

How can people be induced to willingly change their behavior? The path from persuasive communication to binding communication

Robert-Vincent Joule, Fabien Girandola, F. Bernard

► **To cite this version:**

Robert-Vincent Joule, Fabien Girandola, F. Bernard. How can people be induced to willingly change their behavior? The path from persuasive communication to binding communication. *Social and Personality Psychology Compass*, 2007, 1, pp.493-505. 10.1111/j.1751-9004.2007.00018.x . hal-00585299

HAL Id: hal-00585299

<https://hal-univ-bourgogne.archives-ouvertes.fr/hal-00585299>

Submitted on 12 Apr 2011

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

How Can People Be Induced to Willingly Change Their Behavior? The Path from Persuasive Communication to Binding Communication

Robert-Vincent Joule, Fabien Girandola and Françoise Bernard

Abstract

How can people be induced to willingly change their behavior? The present article has three main objectives. Its first purpose is to review some of the procedures pertaining to the 'free will' compliance paradigm. These procedures increase the likelihood that others will freely comply to one's requests (low-ball, teasing, foot-in-the door, touch, and 'you are free to' procedures). The second objective is to introduce a theory stemming from social psychology, namely, the theory of commitment. Finally, we wish to describe the binding communication approach that can be situated at the intersection of research conducted in both the fields of communication, more specifically in the domain of persuasive communication, and the fields of commitment and free will compliance. A project carried out to encourage school children to behave in a more environmentally friendly way will be described to illustrate the approach.

"Good Ideas" Don't Always Lead to "Proper Behavior"

Quite obviously, protecting the environment, following the highway code, voting, using a condom, donating blood, helping a person in danger, or even just doing someone a small favor represent social behavior that should be promoted. But how can this be done?

A prevailing notion about human beings may lead to think that one merely needs to modify the ideas of others to make them behave in the desired way. Information and persuasion are, hence, widely used in the media (radio, television), as well as in the classroom or at home to encourage children and adults to adhere to the ideas required for social functioning. Most major communication campaigns follow this assumption. Many prevention, education, and communication professionals suppose that as long as the information 'goes down well', and/or as long as the arguments are 'strong' enough, the proper behavior will automatically fall into place. Social psychologists have long been aware, however, of the limits of such an assumption. Informing and convincing are not enough, as 'good ideas' don't automatically lead to 'proper behavior'. Consider one of the most telling studies on this topic. Peterson, Kealey, Mann, Marek, and Sarason (2000) conducted an evaluation of the Hutchinson smoking prevention project. This project took place in Washington State and involved over 8,000 students divided into two groups: an experimental group and a control group. From the ages of 8 to 17 years, the students belonging to the experimental group (more than 4,000) took part in 65 prevention sessions while the students in the control group did not participate in these sessions. The program of these sessions was adapted to each age group and had been developed following the recommendations of the Centers for Disease Control and Prevention and those of a group of experts from the National Cancer Institute. The main purpose of these sessions was to inform the students in the experimental group of the negative effects of smoking and to convince them of the advantages of not taking up smoking. However, despite the efforts expended over a 10-year period, the action had no effect; the smoking prevalence was not lower in the experimental group than in the control group! This is just one instance of the many studies that underscore the discrepancy between their behavior of their own free will. In the 1940s, Kurt Lewin blazed the trail for research into free will compliance. Decision-Making and Freezing Effect One may recall the poor outcome of the persuasive strategies tested by

Lewin (1947) to encourage American housewives to change their dietary patterns. To help prevent malnutrition, housewives were advised to cook inexpensive cut meat. It is fair to say that they went home fully informed and convinced by the arguments heard. But this did not keep them from behaving as if they had never attended the conference (3% cooked cut meat). However, during the presentation, when the housewives were asked for a show of hands to express their decision to serve offal, they were 10 times more likely to actually follow through with their decision (32% cooked

