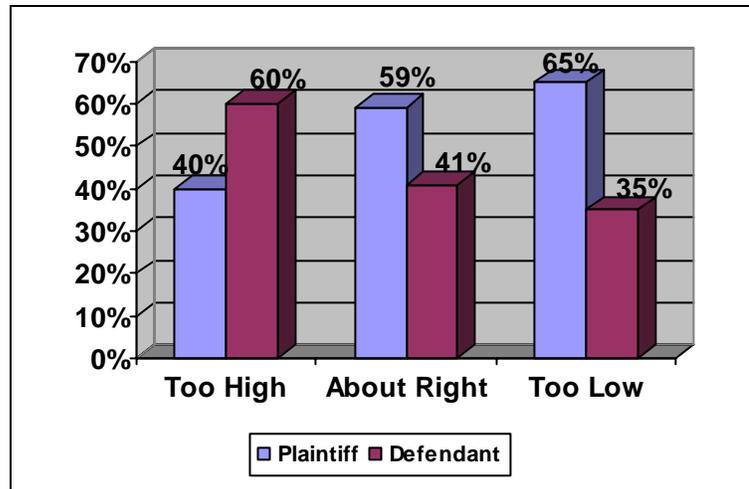
The use of a middle position in a question does not alter the relative importance of the other responses. Making marijuana laws stricter and divorce more difficult was the most affirmed answer whether or not a middle position was suggested, an outcome generally found when a middle position is offered in a question (Schuman & Presser, 1996).

Questions commonly asked in voir dire and on juror questionnaires face this issue of including a middle position. A common question asked in voir dire in civil cases that includes a middle position is *From what you have read or heard, do you think that in recent years, the money awards from lawsuits have generally been too high, too low, or about right?* In many venues, about 60% - 70% of jurors respond *too high*, 0% - 10% say *too low*, and the other 30% say *about right*. The *too low* alternative might not be chosen by any prospective juror in a pool, and so the middle position of *about right* functions as the only viable alternative to *too high*, rather than as a middle position.

The results of a large sample, community attitude survey that I conducted for an actual case reveals what research often finds concerning jurors' responses to this question: answering *about right* or *too low* identifies plaintiff leaning jurors, while answering *too high* identifies defense leaning jurors. Because so few jurors answer *too low*, providing the middle position of *about right* becomes critical in predicting which jurors in a case are likely to lean toward the plaintiff or lean toward the defense.

**FIGURE 1. Monetary Awards**

*From what you have read or heard, do you think that in recent years, the money awards from lawsuits have generally been too high, too low, or about right?*



The provision of a middle position in a question increases the likelihood the middle position is selected, the relative importance of other responses does not change, and the middle position can serve as a reasonable alternative when questions have highly skewed answers.

**Don't Know: What If I Don't Know?**

Question-askers frequently offer response options in their questions that leave out a choice of *undecided, no opinion, uncertain* or *don't know*. The inclusion of a *don't know* option in a question's response scale increases the likelihood of a *don't know* answer.

In criminal voir dire, prospective jurors are sometimes asked *In general, do you think the courts deal too harshly or not harshly enough with criminals?* Prospective jurors could be asked *In general, do you think the courts deal too harshly or not harshly enough with criminals, or don't you have enough information about the courts to say?* More than 1 in 5 people change their answer to *don't know* when provided that option in the question (Schuman & Presser, 1996).

A systematic bias exists in answers between the two versions of this harshness question. People opting for *don't know*, when it is offered, choose

**TABLE 8. "Don't Know" Option**

<i>In general, do you think the courts deal too harshly or not harshly enough with criminals?</i>		<i>In general, do you think the courts deal too harshly or not harshly enough with criminals, or don't you have enough information about the courts to say?</i>	
Too harshly	6%	Too harshly	5%
Not harshly enough	78%	Not harshly enough	60%
About right (volunteered)	10%	About right (volunteered)	6%
Don't know (volunteered)	7%	Don't know (provided)	29%

*not harshly enough* when the question fails to mention a *don't know* alternative.

For many different questions, an average of 22% of people "float" between answers when offered or not offered a *don't know* option in questions, with a typical range of 13% to 23% (Schuman & Presser, 1996).

Only large sample research such as a community attitude survey can determine whether people who answer *don't know* come randomly or systematically from other responses.

In the community attitude survey research project discussed previously, I analyzed *don't know* responses that were volunteered to questions (i.e., that did not include that option), and a number of these *don't know* answers were predictive of juror leaning. Venire members volunteering *don't know* to the question *Would you have any difficulty taking the side of a corporation in a dispute with an individual?* tended to lean toward the plaintiff, as did venire members who volunteered *don't know* to the question *From what you have read or heard, do you think that in recent years, the money awards from lawsuits have generally been too high, about right, or too low?*

The provision (or not) of a *don't know* response affects answers, sometimes systematically.

**Response Ordering: What Did You Last Say?**

The order in which responses are suggested in questions influences answers.

Both *comparison order* (e.g., *Is A more reasonable than B? Is B more reasonable than A?*), and *alternative order* (e.g., *criminal or civil, civil or criminal*) matter.

**Comparison Order.** Questions commonly ask for comparisons: *Is chemotherapy more reasonable than radiation for this patient? Is an apology in a settlement offer more valuable than an additional \$10,000?* Or, as has been discussed extensively in the Spector murder trial, *Does human blood after an intra-oral gunshot wound spatter in a pattern similar to a cow that has been shot in the head?* The order in which the alternatives are placed in questions influences the answers people provide.

When comparison alternatives are reversed in questions, answers change. Consider the case of two monks, Theophilus and Gottlieb, who had a disagreement about smoking and praying at the same time, with Theophilus declaring “No” and Gottlieb, the smoker, saying “Yes.” Weeks after the disagreement, they meet again, and Theophilus says: “I took the issue to the Pope. I asked him point blank ‘*Is it permissible to smoke during prayer?*’ and he said ‘No.’” Gottlieb responded, “That’s not what he said when I asked him, although, of course, I did phrase the question in a more illuminating way. I asked him ‘*Is it permissible to pray while I smoke?*’ and he naturally said ‘Yes’”.

