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Problems for clinical judgement: 5. Principles of influence in medical practice

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Abstract

THE BASIC SCIENCE OF PSYCHOLOGY HAS IDENTIFIED specific ingrained responses that are fundamental elements of human nature, underpin common influence strategies and may apply in medical settings. People feel a sense of obligation to repay a perceived debt. A request becomes more attractive when preceded by a marginally worse request. The drive to act consistently will persist even if demands escalate. Peer pressure is intense when people face uncertainty. The image of the requester influences the attractiveness of a request. Authorities have power beyond their expertise. Opportunities appear more valuable when they appear less available. These 7 responses were discovered decades ago in psychology research and seem intuitively understood in the business world, but they are rarely discussed in medical texts. An awareness of these principles can provide a framework for physicians to help patients change their behaviour and to understand how others in society sometime alter patients' choices.

People sometimes behave in ways that are not in their own best interest. A patient with tuberculosis, for example, may inadvertently miss taking doses of antibiotics and thereby develop resistant disease or may neglect appointments and thereby not receive necessary follow-up.¹⁻³ In many cases, what patients do for themselves can lead to irreversible medical complications. As a consequence, patients themselves sometimes wish their behaviour would change for the better.^{4,5} What can a physician do to help?

Many forces in society work hard to influence behaviour. Advertising is full of requests; for example, "smoke our cigars." The science of influence examines why a request made in one way is rejected but made in a different way is accepted. In this article we review 7 principles that are fundamental to human nature and that underpin most influence strategies. The principles have been verified by research in psychology, are broadly used in society and may apply in medical settings. We do not review incentives, education, readiness, convenience or other aspects of behaviour medicine.⁶⁻¹⁰

The science of social influence provides insights and opportunities for human interactions. These insights are not an invitation to usurp a patient's autonomy any more than anesthesiology is a licence to undermine a patient's independence.¹¹ In practice, for example, a physician might begin by asking the patient about his or her goals and then apply the principles of social influence to reinforce the patient's preferences. In addition, the physician could explain how others in society might try to sabotage the patient's efforts.

Methods of influence

Basic theory

Our patients live in a world that has a crushing amount of information. To cope, patients follow shortcuts in reasoning, called "ingrained responses." Even for extremely relevant issues, thoughtful decisions are often impossible because the issues are so complex, the time is so tight, the distractions are so intrusive, and the mental fatigue is so deep. Ingrained responses, in contrast, are a rapid way to make many sensible choices.¹²⁻¹⁴ One way to drive safely, for example, is to have fairly automatic control over the steering wheel, accelerator and brake so that attention focuses on roadway hazards.

Ingrained responses are important because their effect on behaviour does not rely on conscious deliberation. For example, most people get an urge to urinate if they hear running water. Hence, a clinician can sometimes obtain a urine specimen from a hesitant patient by opening a bathroom faucet. Ingrained responses are strong. In human reasoning, therefore, they are the basic pathways that underlie most influence strategies.¹⁵ An awareness of these pathways provides a framework for physicians attempting to help patients change their behaviour (Table 1).

Reciprocation

The “reciprocation” response leads a person to try to repay in kind what another person has provided to him or her. For example, a colleague who covers for you on call will usually have little difficulty persuading you to return a favour. A more rigorous demonstration of this principle was conducted by psychologists who sent Christmas cards to a random sample of 578 strangers.¹⁶ Surprisingly, as many as 117 sent back a personal response to the researcher. Although times change, the sense of obligation derived from reciprocation is pervasive in human culture and may be universal to all societies.¹⁷

The principle of reciprocation implies that people will comply when asked to repay a debt. This motivation is exploited by fundraisers who ask for a donation only after providing a service. A classic example involves religious sects who solicit contributions in public places after pressing a flower into the hand of a passerby. The unsuspecting passerby is invariably not allowed to give it back or protest that it was unwanted. “No, it is our gift of happiness to you” would be a common explanation by the solicitor. Then, after the force of reciprocation was harnessed, the solicitor would request (and frequently receive) a contribution.