cut meat). This goes to show the importance of the decision. According to Kurt Lewin, there exists no direct link between the ideas in our mind and our effective behavior. It is therefore necessary to call on an intermediary link and this link is none other than the decision action itself. Taken as a whole, Lewin's famous action research shows the advantage of securing a decision from the people whose behavior one seeks to change, given that once a decision is made, people tend to stick to it (freezing effect). Some decisions are easy to obtain. One just needs to ask – a simple request – for a decision to be made. But those easily obtained decisions can sometimes lead quite far. They can change a bystander into an actor, or a coward into a hero, as shown by a study carried out in the mid-1970s (Moriarty, 1975). Stopping a thief The action takes place in a restaurant. Someone comes in carrying a briefcase and sits at a table, next to a person having dinner alone. A few minutes later, the man with the briefcase asks his neighbor for a light, then steps out for a few minutes, leaving his briefcase unattended. A stranger enters the restaurant and tries to steal the briefcase. Only 12.5% of the people who had handed a light to the victim intervene to stop the thief. This percentage would be even lower if the bystander had had no prior contact with the victim. It wouldn't take much, however, for the bystander to react in a totally different way. Things would take another turn if the man with the briefcase had asked his neighbor for a different kind of small favor: for instance to keep an eye on his belongings. Indeed, in this situation, all bystanders, without exception, intervene to stop the thief. From a mere 12.5%, the percentage soars to 100%! People don't behave differently because they have different ideas. The patrons in the restaurant intervene – thus, carrying out the expected behavior (i.e. preventing theft) – because a stranger asked them to watch between one's ideas – namely, one's 'good ideas' – and one's actions. The Drug Abuse Resistance Education (DARE) program is another perfect example of this gap. The DARE program, geared toward the prevention of drug use among teenagers, was set up in California and involved over 9,000 students. Once again, although the program was effective in improving the students' overall knowledge of drugs and of their potential danger, its effectiveness in reducing drug use was poor (Dukes, Ullman, & Stein, 1996; Ennett, Tobler, Ringwalt, & Flewelling, 1994). Of course, this does not mean that information and persuasion are useless. There is no question that, through time, information and persuasion serve to change knowledge, modify attitudes, and, most certainly, trigger genuine awareness. Information and persuasion are therefore necessary indeed, but not sufficient on their own (see, in particular, Albarracín, Gillette, Earl, Glasman, & Durantini, 2005; Albarracín, Durantini, & Earl, 2006). So how then can behavior be changed? Social psychologists have been trying to answer this question for the past 60 years, and there is now a wealth of reliable scientific knowledge on this topic. We have suggested that the research carried out in this particular domain could be brought back to a single basic paradigm: free will compliance (cf. Joule & Beauvois, 1998, 2002). From a practical point of view, this paradigm may be defined as the study of the procedures, or techniques, likely to lead others to modify their things. Social norms being what they are, bystanders can do nothing else but comply. Their values, convictions, attitudes, nature, or personality have no bearings here. It all depends on circumstances. Given other circumstances, they would behave differently, for example, if the stranger had asked for a light, all the more so, if the stranger hadn't spoken to them at all. The psychological process leading up to a change in behavior lies on a simple, easy to obtain decision – to keep an eye on the briefcase – and on the ensuing freezing effect. It goes without saying that some decisions are more difficult to secure than others and must, therefore, be prepared. There are several types of procedures enabling to prepare the ground for decisions likely to lead people to comply freely to what is expected of them. We have suggested to group these procedures in a single paradigm called 'free will compliance' (Joule & Beauvois, 1998). In this article, we will discuss just a few of these procedures: low-ball, teasing, foot-in-the-door, touch, you are free to (see Cialdini, 2000; Guéguen, 2002a; Joule & Beauvois, 2002; Girandola, 2003, for a summary).

Free Will Compliance

Low-ball procedure

Cialdini, Cacioppo, Basset, and Miller (1978) were the first to describe the low-ball principle. A subject is led to make a decision, either by not being informed of its disadvantages or by being misled

by false advantages. Once the decision is made, more details are provided, including information on the disadvantages of the decision or changes to the original positive deal. Subjects may then reiterate their decision or change their minds. The priming phenomenon translates into a tendency of subjects to strive to remain consistent with their first decisions although they needn't do so. Cialdini and his team carried out an experiment where students were invited to take part in a research. The participants, however, were not told that the research was planned to start at 7 a.m.! The students were informed of this early hour plan only once they had agreed to participate. The confederate then inquired to whether or not the students still agreed to take part in the research. The outcome is clear:

compared to the control group that were given all the information up front, the low-ball procedure doubles the likelihood that students will not change their minds and that they will indeed show up at 7 o'clock in the morning (24% versus 53%, respectively). Both Moriarty's and Cialdini et al.'s researches show that individuals feel committed to a prior decision even when the conditions have changed. Decisions originally believed to be quite insignificant are maintained even when they suddenly turn out to be more costly than originally expected. The freezing effect as described by Lewin is not linked to the 'good reasons' that may have led participants to make a particular decision. If such were the case, people would reconsider their decision upon learning that their 'good reasons' are no longer applicable. But they tend not to reconsider precisely because the freezing effect is linked to the decision action per se rather than to the reasons for which a decision was made in the first place. The priming phenomenon provides a perfect illustration of this.