Asking people to compare A to B can produce different answers than when asking them to compare B to A. Consider asking prospective jurors about which gender they find to have been the more empathic teacher in high school, and asking either:

- (1) *Were your female teachers more empathic than your male teachers, or were they less empathic?, or*
- (2) *Were your male teachers more empathic than your female teachers, or were they less empathic?*

Far more people (41% to 9%) answer that females were more empathic teachers than males when *female* is the first item in the

**TABLE 9. Comparison Order: Male-Female Empathy**

<u>Female more empathic than male, or less?</u>		<u>Male more empathic than female, or less?</u>	
Female more (first)	<u>41%</u>	Female more (second)	<u>9%</u>
Male more (second)	<u>12%</u>	Male more (first)	<u>55%</u>
Undecided	<u>47%</u>	Undecided	<u>11%</u>

comparison. Far more people (55% to 12%) answer that males were more empathic teachers than females when *male* is the first item in the comparison (Wanke, Schwarz & Noelle-Neumann, 1995).

The opposite response pattern can also occur. When asked to compare which of two sports is more exiting, far fewer people (35% to

**TABLE 10. Comparison Order: Tennis-Soccer Excitement**

<u>Tennis more exciting than soccer, or less?</u>		<u>Soccer more exciting than tennis, or less?</u>	
Tennis more (first)	<u>35%</u>	Tennis more (second)	<u>77%</u>
Soccer more (second)	<u>65%</u>	Soccer more (first)	<u>15%</u>
Undecided	<u>0%</u>	Undecided	<u>8%</u>

77%) say *tennis* when asked *Is tennis more exciting than soccer, or is it less exciting?* than when asked *Is soccer more exciting than tennis, or is it less exciting?* (Wanke, Schwarz & Noelle-Neumann, 1995).

The comparison order of alternatives in questions influences answers because people focus on features of the *first* object, and check the extent to which those features are also present in the *second* object, neglecting unique features of the second object (Wanke, Schwarz & Noelle-Neumann, 1995). Asking people to compare A to B is not the same as asking them to compare B to A.

**Alternative Order.** When questions suggest multiple responses, the questioner can order the responses. The alternative listed *last* receives greater support for *oral* questions, a recency effect, whereas the alternative listed *first* receives greater support for *written* questions, a primacy effect (Schwarz & Oyserman, 2001).

People who were asked whether divorce should be *easier to obtain*, *more difficult to obtain*, or *stay as it is now* answered differently than people who were asked whether divorce should be *easier to obtain*, *stay as it is now*, or *be more difficult to obtain*. An additional 8% of people said divorce should be *more difficult to obtain* when this option was stated last in the question,

than when it was stated second. An additional 10% of people affirmed that the ease of

**TABLE 11. Response Order: Divorce**

<i>Should divorce in this country be easier to obtain, more difficult to obtain, or stay as it is now?</i>		<i>Should divorce in this country be easier to obtain, stay as it is now, or be more difficult to obtain?</i>	
Easier	21%	Easier	23%
More difficult (second)	34%	More difficult (last)	42%
Stay as is (last)	45%	Stay as is (second)	35%

obtaining a divorce should *stay as it is now* when this option was listed last, rather than second. Other studies have identified differences of 10 to 12% when each option was in the last position (Schuman & Presser, 1996).

The effect of alternative ordering is not limited to questions about divorce. A similar recency effect was identified when people were asked either:

**TABLE 12. Response Order: Medicare**

<i>Do you feel Republicans want to make changes to Medicare to save Medicare or to fund tax cuts?</i>		<i>Do you feel Republicans want to make changes to Medicare to fund tax cuts or to save Medicare?</i>	
To save Medicare (first)	36%	To save Medicare (second)	52%
To fund tax cuts (second)	53%	To fund tax cuts (first)	34%

effect was identified when people were asked either:

- (1) *Do you feel Republicans want to make changes to Medicare to save Medicare or to fund tax cuts?* or
- (2) *Do you feel Republicans want to make changes to Medicare to fund tax cuts or to save Medicare?*

An additional 16% to 19% of people select the last listed alternative, even when they were reversed (Moore, 2005).

Questions, identical except for the order of suggested responses, can yield very different responses. Although this response ordering effect does not always happen, it is generally worth considering which alternative to place in the last position when phrasing questions.

## Why Response Framing Matters

Response framing in questions can have powerful effects on people's answers.

Response scaling shapes answers. Questions that include "higher" or "bigger" ranges of responses prompt answers that are higher and bigger frequencies, lengths, durations, and amounts. Substantively different behavior is included in answers to questions involving short versus long time spans. Decomposed questions foster overestimation, and more general questions foster underestimation.

Response options specified in questions shape answers. Offering a middle position or *don't know* option in a question increases the chance people provide a middle position or *don't know* answer. Inclusion of a middle position leaves the relative importance of other answers intact, while inclusion of a *don't know* option is sometimes related systematically to other responses.

Response ordering shapes answers. People focus differently on the alternatives when making comparisons between them, and so answer differently. When asked to choose among alternatives, people are more likely to choose the last alternative in oral questions and the first alternative in written questions.

## PRESUMPTUOUS QUESTIONS

Presumptuous questions are not approved for use in most trial situations precisely because they have a powerful influence on people's answers.

Presumptuous questions not allowed at trial are still useful in pre-trial settings, and many more questions are presumptuous than the legal system proscribes.

Two types of presumptuous questions are (1) those that are *unbalanced*, asking about only one side of an issue, and (2) those that are *assumptive*, the more extreme of which would be ruled to "lack foundation" and the less extreme (though equally powerful) of which routinely pass judicial muster.

### Balanced vs. Unbalanced: I Ask, Therefore I'm Biased

Many questions asked in legal settings are unbalanced, stating only one side of an issue. For example, prospective jurors are asked in capital cases *Do you favor the death penalty for persons convicted of murder?* This question is unbalanced, asking only whether jurors *favor* the death penalty (and not whether they *oppose* the death penalty), and asking only about the *death penalty* (and not about *life in prison without the possibility of parole*).

