

Capitolo 8

Case Study 1

Looking for 5683 in all the wrong places

As discussed in the text, our movements can have an influence on our attitudes. Did you know that a routine behavior as simple as dialing a phone number can elicit certain attitudes? Ever notice that many of the numbers on your cell phone keypad also have three or four letters associated with the numbers? In some interesting research from Germany, psychologist Sascha Topolinski has shown that our brains keep track of information such as which letters are associated with which keys on the number pad. In addition, when we press numbers that spell a word, many of the associations we have with that word become primed.

In a series of studies conducted at the University of Wurzburg, Topolinski (2011) [DOI: [10.1177/0956797610397668](https://doi.org/10.1177/0956797610397668)] had participants type numbers into a cell phone that either spelled out a relevant German word or not. In each study, participants used a cell phone that had a regular keypad, but no letters were included on the keys. In Study 1, participants were asked to do a lexical decision task in which they indicated whether or not a word that appeared on the screen was a real word or a set of nonsense syllables. The results of this first study showed that participants were faster to identify words as real if they had just been asked to type the corresponding set of numbers into the keypad. In other words, if they typed numbers corresponding to the German word for SALAD, then they were faster to recognize that word as a real word when they saw it later on the computer. And the amazing thing was that extensive debriefing after they study revealed that these participants had no idea that the numbers they were typing into the cell phone spelled a word. But, on some unconscious level, they did know, and that led to the faster recognition of the real versus nonsense words. But it only gets more interesting ...

In Study 2, the participants were asked to type a series of numbers into a cell phone keypad and then rate how pleasant that string of numbers seemed to them. In this second study, some of these words were positive (e.g., the German word for FRIEND) and some of them were negative (e.g., the German word for MISERY). The results of this study showed that the participants rated the sequences of numbers that spelled out positive words as more pleasant than the numbers that spelled out negative words. Again, the participants had no idea that the numbers they were typing could be formed into words. Want to know something even more interesting? The numbers that you dial can influence your attitude to the person or business that you are dialing!

In Study 3, Topolinski (2011) asked participants to dial a series of phone numbers for various businesses, listen to the recorded message of the business, and then rate how attractive each company seemed to them. Unbeknownst to the participants, for half of the businesses that they dialed, the phone number corresponded to the type of company being called. So, for example, some participants called a dating service and the phone number spelled the German word for LOVE, other participants called the mortician and that phone number spelled out the German word for CORPSE, and finally other participants called a company whose phone number did not correspond to a related word. The results of this study showed that people found a business more attractive when the phone number spelled out a word that corresponded to the type of business that was called.

The results of this research are mind-boggling because the participants were completely unaware of the associations they had formed between the numbers on their cell phone and the letters on the keys. If asked, we might not even be able to consciously recall which letters go with which keys, but on some level we actually do know— and amazingly, we even know how to form words out of all of those possible letter combinations. As shown in this research, the unconscious is a powerful thing, and the simplest of actions can influence our attitudes in ways that we are not even aware. So, the next time you're calling someone to go out on a date and their number contains the digits 5683, just get ready for the clouds to part and for Cupid to come calling.

Reference

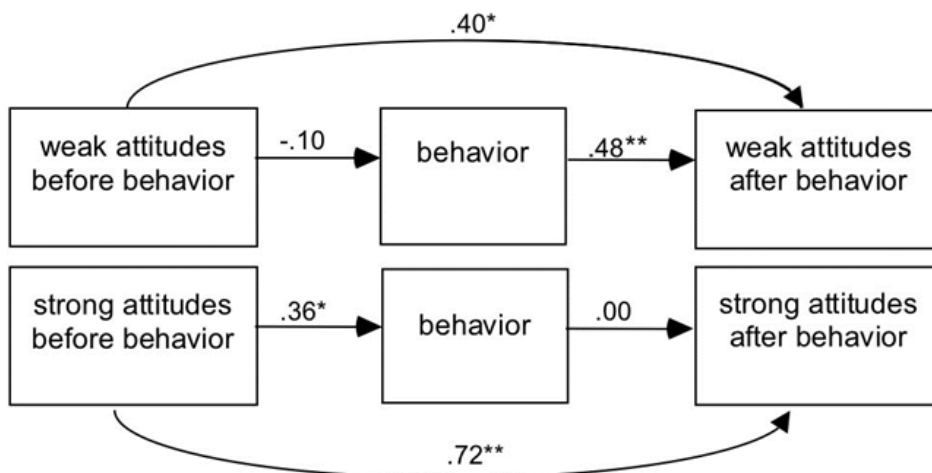
- Topolinski, S. (2011). [DOI: [10.1177/0956797610397668](https://doi.org/10.1177/0956797610397668)]. I 5683 you: Dialing phone numbers on cell phones activates key-concordant concepts. *Psychological Science*, 342, 1119–1120.

Case Study 2

From actions to attitudes superficially: Self-perception and attitude strength

Do our likes and dislikes guide our behavior, or do they follow on from our behavior? Do we first evaluate an object and behave consistently (e.g., David Lynch is a great film-director! Let's watch his new movie), or do we first behave in a positive or a negative manner towards an object, and infer our attitudes from that behavior (e.g., I have seen nearly all his movies, so I guess I like David Lynch)? The question concerning the direction of the attitude–behavior relationship has intrigued social psychologists for a long time. Without any doubt, there is ample evidence for both causal directions of attitude–behavior relations. So in which circumstances do attitudes influence our behavior, and in which circumstances are attitudes inferred from behavior?