Reciprocation might also be a source of influence for clinicians. A physician who makes a patient feel comfort-

able may be more likely to be taken seriously when offering advice, not just because the doctor appears more diligent but also because the patient feels appreciated.¹⁸ A physician who accommodates small favours, such as agreeing to a sudden appointment request to convenience a patient or supporting a popular community initiative in a small town, has some advantage when suggesting a lifestyle change.^{19,20} Even in the anonymous setting of an emergency department, a bit of compassion can cause homeless adults to act a bit differently.²¹

Concession

The “concession” response is a special case of reciprocation in which a person feels obliged to concede after someone else has offered a compromise. For example, an administrator may convince you to sit on a committee if he or she first asks you to join 2 committees and then “surrenders” to having you serve on just 1. A classic study of this principle involved psychologists who asked college students to volunteer for a trip to the zoo to supervise juvenile delinquents. Those asked directly were much less likely to agree than those initially asked to volunteer every week for 2 years (17% v. 50%, $p < 0.05$).²²

Provided the sequence is structured skillfully, the routine of concession can make a second request appear unduly reasonable. This tactic is exploited by labour negotiators, for example, who make extreme demands that they do not expect to win but that make subsequent demands look more attractive. The first request must seem realistic so that the negotiator is still viewed as bargaining in good faith. The skilled negotiator, therefore, is one whose initial position is exaggerated enough to allow for concessions but not so immoderate as to seem unfair. Concession is a remarkable influence strategy and can create lasting satisfaction for both parties.²³

Concession also occurs in clinical situations. A physician

Table 1: Pathways of ingrained responses in human reasoning — a framework for physicians attempting to help patients change their behaviour

Pathway	Ingrained response	Approach for physicians
Reciprocation	Repay a perceived debt	Provide some initiating benefit such as new information or a compliment
Concession	Agree to a lesser demand	Preplan possible compromises by having a fall-back position ready
Consistency	Follow past pronouncements	Point out when a patient is doing something right, to build more positive changes
Endorsement	Imitate relevant others	Set a new social comparison group by describing successes of other patients
Liking	Link message to messenger	Be charming and encouraging even in unpleasant circumstances
Authority	Obey authorities' orders	Give recommendations to patients personally rather than through others
Scarcity	Value rare opportunities	Emphasize a special distinction so that the treatment seems uniquely suitable

whose patient is reluctant to start treatment for high blood pressure, for example, might first raise additional issues and then agree to first focus just on the hypertension. A patient who declines to undergo a screening colonoscopy might be willing to have a barium enema examination. A patient who smokes might be willing to discuss the dilemma and eventually might agree to quit smoking. The essential task is to tailor the counselling according to the patient's stage of change.²⁴ The strategy of concession is also one reason that methadone programs can be successful for treating serious drug addictions.²⁵

Consistency

The "consistency" response leads a person, once having made a choice, to have a strong tendency to continue with that commitment. For example, you might give your administrative assistant a Christmas bonus based on precedents regardless of recent performance. Research shows that an important feature is that the person accepts inner responsibility for a prior act completed in the absence of strong pressure. In one study, a sample of Ohio residents were telephoned and asked if they intended to vote in an upcoming election. Almost all replied with a perfunctory "yes." Surprisingly, the turnout rate was higher among those called (and induced to answer) than among the general public.²⁶

The drive to look consistent is a potent force that can result in people acting against their own interests. This tendency is exploited by toy manufacturers that heavily advertise an item in December but then understock it. An unsuspecting parent who promises his or her child the toy for Christmas discovers that it is not available, feels compelled to buy something else as a compromise and must return in January to fulfill the original promise. In this example, appealing to the need for consistency leads to excessive consumer spending. In other settings, it can lead to greater participation in blood donor programs²⁷ or in medical research studies.²⁸

Clinicians might guide a patient's desire for consistency to reinforce healthy choices. For example, a physician can ask a recalcitrant smoker to list 2 drawbacks of smoking. This is a small task that will likely be accepted. Having made a list, the patient might be willing to talk more at the next visit. And at a following visit, the patient might be willing to discuss quitting.²⁹ The feature of this slow process is that a series of small tasks causes the person to change their self-image so as to naturally comply with greater tasks.³⁰ This helps explain many self-enhancing memory distortions^{31,32} and why empowering patients toward self-management can breed sustained adherence.³³

Endorsement

The "endorsement" response occurs when a person determines what is correct by copying others relevant to him or her. For example, if your colleagues all prescribe omepra-

zole to treat esophagitis, then you will probably also prescribe it. Pressure toward conformity is especially strong when people try to determine what constitutes normal behaviour. For example, a group of psychologists studied 24 children frightened of dogs.³⁴ Each child was asked to watch another young person playing happily with a dog each day. After only 4 days two-thirds of the children could play happily with a dog. The behaviour change was even more profound with time.