A purely formal method of balancing a question is to include its negative, so that the form of the question becomes *Do you agree that X, or not?*

The death penalty question is formally balanced by asking *Do you favor or oppose the death penalty for persons convicted of murder* (or alternately, *Do you favor the death penalty for persons convicted of murder, or are you opposed to this?*).

“Formally” balanced questions *appear* more balanced, but they are not because answers remain the same. The same percentage of people favor and oppose the death penalty, unions, gun permits, legalizing marijuana and a host of other issues when asked to answer unbalanced and formally balanced questions (Schuman & Presser, 1996).

Questions can also be balanced by (1) asking an opposite question (e.g., *Do you favor life in prison without the possibility of parole?*), which is still unbalanced, although in the opposite direction, and (2) countering with alternatives, called counter-balancing (e.g., *Do you favor the death penalty for persons convicted of capital murder, or do you favor life imprisonment without the possibility of parole?*).

In 2004, Steven Son content analyzed the voir dire of 12 capital cases and found that most of the pretrial publicity and death penalty questions consisted of prospective jurors being asked closed-ended (*yes/no*) and unbalanced questions. Even though the asking of open and balanced questions was significantly more likely to reveal juror bias, few prospective jurors were asked such questions.

Balanced questions are preferred for some purposes (e.g., voir dire) and unbalanced questions for others (e.g., cross-examination).

***Asking the Opposite Question.*** An opposite question asks an unbalanced question “in reverse”. During discussions about a juror questionnaire in a personal injury case on which I worked, the defense proposed asking *Do you feel most accidents at work are caused by the disregard for safety by company management?*, and the plaintiff countered with *Do you feel most accidents at work are caused by the disregard for safety by the employee?*

Opposite questions logically should, but do not, yield opposite answers.

When asked *What is your opinion of ground beef that is 75% lean?*, people rated it to be leaner, of higher quality, and less greasy than when asked *What is your opinion of ground beef that is 25% fat?* (Levin & Gaeth, 1988).

People asked about medical treatment outcomes where *75% survive* perceive the treatments as more acceptable than when asked about treatments where *25% die* (Levin, Schnittjer & Thee, 1988; Marteau, 1989; Wilson, Kaplan & Schneiderman, 1987).

When balancing by asking opposite questions, one question often has a positive frame (e.g., *% lean, % survive*), while the other has a negative frame (*% fat, % die*). Opposite questions do not generate opposite answers because positive frames lead to more favorable responses than do negative frames.

People infer the frame from information preceding or surrounding a question.

Imagine asking people whether a glass with water at a 50% mark is *half full* or *half empty*. When people know the glass previously was empty (i.e., they see water poured into it), people understand the glass to be *half full*. When people know the glass previously was full (i.e., they see water poured out of it), people understand the glass now to be *half empty*. And, circularly, when hearing that a glass is *half full* or *half empty*, people infer that it

previously was empty or full, respectively (McKenzie & Nelson, 2003). The surrounding or preceding circumstances guide the frame people select.

People infer a positive survival frame (*X% survive*) when a new treatment leads to relatively many (versus relatively few) survivors *in comparison with an old treatment*. And, circularly, people infer that an old treatment led to more deaths when a new treatment is described with a positive survival frame of *75% survive* than a negative death frame of *25% die* (McKenzie & Nelson, 2003).

Opposite questions provide frames that listeners compare to surrounding circumstances and events, and this comparison affects both people’s answers and their understandings.

**Countering with Alternatives.** Counter-balancing occurs when an opposite possibility is offered as part of the question. Instead of asking *Do you agree that X, or not?*, the question asks *Do you agree that X, or agree that Y?*

In 1991, the General Social Survey asked two different forms of a question about employers’ hiring policies. One question was formally balanced and one was counter-balanced. Both questions started with *Suppose workers will be exposed to some cancer-causing materials on the job:*

(1) *In that case, should employers have the right not to hire workers whose tests show they have an inherited tendency to develop certain forms of cancer, or should they not have that right?* (formally balanced)

(2) *In that case, should employers have the right not to hire workers whose tests show they have an inherited tendency to develop certain forms of cancer, or should they be required to clean up the workplace so it is safe for everyone?* (counter-balanced)

To no surprise, fewer people (6% to 36%) felt employers should have the right not to hire workers predisposed to cancer when an opposing alternative was provided (Reichardt, 2004).

**TABLE 13. Countering with Alternatives: Employment**

<i>Should employers have the right not to hire workers... [predisposed to] cancer, or should they <u>not have that right</u>?</i>	<i>Should employers have the right not to hire workers... [predisposed to] cancer, or should they <u>be required to clean up the workplace so it is safe for everyone</u>?</i>
Should 36%	Should 6%
Should not 64%	Should not (should clean up) 94%

In 1983, the General Social Survey also asked two versions of a question about trust in other people, one unbalanced and the other counter-balanced. Many trial consultants recommend attorneys ask the counter-balanced question in voir dire:

(1) *Do you think most people can be trusted?* (unbalanced)

(2) *Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?* (counter-balanced)

When asked the unbalanced (first) question, an additional 15% of respondents think people can be trusted than when asked the counter-balanced (second) question (Reichardt, 2004).

From a jury selection perspective, the unbalanced (first) question is better at identifying jurors who do *not* trust others (by protecting the most strongly trusting in the larger group answering with the “default” answer of *yes*). The counter-balanced (second) question is better at identifying jurors who *do* trust others (by protecting the least trusting in the larger group answering with the “default “ answer of *can’t be too careful*).

**TABLE 14. Countering with Alternatives: Trust**

<i>Do you think most people can be trusted?</i>		<i>Generally speaking, would you say that most people can be trusted <u>or that you can’t be too careful in dealing with people?</u></i>	
Yes (can be trusted)	58%	Can be trusted	43%
No	42%	Can’t be too careful	57%

In certain civil cases, plaintiffs prefer jurors who trust others, and defendants prefer jurors who are cynical and cautious. Plaintiff attorneys, needing to identify and strike less-trusting defense-oriented jurors, do best by asking the unbalanced trust question. Defense attorneys, needing to identify and strike the most trusting plaintiff-oriented jurors, do best by asking the counter-balanced trust question.