The teasing procedure

The teasing procedure (Joule, Guilloux, & Weber, 1989) is quite similar to the low-ball procedure although its principle differs. People are encouraged to make a decision entailing positive consequences for them but that can only materialize ('teasing' request) after a less enticing decision is taken (substitution request). In an experiment carried out by Joule et al. (1989), students had agreed to participate in an interesting psychology research: they were to watch a really good movie and, on top of that, they would receive remuneration. The students were then informed that the research was cancelled and were invited to participate in a much less interesting – even boring – nonremunerated research (repetitive paper-and-pencil exercises). Twice as many students agreed to participate in this new study compared to the control condition where no 'teasing' request was made. Teasing has certain similarities with priming yet differs in one major way: in priming, both decisions are linked to the same object (for instance in Cialdini et al.'s experiment, i.e. to participate in a given study) while in teasing the first and second decision concern two different objects (for example, in Joule et al.'s experiment, i.e. to be paid to watch a good movie or to write repetitive exercises in a new nonremunerated research). Teasing leads us to the foot-in-the-door procedure that also involves two decisions geared toward two different objects.

The foot-in-the-door procedure

The foot-in-the-door technique, first coined by Freedman and Fraser (1966), is unquestionably the oldest free will compliance procedure and one that has generated the most research (for a review, see, in particular, Burger, 1999). It should be mentioned that this procedure can be observed on a daily basis. Its principle is well known: a small request (preparatory action) is made prior to a more substantial one (expected behavior). In one of their most famous experiments, Freedman and Fraser began by asking housewives to answer a few innocuous questions over the phone about their consumption patterns (preparatory action). A few days later, the housewives received a phone request aimed at triggering the expected behavior. They were asked to agree to a 2-hour interview concerning household consumption. The interview was to be carried out in their home by a team of several men. Freedman and Fraser observed that such a costly request was twice as likely to be complied to when it was preceded by a smaller request than in the control group where the housewives had not been contacted beforehand for a quick phone survey (52% versus 22.2%, respectively).

In this foot-in-the-door experiment, an explicit request is aimed at triggering the expected behavior: 'Would you allow our team of surveyors to interview you at home?' Such is not the case in other research, where the conditions likely to incite the person to spontaneously behave as expected are set up without putting forth an explicit request. Insofar as the expected behavior is not the object of a request per se, some researchers refer to foot-in-the-door with implicit request.

Foot-in-the-door with implicit request

In a series of studies carried out in Aix-en-Provence, France (Joule, Py, & Bernard, 2004), we were able to show just how easy it is, using the foot-in-the-door with implicit request technique, to make someone behave in a more honest way than he or she spontaneously would in normal circumstances. One such experiment took place in a deserted alley where a passerby was seen dropping a 10-dollar bill. A mere 20% of the eyewitnesses caught the passerby's attention while the other 80% let him move on and grabbed the money! Yet, a carefully designed preparatory action could increase the likelihood that eyewitnesses would behave in a more honest way. The likelihood of honest behavior is multiplied by two (40%) in situations where the bystanders are first led to do a small favor – for instance, give directions – to another passerby. And it is even higher (70%) when the favor is slightly more costly, that is, to walk a distance of about 30 meters to help someone find their way. Once again, if some people tend not to take money that doesn't belong to them, it has nothing to do with their personality, values, or moral standards, but rather because they were encouraged to carry out a preparatory action, that is, to do someone a small favor. It thus seems that this first favor enables the person to make a connection between what she or he has done (namely, giving someone directions or walking a few steps to help someone find their way) and who he or she is (someone willing to help). And wouldn't such an obliging person tell a passerby that he or she has dropped money?

Foot-in-the-door with labeling

In another series of studies carried out in Aix-en-Provence (quoted by Joule & Beauvois, 2002, 178–180), we were able to show that the foot-in-the-door procedure could be even more efficient if the labeling technique was also used. One research took place on market day. A first confederate pretended to be a tourist and asked a shopper to help him read a city map (preparatory action). Once the favor had been secured and just before leaving the tourist confederate proceeded to label the shopper: 'I was so fortunate to come across someone as nice as you.' Later on, a second confederate in the crowd handed the shopper a banknote: 'Here, I think you've lost this.' By doing so, the likelihood that an 'Aixois' will turn down money that is not his or hers is eight times higher (64%) than in the control condition (only 8%) with only one confederate. This effect turned out to be twice as high compared to a foot-in-the-door situation without labeling (30%), where a first confederate warmly thanked the shopper for having helped him find his way on the map. The foot-in-the-door technique can therefore be optimized by using the appropriate labeling, that is, one that underscores the personality trait corresponding to the expected behavior.