Peer endorsement is compelling evidence that can be manipulated by outside agents. For example, advertisers exploit this tactic by using testimonials to promote a product. Also troubling is that this response is deleterious if someone needs emergency help when in a crowd. Research studies involving mock epileptic seizures staged in New York City, for example, showed that the person having the seizure was more likely to receive aid if 1 rather than 5 bystanders were present (85% v. 31%, $p < 0.05$).³⁵ In a crowd, people may see that others are hesitating, mistakenly interpret that such withdrawal is appropriate and become further persuaded to do nothing.

Endorsements are most appealing when a person's confidence is shaky. Thus, difficult medical decisions are often driven by appeals to norms, wherein patients pay attention to what has been popular with others. A man with lung cancer who must choose between surgery and radiation therapy, for example, may find the single statistic "most patients have the operation" more convincing than any clinical data.³⁶ Physicians, therefore, have influence because they set new social standards.³⁷ This also helps explain why pre-emptive compassion spurs patients to disclose embarrassing information (e.g., "Many diabetic patients are impotent. Does this include you?").³⁸

Liking

The "liking" response leads people to agree with requests from those they like. A charismatic intern, for example, can have remarkable success in expediting an urgent radiology procedure for a patient. One determinant of favouritism is physical appearance. Good-looking people are stereotypically assigned more positive traits than they might deserve (e.g., intelligence).³⁹ In a criminology study, for example, attractive defendants were less likely than unattractive defendants to be sent to jail (46% v. 77%, $p = 0.014$), even though all had been found guilty.⁴⁰ Good-looking people have a greater advantage than is generally realized.

Several other attributes can contribute to a person's attractiveness, including the similarity of dress, interests, background, verbal style and body language to the other person. This phenomenon is exploited when car salespeople deliberately dress well, assign themselves to customers of a similar age or sex and otherwise create a veneer of familiarity. Other tricks used in commercial circumstances include setting-up an oppositional third party (e.g., "the boss") so that the salespeople pretend to ally themselves

with the buyer. In addition, a few words of praise can produce return liking and willing compliance.

Medical practitioners can potentially become more persuasive than a salesperson because of their respected professional image. A physician who offers a tissue to a tearful patient will seem humane. A physician who is friendly and outgoing may command more attention.⁴¹ A physician who compliments a patient on his or her improved blood pressure will both reinforce and motivate the patient to work for further approvals.⁴² A physician who is well liked can sway his or her colleagues more effectively than can standard educational materials.⁴³ Of course, professionals must not misuse their attractive image, such as when physicians abuse patients.⁴⁴

Authority

The “authority” response leads people to have a deep sense of duty for those in command. For example, some nurses carry stethoscopes to appear more authoritative.⁴⁵ A classic study on obedience to authority involved middle-aged men who were told to give electrical shocks of increasing intensity to subjects as part of a sham test of learning.^{46,47} Surprisingly, most (65%) complied with all instructions and inflicted voltages labelled as potentially lethal. Although the shocks were later revealed as fake and aspects of this study are controversial, the evident finding is that people submit to authority.

Adults go to great lengths on the command of an authority. Governments use this compliance to extract high levels of obedience from citizens. For example, such compliance in Nazi Germany contributed, in part, to the death of millions. This deference to authority is not unique to one culture and has been identified in every country evaluated, including the individualistic society of the United States.⁴⁸ Blind obedience is convenient, and a claim to have “only been following orders” is a popular way to rationalize unpleasant actions.