Notice that neither trust question is truly balanced: the unbalanced (first) question only asks about trust, the counter-balanced (second) question counters with *carefulness*, a trait not necessarily opposite of *trust*, and both yield skewed response distributions (deviating from 50% *yes* and 50% *no*). Counter-balancing makes the trust question appear unbiased and balanced, even though it is not.

Counter-balancing an alternative in an unbalanced question is difficult, and questions can wind up slanted. Counter-balanced questions often rely on “false dichotomies”, though rarely as obvious as *Would you rather be Red than dead?* Less obvious slanting, as with the trust question, can be strategically useful.

**Assumptive Questions: What Will You Infer?**

All questions assume, and these assumptions influence answers.

Assumptive cross-examination questions can influence jurors’ perceptions of expert witnesses. Kassin and colleagues (1990) had jurors listen to a cross-examiner ask an expert witness two assumptive questions about the expert’s reputation: *Isn’t it true that your work is poorly regarded by your colleagues?* and *Hasn’t your work been sharply criticized in the past?* Some jurors heard denials from the expert (*No, it isn’t; No, it hasn’t*), others heard admissions from the expert (*Yes, it has; Yes*), and yet others heard objections from an attorney that were sustained with the questions then withdrawn before the witness had a chance to respond. There was also a group of jurors who did not hear the assumptive cross-examination questions. The expert’s credibility – that is, the expert’s honesty, believability, competence, and persuasiveness – was significantly diminished by the assumptive questions, even when the expert flatly denied the charge or the attorney won a favorable ruling on an objection.

Assumptive questions include *how* questions, *ordinal adjective* questions and *embedded*

*assertions.*

**'How' questions.** Questions starting with *how* are often assumptive: *How concerned are you about...? How difficult is it for you...? How many times have you ....?* These questions assume that respondents are concerned, have some difficulty, or have engaged in some behavior because they ask for an extent after assuming a presence.

Close-ended (*yes/no*) filter questions ask about presence or absence, as in *Are you concerned about...? Do you have any difficulty with...? Have you ever done...?* These questions filter answers so that when the *how* question is asked only to people responding *yes*, asking about extent is no longer assumptive.

More people respond affirmatively when asked assumptive *how* questions than when asked *yes/no* filter questions before the *how* questions.

Using a *yes/no* filter question asking people whether or not they were concerned with an issue, and then asking those that were concerned *How concerned are you?*, results in significantly fewer people showing concern than when asking the *how* question by itself (Sterngold, Warland & Hermann, 1994).

Important to hardship determination, when people are asked about their difficulty with a variety of daily activities (e.g., running, walking, jogging several blocks, sitting for 2 hours, etc.), questions asking *How much difficulty...?* are consistently more likely than questions asking *Do you have any difficulty...?* to elicit affirmative answers (Freedman, Aykan & Kleban, 2003).

When asked *yes/no* filter questions, people filter their answers and focus on more serious and rarer incidents, events and behaviors. When asked assumptive *how* questions, people include the less serious episodes in their answers.

People report more crimes, and less severe ones, when they are asked *In the past 10 years, how many times did you witness a crime?* than when asked a filter question, *Did you witness a crime in the past 10 years?*, before being asked the *how* question (Knauper, 1988).

Asking assumptive *how* questions increases the frequency with which people answer affirmatively, and lowers the severity of incidents contained in those answers.

**Use Of Ordinal Adjectives.** Ordinal adjectives are words for numerals (e.g., *first, second, third*) and other "temporal" markers (e.g., *previous, new, old, another, last*). When questions include ordinal adjectives, the questions are assumptive (Lucas & McCoy, 1993).

Asking *When did you last sign a contract?* assumes you have signed a contract more than once, which is not assumed by the filter question *Have you ever signed a contract?*

The question *How would you describe your present fear of the defendant?* assumes there is and has been fear, a fear that is not assumed by the filter question *Have you ever been afraid of the defendant?*

The question *The first time this occurred was over five years ago?* implies multiple occurrences, something that is not implied by the filter question *When did this occur?*

The question *When you last thought about this you said...?*, assumes multiple instances of prior thought, which is not assumed by the filter question *When did you think about this?*

Answerers frequently fail to correct the assumptions of questions containing ordinal adjectives and numerals, and listeners accept those uncorrected assumptions as truths.

***Embedded Assertions.*** Witnesses often are asked factual questions in the form of an assertion, such as *Isn't it true that...[assertion]?* Beyond the issue of this question being difficult for people to answer (because of the *not*),<sup>1</sup> is the issue that this question encourages a focus on whether something is true – the truth of the statement gets scrutinized.

An embedded assertion shifts people's focus to matters other than the truth of the assertion.

Assertions often are embedded in questions having the form *Did you realize that...?*, *Were you aware that...?*, and *Did you notice how...?* With these embedded forms, people think about whether they realized, were aware, or noticed, and much less about the truth of the matter. Assertions embedded in questions tend to be challenged less (Lucas & McCoy, 1993).<sup>2</sup>

Assertions can be embedded in questions for examination of witnesses or for addressing juries in openings and closings. Zillmann (1972) embedded 10 assertions in questions in condensed closing arguments taken from a real criminal case. For example:

- (1) The assertion *On this night and in this condition, Frank Myers was a threat to his own daughter* was embedded as *Wasn't Frank Myers a threat to his own daughter?*
- (2) The assertion *But he never used his knife as a weapon before* was embedded as *But did he ever use his knife as a weapon before?*
- (3) The assertion *Johnny was a peaceful boy* was embedded as *Johnny was a peaceful boy, wasn't he?*

Jurors recommended shorter prison sentences when the assertions were embedded as questions in the closing than when the assertions were stated directly (Zillmann, 1972).