In a study by Holland, Verplanken, and van Knippenberg (2002) [DOI:10.1002/ejsp.135], the strength of an attitude was studied as the pivotal factor. In their study, attitude strength (certainty of an attitude, how personally important the attitude is) and attitudes towards Greenpeace were measured during a preliminary session. Two weeks later, participants returned to the laboratory and were given the opportunity to donate money to Greenpeace. Interestingly, after their behavior attitudes were measured once more, results showed that strong attitudes were predictive of the amount of money that was donated to Greenpeace, whereas weak attitudes were not. However, with regard to the self-perception effect, the reverse was found. Behavior had an impact on weak attitudes, but not on strong attitudes. The results are depicted in Figure 1.



This study shows that two basic causal relations between attitudes and behavior depend on the strength of attitudes. When attitudes are strong, they are more easily retrieved from memory, and guide behavior. Also, contextual influences like our own recent behavior have less influence on such strong attitudes. On the other hand, when attitudes are weak, contextual influences are more likely to have an impact. As a consequence, self-perception effects are more likely to occur. In other words, the strong guide, and the weak follow.

Reference

- Holland, R. W., Verplanken, B., & van Knippenberg, A. (2002). [DOI:10.1002/ejsp.135]. On the nature of attitude–behavior relations: The strong guide, the weak follow. *European Journal of Social Psychology*, 32, 869–876.

Case Study 3

I feel the need for speed: Risky attitudes predict driving violations

Throughout the US and the UK it is well known that new drivers pose a risk on the road because of their inexperience. In theory, then, greater experience behind the wheel should lead to less risky

behavior behind the wheel. But is that really the case, and do the attitudes that new drivers have about risky driving at all predict their later driving behavior?

Researchers from the UK conducted a longitudinal study in which they assessed the attitudes of non-drivers, pre-qualified drivers (i.e., those with their learner's permits), and qualified drivers (i.e., those with their licenses) and followed them over the course of four years (Rowe, Maughan, Gregory & Eley, 2013) [DOI: [10.1136/injuryprev-2012-040551](https://doi.org/10.1136/injuryprev-2012-040551)]. Their results showed that greater experience behind the wheel led to greater confidence driving, but that greater experience also led to the endorsement of more risky attitudes. When all of the drivers and non-drivers were tested at baseline, there was no difference among their attitudes toward driving. But the more experience that the drivers had behind the wheel, the more risky their attitudes became. In addition, for both the pre-qualified drivers and the qualified drivers, their attitudes at baseline significantly predicted the number of driving violations they would incur.

Why does experience correlate with more risky driving? The authors suggested that as people become more confident drivers, they feel more in control and able to speed and engage in other risky behaviors. One important lesson from this research is that, if the attitudes of pre-qualified drivers predict their later attitudes and driving behavior, then driver's education classes would be an excellent place to change attitudes before driving behaviors become habit. As we learned in the previous chapter, driver's ed would be the perfect place to include some fear-based persuasive appeals about safe driving; because the way to change the negative behavior is simple—just take your foot off the gas and slow down.

Reference

- Rowe, R., Maughan, B., Gregory, A. M., & Eley T. C. (2013). [DOI: [10.1136/injuryprev-2012-040551](https://doi.org/10.1136/injuryprev-2012-040551)]. The development of risky attitudes from pre-driving to fully-qualified driving. *Injury Prevention*, 19, 244–249.

Case Study 4

He loves me, he loves me not ...

A lot of research has been conducted to understand the relevance of one's implicit attitudes and whether those attitudes actually predict people's overt behavior in meaningful ways. Do implicit attitudes have anything to do with gut feelings? If so, when should we actually follow our gut?

Recent research by McNulty, Olson, Meltzer and Shaffer (2013) [DOI: [10.1126/science.1243140](https://doi.org/10.1126/science.1243140)] suggests that sometimes it pays to trust your gut, especially on big decisions such as whether or not to get married. Feeling skeptical? Then read on ...

Some 135 newlywed couples from the US were part of a four-year longitudinal study. At the beginning of the study, both partners completed implicit and explicit measures that assessed their attitudes toward their partner. Every 6 months thereafter, the couples completed surveys of their marital satisfaction, the number and severity of their relationship problems, etc. At the conclusion of the study, the results showed that spouses' conscious, explicit attitudes did not predict their later marital satisfaction, but their implicit thoughts did. At baseline, those spouses who had a more positive implicit attitude about their partner felt more marital satisfaction over time, compared to those who had more negative implicit attitudes. These results are partly explained by the spouses who initially had positive attitudes perceiving fewer problems with their partners over time. Intriguingly, the authors found no correlation between the individual's implicit and explicit attitudes, suggesting that they were not consciously aware of their implicit attitudes. There could be any number of reasons why people's conscious attitudes about marriage didn't predict their later marital satisfaction. Perhaps some spouses were putting on a brave face, or hoping things would all work out in the end. What this research does show, though, is that implicit measures can predict future behavior that is quite meaningful. More importantly, this research suggests that if your gut is telling you that you have found the love of your life, then your future should look pretty bright. On the other hand, if your gut is telling you that this is not the one, then consider listening to that little voice. It might prevent you from experiencing unhappiness down the road.

Reference

- McNulty, J. K., Olson, M. A., Meltzer, A. L., & Shaffer, M. J. (2013). [DOI: [10.1126/science.1243140](https://doi.org/10.1126/science.1243140)]. Though they may be unaware, newlyweds implicitly know whether their marriage will be satisfying. *Science*, *342*, 1119–1120.