Physicians are authorities and thereby have power. No one overrules a doctor’s judgement in a case, except perhaps another doctor. Hence, compliance may increase if advice is given by the physician rather than by an assistant. For example, a physician could specifically ask patients about their fears and directly extinguish misconceptions (“Yes, it is all right to eat sushi when pregnant”). Indeed, a single exhortation by a doctor can sometimes cause patients to quit smoking.⁴⁹ This deference to authority can also lead to errors, such as when nurses fail to question a doctor’s inappropriate order⁵⁰ or when doctors give unfair preference to patients who hold political power.⁵¹

Scarcity

The “scarcity” response is invoked when opportunities seem valuable because they seem rare. For example, patients with Kayser–Fleischer rings can be exceedingly popular with

medical students, not necessarily because the patients are educational but because they represent a once-in-a-lifetime learning opportunity. One classic study of this principle involved consumer preferences for chocolate cookies.⁵² Half of the raters sampled from a large jar containing many cookies. The other raters sampled from a small container of just 2 cookies. All of the cookies were identical; however, those shown in short supply were rated as more desirable and more attractive than those in abundant supply.

Creating scarcity is easy by declaring that numbers are limited, competition is growing, deadlines are tight or access is restricted. The scarcity principle is exploited by theatre owners, for example, who advertise shows as “ending soon!” The principle can also backfire. In one experiment, mock juries considered a standardized case of a pedestrian injured in a collision.⁵³ As expected, juries that were told the driver had insurance awarded the victim more than did juries told nothing of insurance (mean award \$37 000 v. \$33 000, $p < 0.05$). However, other juries that were instructed to “disregard” insurance gave even higher awards (mean \$46 000). Censored data have special allure.

Physicians might invoke the scarcity principle to make their counsel more powerful. Once a day, for example, a physician can preface advice by stating “Of all the patients I’ve seen today, you’re on my mind the most because ...” This distinction adds weight to whatever advice follows and might motivate some patients to change their behaviour. The scarcity principle also helps explain why decision-makers are more likely to accept a new option and forgo the status quo when one alternative, rather than many, is offered.⁵⁴ The perception of gaining special treatment may explain why heart transplant recipients stay compliant.⁵⁵

Summary

Changing the behaviour of a competent adult in a free society requires exercising influence but not control. In this article we have reviewed ingrained responses that are fundamental to human nature and that underpin most influence strategies. As with all aspects of medicine, influence strategies can do good or harm depending on the care with which they are directed. The reality is that forces in society are already using these techniques against the patient. An awareness of how to help patients make beneficial choices may be a necessary skill for clinicians to provide effective care.