Embedding assertions as questions in openings and closings is only persuasive when those assertions are for strong arguments. The tactic “boomerangs” (i.e., people disagree even more) when the embedded assertions are for weak arguments (Petty, Rennie & Cacioppo, 1987).

Assertions embedded in questions influence answers and change opinions.

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<sup>1</sup> People find questions containing negatives (i.e., *not*, as in *Did the woman not have black hair?*) and double negatives (two *not*'s, as in *Would you not say the woman did not scream?*) confusing, difficult both to understand and answer. Questions containing negatives are answered less accurately (Kebbell & Giles, 2001).

<sup>2</sup> Assertions can be embedded in questions starting or ending with negatives (see footnote 1). Embedded assertions in questions beginning with negatives (e.g., *Aren't you aware that...?*, *Don't you realize that...?*, *Didn't you notice that...?*) are contested as assertions. Embedded assertions in questions ending with negatives (e.g., *X is the case, didn't you realize that?*; *Y happened, aren't you aware of that?*; *Z occurred, didn't you notice?*) are challenged less for the truth of the matter (Heritage, 2002).

## **Do You Want To Be Presumptuous?**

Presumptuous questions are powerful.

Unbalanced questions encourage people to provide unbalanced answers, which may or may not be strategically advantageous in any given circumstance. Formal balancing provides the appearance of neutrality, while continuing to skew answers. Asking opposite questions highlights the bias inherent in unbalanced questions, while still being biased (just in an opposite direction). Counter-balancing influences answers and understandings, has the appearance of neutrality, may or may not be neutral, and can be used strategically to shift people's responses.

Assumptive *how* questions receive more affirmative answers, and include less serious events, than *how* questions preceded by *yes/no* filter questions. Assumptions in questions with ordinal adjectives and numerals are generally accepted by both answerers and listeners. Assertions embedded in questions are more persuasive and challenged less than direct assertions.

Presumptuous questions lead people to answers.

### **SOCIALLY DESIRABLE RESPONDING**

Most people want to be get along with, and be liked by, others. Socially, we expect ourselves and others to act in certain ways, including being agreeable and putting our best foot forward, especially in public places. These social tendencies affect all facets of trial work, from what clients will say (and when) to how witnesses answer questions to what prospective jurors are willing to reveal in voir dire.

People prefer to agree more than disagree. A question's form can be chosen to locate disagreement or maintain agreeable (though not necessarily accurate) answers.

People prefer to withhold, evade, and even lie about times they failed to put their best foot forward. A question's form can be chosen that challenges an answerer, encourages more openness, or maintains his/her face-saving (though not necessarily accurate) answers.

A question's form amplifies and diminishes tendencies people have to agree or disagree, to speak openly or save face, and to feel threatened or comfortable.

#### **Agree or Disagree: I'd Rather Say "Yes"**

People prefer to be agreeable and this tendency extends to how they answer questions. People are less likely to disagree than agree when asked their opinion on an issue.

Consider two variations of a question that jurors are sometimes asked in voir dire in criminal cases:

- (1) *Do you agree or disagree that "Individuals are more to blame than social conditions for crime and lawlessness in this country"?*
- (2) *Do you agree or disagree that "Social conditions are more to blame than individuals for crime and lawlessness in this country"?*

The same percentage of people (57% to 60%) agree with both questions, and that is inconsistent.

The percentage of people who agree that individuals are more to blame for crime should disagree

**TABLE 15. Agreeing**

<i>Do you agree or disagree that “<u>Individuals</u> are more to blame than <u>social conditions</u> for crime and lawlessness in this country”?</i>		<i>Do you agree or disagree that “<u>Social conditions</u> are more to blame than <u>individuals</u> for crime and lawlessness in this country”?</i>	
Agree	60%	Agree	57%
Disagree	40%	Disagree	43%

that social conditions are more to blame (Schuman & Presser, 1996). This question evidences an “agreement bias”.

Asking this question in a “forced choice” form (rather than in its current “agree or disagree” form), provides some idea of people’s true preferences, rather than their “agreeableness”. A “forced choice” form removes “agreeableness” from the phrasing of the question by asking: *Which in your opinion is more to blame for crime and lawlessness in this country – individuals or social conditions?*

When asked in a forced-choice form, 46% of people answer that *individuals* are more to blame for crime and lawlessness than *social conditions* (and the same percentage of people does so when the choices of *individuals* and *social conditions* are in the opposite order).

**TABLE 16. Agreement versus Forced Choice**

<i>Do you agree or disagree that “<u>Individuals</u> are more to blame than <u>social conditions</u> for crime and lawlessness in this country”?</i>		<i>Do you agree or disagree that “<u>Social conditions</u> are more to blame than <u>individuals</u> for crime and lawlessness in this country”?</i>		<i>Which in your opinion is more to blame for crime and lawlessness in this country – individuals or social conditions?</i>	
Agree	60%	Agree	57%	Individuals	<u>46%</u>
Disagree	40%	Disagree	<u>43%</u>	Social conditions	54%

This 46% response rate is closest to individuals’ answers to the second “agree or disagree” question, indicating that an “agreeableness” effect is occurring to the first question, while the second question better corresponds to people’s true opinion (Schuman & Presser, 1996).

Strategically, question-askers need to decide (a) *whether* to ask a question in an “agree or disagree” or “forced choice” form, and (b) *which* comparative order to use for the question. The choice is one of encouraging (or discouraging) socially desirable responding, and accessing (or not) people’s true opinions.

**Threatening Questions: I Don’t Want To Answer**

People want to save face, and deliberately provide inaccurate answers to questions they find threatening. The more threatening the questions, the less accurate the answers (Sudman & Bradburn, 1974). Sometimes these inaccurate answers are helpful to attorneys, and sometimes not.

Threatening questions can pertain to either highly desirable or highly undesirable behaviors. More people say they vote, take their mother out for Mother’s Day, follow the

speed limit, and otherwise act as expected than actually do. Fewer people report they drive drunk, yell at others, stab people in the back, or otherwise act inappropriately than actually do. People over-report desirable behavior, and under-report undesirable behavior.

Sometimes attorneys want their questions to threaten people (e.g., opposing witnesses), and sometimes questions threaten accidentally (e.g., jurors in voir dire). A variety of strategies exist to reduce the threat involved in questions, strategies that can be avoided or reversed when threat is desired.

Lucas and McCoy (1993) offer three strategies for reducing the threat involved in a question:

(1) Use familiar words. Familiar words are less threatening than “correct” words. People are more willing to admit engaging in acts described by the familiar words of *shoot*, *take*, and *sex*, than they are to admit engaging in acts described by the correct words of *kill*, *steal*, and *rape*.

(2) Pose questions impersonally. People are less cautious in answering questions when the questions are posed impersonally. The use of the word *you* personalizes questions, and increases their accusatory potential. *Was there a...?* is less threatening than *Did you see a...?*

(3) Use past tense. Talking in past tense distances people emotionally from an event, whereas present tense is more vivid, real and immediate. Even when personalized, questions in past tense, such as *Were you...?* *Did you...?* and *When you drove....?* are less threatening than questions in present tense, such as *Are you...?*, *Do you...?*, and *When you drive....?*

Barton (1958) suggests using a “lead-in” to “normalize” the behavior being requested by a threatening question. For example, rather than asking *Have you ever been sexually assaulted?* or *Did you vote in the last election?*, questions that jurors and witnesses are uncomfortable answering, a lead-in might be used that says *Many people have experienced sexual assault. Have you ever been sexually assaulted?* or *Many people were not able to vote in the last election. Were you able to vote?*

When parties are trying to negotiate a settlement, a lead-in that states the reason for why a question is being asked (e.g., *I'm not clear how you come to that conclusion. Would you tell me why you think that?*) is particularly useful in reducing a question's threat, and keeping negotiations productive (Fairfield & Allred, 2007).

To reduce a question's threat, Barton also suggests:

- (1) Being casual (e.g., *Do you happen to have been sexually assaulted?*),
- (2) Assumptive questioning (e.g., *How many times have you been sexually assaulted in the last 10 years?*),
- (3) Sandwiching the question between even worse alternatives (e.g., *Have you ever experienced any of the following – been accused of murder, been sexually assaulted, been imprisoned for terrorism*), and
- (4) Asking about other people (e.g., *Do you know any other people who have been sexually assaulted? How about yourself?*).

Embedding a threatening question in a statement starting *I wonder* or *I'm curious* is another method for reducing the threat of more direct questions. Rather than asking *Why did you wait so long to quit your job?*, the question can be embedded in a statement inviting an answer that starts with *I wonder* or *I'm curious*, such as *I was wondering why you waited so long to quit your job?* Embedded questions permit more candid answers, elicit a more positive feeling toward the question-asker, and are particularly useful for asking for personal information that may be emotional (Lucas & McCoy, 1993).

Questionnaires – for clients, potential witnesses, and jurors – reduce the threat of face-to-face questioning. Questionnaires provide a sense of privacy and confidentiality that face-to-face, and especially public, questioning lacks (Krysan, Schuman, Scott & Beatty, 1994; Smith, 1979). Socially desirable responding to sensitive questions occurs less often when questions are in questionnaires than when asked face-to-face.

The use of threatening questions is a choice, and one that regulates how much, and what type of, information people offer. Threatening questions encourage socially desirable responding, whereas non-threatening questions encourage openness.

### **Why Socially Desirable Responding Matters**

Socially desirable responding is a fact of life, and question-askers can phrase questions to reduce or enhance this tendency.

“Agree or disagree” questions encourage agreement, which “forced choice” questions help overcome.

Threatening questions can be normalized, depersonalized, sandwiched, assumed, embedded, written, and/or asked in past tense and with familiar words. If threat is desired, questions can be direct, personalized, and asked in the present tense with correct words and no lead-in.

## **CONCLUSION**

Questions shape answers. Small changes in word choice, response framing, presumptions, and form produce major changes in answers.

No technique works all of the time for all people.

First, some people are more susceptible to being led by questions than others. Children, people with cognitive impairments (including being drunk), those who are uncertain, those who don't trust their memory, and “false confessors” to crimes are highly susceptible to leading questions (Gudjonsson, 1984; Gudjonsson, Hannesdottir, Petursson, & Bjornson, 2002; Merckelbach, Muris, Wessel & van Koppen, 1998). Susceptibility is an important determinant in acceptance of false information cued by leading questions (Sheehan, 1993).

Second, some types of answers are easier to influence than others. Regardless of susceptibility, question wording is more likely to influence answers when people have trouble making estimates competently or recalling information in a detailed manner.

Uncertainty surrounding the memory of an event is often required for question wording to guide people's answers. A clear memory is less susceptible to being led (Smith & Ellsworth, 1987).

Witnesses paying only partial attention to an event are more influenced by question wording than those paying full attention (Lane, 2006).

Information that is tangential to an event or person is more likely to be distorted in answers than is information that is central to a person (Wright & Stroud, 1998).

Third, some questioners are more capable of influencing answers than others. People accept being led by questions more readily when the question-askers are perceived as experts or knowledgeable (Smith & Ellsworth, 1987).

Eyewitnesses alter answers to questions if they think that an authority figure sees them as unhelpful and/or unobservant (Roper & Shewan, 2002).

If a questioner is perceived as biased or of questionable reliability, then question wording has less influence (Dodd & Bradshaw, 1980; but also see Holst & Pezdek, 1992).

Finally, some communication styles for asking questions influence answers more than others. A firm or abrupt demeanor – though not a hostile demeanor – encourages more changes in answers than a friendly demeanor (Bain & Baxter, 2000; Baxter, Boon & Marley, 2006; Gibbs, Segal, Adams & Grossman, 1989).

Questions do more than convey and solicit information. Questions put words in people's mouths.