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References

- Zwarenstein M, Schoeman JH, Vundule C, Lombard CJ, Tatley M. Randomised controlled trial of self-supervised and directly observed treatment of tuberculosis. *Lancet* 1998;352:1340-3.
- Fletcher SW, Appel FA, Bourgeois M. Improving emergency-room patient follow-up in a metropolitan teaching hospital: effect of a follow-up check. *N Engl J Med* 1974;291:385-8.
- Diabetes Control and Complications Trial Research Group. Retinopathy and nephropathy in patients with type 1 diabetes four years after a trial of intensive therapy. *N Engl J Med* 2000;342:381-9.
- Redelmeier DA, Rozin P, Kahneman D. Understanding patients' decisions: cognitive and emotional perspectives. *JAMA* 1993;270:72-6.
- Haynes RB, Taylor DW, Sackett DL, editors. *Compliance in health care*. Baltimore: Johns Hopkins University Press; 1979.
- Becker MH, editor. *The health belief model and personal health behavior*. Thorofare (NJ): Charles B. Slack; 1974.
- Ferguson JM, Taylor CB, editors. *The comprehensive handbook of behavioral medicine*. New York: Spectrum; 1980.
- Taylor SE. *Health psychology*. 3rd ed. New York: McGraw Hill; 1995.
- Haynes RB, McKibbon KA, Kanani R. Systematic review of randomised trials of interventions to assist patients to follow prescriptions for medications. *Lancet* 1996;348:383-6.
- Prochaska JO, Velicer WF. The transtheoretical model of health behavior change. *Am J Health Promot* 1997;12:38-48.
- Redelmeier DA, Ferris LE, Tu JV, Hux JE, Schull MJ. Problems for clinical judgement: introducing cognitive psychology as one more basic science. *CMAJ* 2001;164(3):358-60. Available: www.cmaj.ca/cgi/content/full/164/3/358
- Kahneman D, Slovic P, Tversky A. *Judgment under uncertainty: heuristics and biases*. New York: Cambridge University Press; 1982.
- Nisbett R, Ross L. *Human inference: strategies and shortcomings of social judgment*. Englewood Cliffs (NJ): Prentice Hall; 1980.
- Thaler RH. *Quasi rational economics*. New York: Russel Sage Foundation; 1994.
- Cialdini RB. *Influence*. 4th ed. Boston: Allyn & Bacon Publishers; 2001.
- Kunz PR, Woolcott M. Season's greetings: from my status to yours. *Soc Sci Res* 1976;5:269-78.
- Leaky R, Lewin R. *People of the lake*. New York: Anchor Press/Doubleday; 1978.
- Sadovsky R. Psychosocial issues in symptomatic HIV infection. *Am Fam Physician* 1991;44:2065-72.
- Smith DM, Norton JA, Weinberger M, McDonald CJ, Katz BP. Increasing prescribed office visits. A controlled trial in patients with diabetes mellitus. *Med Care* 1986;24:189-99.
- Pathman DE, Williams ES, Konrad TR. Rural physician satisfaction: its sources and relationship to retention. *J Rural Health* 1996;12:366-77.
- Redelmeier DA, Molin JP, Tibshirani RJ. A randomized trial of compassionate care for the homeless in an emergency department. *Lancet* 1995;345:1131-4.
- Cialdini RB, Vincent JE, Lewis SK, Catalan J, Wheeler D, Darby BL. Reciprocal concessions procedure for inducing compliance: The door-in-the-face technique. *J Pers Soc Psychol* 1975;31:206-15.
- Miller RL, Seligman C, Clark NT, Bush M. Perceptual contrast versus reciprocal concession as mediators of induced compliance. *Can J Behav Sci* 1976;8:401-9.
- Levinson W, Cohen MS, Brady D, Duffy FD. To change or not to change: "Sounds like you have a dilemma." *Ann Intern Med* 2001;135:386-91.
- Sees KL, Delucchi KL, Masson C, Rosen A, Clark HW, Robillard H, et al. Methadone maintenance vs 180-day psychosocially enriched detoxification for treatment of opioid dependence: a randomized controlled trial. *JAMA* 2000;283:1303-10.
- Greenwald AF, Carnot CG, Beach R, Young B. Increasing voting behavior by asking people if they expect to vote. *J Appl Psychol* 1987;72:315-8.
- Hayes TJ, Dwyer FR, Greenwalt TJ, Coe NA. A comparison of two behavioral influence techniques for improving blood donor recruitment. *Transfusion* 1984;24:399-403.
- Hornik J, Zaig T, Shadmon D, Barbash GI. Comparison of three inducement techniques to improve compliance in a health survey conducted by telephone. *Public Health Rep* 1990;105:524-9.
- Agency for Health Care Policy and Research. The Agency for Health Care Policy and Research Smoking Cessation Clinical Practice Guideline. *JAMA* 1996;275:1270-80.
- Law M, Tang JL. An analysis of the effectiveness of interventions intended to help people stop smoking. *Arch Intern Med* 1995;155:1933-41.