## REFERENCES

- Bain, S. A., & Baxter, J. S. (2000). Interrogative suggestibility: The role of interviewer behavior. *Legal and Criminological Psychology, 5*, 123-133.
- Barton, A. J. (1958). Asking the embarrassing question. *Public Opinion Quarterly, 22*, 271-278.
- Bartram, P. & Yielding, D. (1973). The development of an empirical method of selecting phrases used in verbal rating scales: A report on a recent experiment. *Journal of the Market Research Society, 15*, 151-156.
- Baxter, J. S., Boon, J. C. W., & Marley, C. (2006). Interrogative pressure and responses to minimally leading questions. *Personality and Individual Differences, 40*, 87-98.
- Belli, R., Schwarz, N., Singer, E., & Talarico, J. (2000). Decomposition can harm the accuracy of retrospective behavioral reports. *Applied Cognitive Psychology, 14*, 295-308.
- Belson, W. A. (1981). *The design and understanding of survey questions*. Aldershot: Gower.
- Blair, E., & Burton, S. (1987). Cognitive processes used by survey respondents to answer behavioral frequency questions. *Journal of Consumer Research, 14*, 280-288.

- Davis, J., & Schiffman, H. R. (1985). The influence of the wording of interrogatives on the accuracy of eyewitness recollections. *Bulletin of the Psychonomic Society*, 23, 394-396.
- De Dreu, C., & Van Kleef, G. A. (2004). The influence of power on the information search, impression formation, and demands in negotiation. *Journal of Experimental Social Psychology*, 40, 303-319.
- Dodd, D. H., & Bradshaw, J. M. (1980). Leading questions and memory: Pragmatic constraints. *Journal of Verbal Learning and Verbal Behavior*, 19, 695-704.
- Fairfield, K. D., & Allred, K. G. (2007). Skillful inquiry as a means to success in mixed-motive negotiation. *Journal of Applied Social Psychology*, 37, 1837-1855.
- Freedman, V. A., Aykan, H., & Kleban, M. H. (2003). Asking neutral versus leading questions: Implications for functional limitation measurement. *Journal of Aging and Health*, 15, 651-687.
- Gibbs, M.S., Sigal, J., Adams, B., & Grossman, B. (1989). Cross-examination of the expert witness: Do hostile tactics affect impressions of a simulated jury? *Behavioral Sciences & the Law*, 7, 275-281.
- Gudjonsson, G. H. (1984). Interrogative suggestibility: Comparison between 'false confessors' and 'deniers' in criminal trials. *Medicine, Science, and the Law*, 24, 56-60.
- Gudjonsson, G. H., Hannesdottir, K., Petursson, H., & Bjornson, G. (2002). The effects of alcohol withdrawal on mental state, interrogative suggestibility, and compliance: An experimental study. *Journal of Forensic Psychiatry*, 13, 53-67.
- Hans, V. P. & Lofquist, W. S. (1994). Perceptions of civil justice: The litigation crisis attitudes of civil jurors. *Behavioral Sciences & The Law*, 12, pp. 181-196.
- Harris, R. J. (1973). Answering questions containing marked and unmarked adjectives and adverbs. *Journal of Experimental Psychology*, 97, 399-401.
- Heritage, J. (2002). The limits of questioning: Negative interrogatives and hostile question content. *Journal of Pragmatics*, 34, 1427-1446.
- Hippler, H. J., & Schwarz, N. (1986). Not forbidding isn't allowing: The cognitive basis of the forbid-allow asymmetry. *Public Opinion Quarterly*, 50, 87-96.
- Holst, V. F., & Pezdek, K. (1992). Scripts for typical crimes and their effects on memory for eyewitness testimony. *Applied Cognitive Psychology*, 6, 573-587.
- Johnson-Laird, P. N. (1968a). The choice of the passive voice in a communicative task. *British Journal of Psychology*, 59, 7-15.
- Johnson-Laird, P. N. (1969b). The interpretation of the passive voice. *Quarterly Journal of Experimental Psychology*, 20, 69-73.
- Kassin, S. M., Williams, L. N., & Saunders, C. L. (1990). Dirty tricks of cross-examination. *Law & Human Behavior*, 14, pp. 373-384.
- Kebbell, M. R., & Johnson, D. (2000). Lawyers' questioning: The effect of confusing questions on witness confidence and accuracy. *Law and Human Behavior*, 24, 629-641.
- Knauper, B. (1988). Filter questions and question interpretation – presuppositions at work. *Public Opinion Quarterly*, 62, 70-78.
- Krosnick, J. A. (1989). Question wording and reports of survey results: The case of Louis Harris and Associates and Aetna Life and Casualty. *Public Opinion Quarterly*, 53, 107-113.

- Krysan, M., Schuman, H., Scott, L. J., & Beatty, P. (1994). Response rates and response content in mail versus face-to-face surveys. *Public Opinion Quarterly*, *58*, 381-399.
- Lane, S. M. (2006). Dividing attention during a witnessed event increases eyewitness suggestibility. *Applied Cognitive Psychology*, *20*, 199-212.
- Levin, I. P., & Gaeth, G. J. (1988). How consumers are affected by the framing of attribute information before and after consuming the product. *Journal of Consumer Research*, *15*, 374-378.
- Levin, I. P., Schnittjer, S. K., & Thee, S. L. (1988). Information framing effects in social and personal decisions. *Journal of Experimental Social Psychology*, *24*, 520-529.
- Lipscomb, T. J., McAllister, H. A., & Bregman, N. J. (2001). Bias in eyewitness accounts: The effect of question form, delay interval, and stimulus presentation. *The Journal of Psychology*, *119*, 207-212.
- Loftus, E. F. (1975). Leading questions and the eyewitness report. *Cognitive Psychology*, *7*, pp. 560-572.
- Loftus, E. F., Klinger, M. R., Smith, K. D., & Fieldler, J. (1990). A tale of two questions: Benefits of asking more than one question. *Public Opinion Quarterly*, *54*, 330-345.
- Loftus, E. F., & Palmer, J. C. (1974). Reconstruction of automobile destruction: An example of the interaction between language and memory. *Journal of Verbal Learning and Verbal Behavior*, *13*, 585-589.
- Loftus, E. F., & Zanni, G. (1975). Eyewitness testimony: The influence of the wording of a question. *Bulletin of the Psychonomic Society*, *5*, 86-88.
- Lucas, R. H., & McCoy, R. B. (1993). *The winning edge: Effective communication and persuasion techniques for lawyers*. New York: John Wiley & Sons.
- Marshall, L. L., & Smith, A. (1986). The effects of demand characteristics, evaluation anxiety, and expectancy on juror honesty during voir dire. *The Journal of Psychology*, *120*, 205-217.
- Marteau, T. M. (1989). Framing of information: Its influence upon decisions of doctors and patients. *British Journal of Social Psychology*, *28*, 89-94.
- McKenzie, C. R. M., & Nelson, J. D. (2003). What a speaker's choice of frame reveals: Reference points, frame selection, and framing effects. *Psychonomic Bulletin and Review*, *10*, 596-602.
- Merckelbach, H., Muris, P., Wessel, I., & van Koppen, P. J. (1998). The Gudjonsson Suggestibility Scale: Further data on its reliability, validity, and metacognition correlates. *Social Behavior and Personality*, *26*, 203-210.
- Mize, G. E. (2003). Be cautious of the quiet ones. *Voir Dire*, *10*, 1-4.
- Moore, D. (2005, Nov. 17). *The enigmatic, problematic and oxymoronic nature of public opinion: Why we should be wary of polls*. Presentation made to the New England Forum for Women State Legislators, Center for American Women & Politics, Rutgers, NJ.
- Moran, G., Cutler, B. L., & De Lisa, A. (1994). Attitudes toward tort reform, scientific jury selection, and jury bias: Verdict inclination in criminal and civil trials. *Law and Psychology Review*, *18*, pp. 309-328.
- O'Hara, M., & Schober, M. F. (2004). Attitudes and comprehension of terms in opinion questions about euthanasia. *Graduate Faculty Psychology Bulletin*, *2*, 11-29.

- Petty, R. E., Rennie, G. A., & Cacioppo, J. T. (1987). Assertion versus interrogation format in opinion surveys: Questions enhancing thoughtful responding. *Public Opinion Quarterly*, *51*, 481-494.
- Reichardt, C. S. (2004). *Wording of questions*. Unpublished paper, University of Denver. [www.du.edu/idea/lessons/wording.doc](http://www.du.edu/idea/lessons/wording.doc)
- Roper, R., & Shewan, D. (2002). Compliance and eyewitness testimony: Do eyewitnesses comply with misleading 'expert pressure' during investigative interviewing? *Legal and Criminological Psychology*, *7*, 155-163.
- Rose, M. R. (2001). Jurors' views of voir dire. *Judicature*, *85*, 10-18.
- Rugg, D. (1941). Experiments in wording questions: II. *Public Opinion Quarterly*, *5*, 91-92.
- Schuman, H. & Presser, S. (1996). *Questions & Answers in Attitude Surveys*. Thousand Oaks, CA: Sage Publications.
- Schwarz, N., Hippler, H. J., Deutsch, B., & Strack, F. (1985). Response categories: Effects on behavioral reports and comparative judgments. *Public Opinion Quarterly*, *49*, 388-395.
- Schwarz, N. & Oyserman, D. (2001). Asking questions about behavior: Cognition, communication, and questionnaire construction. *American Journal of Evaluation*, *22*, 127-160.
- Schwarz, N., Strack, F., Muller, G., & Chassein, B. (1988). The range of response alternatives may determine the meaning of the question: Further evidence on informative functions of response alternatives. *Social Cognition*, *6*, 107-117.
- Sheehan, P. W. (1993). Parameters influencing response to leading questions. *Australian Journal of Clinical & Experimental Hypnosis*, *2*, 1-14.
- Sher, S., & McKenzie, C. R. M. (2006). Information leakage from logically equivalent frames. *Cognition*, *101*, 467-494.
- Shuy, R. (1998). *The language of confession, interrogation and deception*. Thousand Oaks, CA: Sage Publications.
- Smith, T. W. (1979). Happiness. *Social Psychology Quarterly*, *42*, 18-30.
- Smith, V. L., & Ellsworth, P. C. (1987). The social psychology of eyewitness accuracy: Misleading questions and communicator expertise. *Journal of Applied Psychology*, *72*, 294-300.
- Snyder, M., & Swann, W. B. (1978). Hypothesis testing processes in social interaction. *Journal of Personality and Social Psychology*, *36*, 1202-1212.
- Son, S. J. (2004). *Adequacy of voir dire questioning for selecting an impartial jury*. Unpublished doctoral dissertation, University of Nevada, Reno. Abstract: *Dissertation Abstracts International: Section B: The Sciences and Engineering*, *65(2-B)*, 1075.
- Sudman, S., & Bradburn, N. M. (1974). *Response effects in surveys: A review and synthesis*. Chicago, IL: Aldine.
- Suessbrick, A. L., Schober, M. F., & Conrad, F. G. (2001). Different respondents interpret ordinary questions quite differently. In *Proceedings of the American Statistical Association, Section on Survey Research Methods*. Alexandria, VA: American Statistical Association.
- Swann, W. B., Giuliano, T., & Wegner, D. M. (1982). Where leading questions can lead: The power of conjecture in social interaction. *Journal of Personality and Social Psychology*, *42*, 1025-1035.

- Sterngold, A., Warland, R. H., & Herrmann, R. (1994). Do surveys overstate public concerns? *Public Opinion Quarterly*, *58*, 255-263.
- Wanke, M., Schwarz, N., & Noelle-Neumann, E. (1995). Asking comparative questions: The impact of the direction of comparison. *Public Opinion Quarterly*, *39*, 347-372.
- Wilson, D. K., Kaplan, R. M., & Schneiderman, L. J. (1987). Framing of decisions and selections of alternatives in health care. *Social Behavior*, *2*, 51-59.
- Wright, D. B., & Stroud, J. N. (1998). Memory quality and misinformation for peripheral and central objects. *Legal & Criminological Psychology*, *3*, 273-286.
- Zillmann, D. (1972). Rhetorical elicitation of agreement in persuasion. *Journal of Personality and Social Psychology*, *21*, 159-165.