- Mather M, Johnson MK. Choice-supportive source monitoring: Do our decisions seem better to us as we age? *Psychol Aging* 2000;15:596-606.
- Mather M, Shafir E, Johnson MK. Misrememberance of options past: source monitoring and choice. *Psychol Sci* 2000;11:132-8.
- Lorig KR, Ritter P, Stewart AL, Sobel DS, Brown BW Jr, Bandura A, et al. Chronic disease self-management program: 2-year health status and health care utilization outcomes. *Med Care* 2001;39:1217-23.
- Bandura A, Grusec JE, Menlove FL. Vicarious extinction of avoidance behavior. *J Pers Soc Psychol* 1967;5:16-23.
- Latané B, Nida S. Ten years of research on group size and helping. *Psychol Bull* 1981;89:308-24.
- Crawford ED, Bennett CL, Stone NN, Knight SJ, DeAntoni E, Sharp L, et al. Comparison of perspectives on prostate cancer: analyses of survey data. *Urology* 1997;50:366-72.
- Redelmeier DA, Schull MJ, Hux JE, Tu JV, Ferris LE. Problems for clinical judgement: 1. Eliciting an insightful history of present illness. *CMAJ* 2001;164(5):647-51. Available: www.cmaj.ca/cgi/content/full/164/5/647
- Redelmeier DA, Tu JV, Schull MJ, Ferris LE, Hux JE. Problems for clinical judgement: 2. Obtaining a reliable past medical history. *CMAJ* 2001;164(6):809-13. Available: www.cmaj.ca/cgi/content/full/164/6/809
- Eagly AH, Ashmore RD, Makhijani MG, Longo LC. What is beautiful is good, but ... : a meta-analytic review of research on the physical attractiveness stereotype. *Psychol Bull* 1990;110:109-28.
- Stewart JE. Defendant's attractiveness as a factor in the outcome of trials. *J Appl Soc Psychol* 1980;10:348-61.
- Buston KM, Wood SF. Non-compliance amongst adolescents with asthma: listening to what they tell us about self-management. *Fam Pract* 2000;17:134-8.
- Feldman R, Bacher M, Campbell N, Drover A, Chockalingam A. Adherence to pharmacologic management of hypertension. *Can J Public Health* 1998;89:116-8.
- Davis DA, Thomson MA, Oxman AD, Haynes RB. Changing physician performance. A systematic review of the effect of continuing medical education strategies. *JAMA* 1995;274(9):700-5
- Johnston C. New college data may shed light on issue of sexual abuse by physicians. *CMAJ* 1996;154:1553-5.
- Castledine G. Nursing's image: It is how you use your stethoscope that counts. *Br J Nurs* 1996;5:882.
- Milgram S. Some conditions of obedience and disobedience to authority. *Human Relations* 1965;18:57-76.
- Milgram S. *Obedience to authority*. New York: Harper & Row; 1974.
- Aldry R. *The social contract*. New York: Atheneum; 1970.
- Cohen SJ, Stookey GK, Katz BP, Drook CA, Smith DM. Encouraging primary care physicians to help smokers quit. A randomized, controlled trial. *Ann Intern Med* 1989;110:648-52.
- Hofling CK, Brotzman E, Dalrymple S, Graves N, Pierce CM. An experimental study of nurse-physician relationships. *J Nerv Ment Dis* 1966;143:171-80.
- Alter DA, Basinski AS, Naylor CD. A survey of provider experiences and perceptions of preferential access to cardiovascular care in Ontario, Canada. *Ann Intern Med* 1998;129:567-72.
- Worchel S, Lee J, Adewole A. Effects of supply and demand on ratings of object value. *J Pers Soc Psychol* 1975;32:906-14.
- Broader D. The University of Chicago jury project. *Nebr Law Rev* 1959;38:744-60.
- Redelmeier DA, Shafir E. Medical decision making in situations that offer multiple alternatives. *JAMA* 1995;273:302-5.
- Grady KL, Jalowiec A, White-Williams C. Patient compliance at one year and two years after heart transplantation. *J Heart Lung Transplant* 1998;17:383-94.

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Articles to date in this series

- Redelmeier DA, Ferris LE, Tu JV, Hux JE, Schull MJ. Problems for clinical judgement: introducing cognitive psychology as one more basic science. *CMAJ* 2001;164(3):358-60.
- Redelmeier DA, Schull MJ, Hux JE, Tu JV, Ferris LE. Problems for clinical judgement: 1. Eliciting an insightful history of present illness. *CMAJ* 2001;164(5):647-51.
- Redelmeier DA, Tu JV, Schull MJ, Ferris LE, Hux JE. Problems for clinical judgement: 2. Obtaining a reliable past medical history. *CMAJ* 2001;164(6):809-13.
- Schull MJ, Ferris LE, Tu JV, Hux JE, Redelmeier DA. Problems for clinical judgement: 3. Thinking clearly in an emergency. *CMAJ* 2001;164(8):1170-5.
- Tu JV, Schull MJ, Ferris LE, Hux JE, Redelmeier DA. Problems for clinical judgement: 4. Surviving in the report card era. *CMAJ* 2001;164(12):1709-12.