The touch procedure

The touch procedure was first identified in the 1970s and consists in touching a person's arm for 1 or 2 seconds to secure his or her compliance. In one of the first studies (Kleinke, 1973), a few coins were left in a phone booth. People leaving the phone booth were asked if they had found money in the booth. One time out of two, the confederate would not just enquire about the coins but would also touch the person's arm thus substantially improving the rate of return of the forgotten coins twofold. The effectiveness of this procedure is well established. The effect of touch has been observed in different contexts and for various types of behavior. The University of Miami hosts the Touch Research Institute. In the medical field, hundreds of studies have been conducted proving the positive effect of touch in securing compliance to a desired behavior. For example, patients touched by hospital staff were more likely to follow medical prescriptions, hospital patients experience less presurgery stress when a nurse has touched them, and finally patients are more likely to go

back to a psychiatrist if he or she touched them during the first session. First observed in the USA – typically a ‘noncontact culture’, the phenomenon remains effective in a ‘contact culture’ such as France. Guéguen (2002b) observed, for instance, that a person is twice as likely to give a coin to a stranger if he or she has touched his or her arm during the request. In another study, Guéguen (2002c) observed that touching a student’s forearm during a corrective exercise multiplied by almost three the likelihood that the student will volunteer to go to the board to demonstrate the exercise. This last research is in line with American research showing that a teacher can help students improve their school performance by merely touching them (Steward & Lupfer, 1987).

The ‘you are free to’ procedure

It was recently shown that explicitly calling on a person’s feeling of free will increases the likelihood that this person will behave according to one’s expectations. The principle of this procedure is to end a request by specifying that the person is totally free to do (or not) what is requested of him or her. This technique has enabled Guéguen and Pascual (2000) to multiply by four their chance of having people giving them money in the street. They asked a stranger for money to take the bus, adding ‘but you are free to accept or refuse’ (10% versus 47% with the ‘you are free to’ procedure). Other studies (Guéguen, LeGouello, Pascual, Morineau, & Jacob, 2002) have shown that the fact of replacing the traditional ‘click here’ with ‘you are free to click here’ increases the number of hits on a Web site. The free will compliance procedures previously mentioned (priming, teasing, foot-in-the-door, touch, you are free to ...) prove that it is in fact quite easy to influence the behavior of others and to increase the likelihood that people will freely comply to what is expected of them. The advantage of these techniques is that they are more effective than other more authoritarian procedures that are likely to be ineffective or inappropriate. Of course, it is out of the question that housewives be forced to agree to having a team of surveyors spend 2 hours in their homes. Likewise, we are not aiming at compelling a passerby to give us money to take the bus. When we choose to talk about compliance – insofar as people would have spontaneously behaved differently – we are actually referring to a different type of compliance, that is, free will compliance.

The Theory of Commitment

In our opinion, the theory of commitment provides the best theoretical interpretation of free will compliance phenomena (Girandola, 2005; Joule & Beauvois, 1998; Kiesler, 1971). According to Kiesler, people who act become committed, almost despite themselves, to their action hence impacting people’s attitudes and behavior. As far as attitudes are concerned, committing oneself to a counterattitudinal action (i.e. one that goes against one’s attitudes) results in a change of attitude or rationalization (a better adjustment of attitude to action). Whereas commitment to an action in line with one’s attitudes leads to a consolidation of the attitude. A better resistance to subsequent influence attempts may be observed in that case. For example, signing a petition in favor of a cause that one holds close to heart enables to better resist attacks targeting this cause. Concerning behavior, committing oneself to a decisional action leads the person making this decision to stick to it (freezing effect, low-balleffect). Committing first to an innocuous action increases the likelihood

of complying to subsequent more demanding requests as long as the course of action remains consistent (teasing effect and foot-in-the-door). However, this type of impact on attitudes and behavior can be observed only as long as the first action (preparatory action) was carried out in specific commitment conditions. Therefore, the same action can be more or less binding, and can even be seen as nonbinding. Studies have shown that the stronger the commitment the bigger the effects. Strong commitment can be obtained by playing on several factors, among which:

- 1 The context of freedom in which the action was carried out: an action carried out in a context of freedom is more binding than when carried out in a context of constraint.

2 The public nature of the action: an action carried out in public is more binding than when anonymity is guaranteed.

3 The explicit nature of the action: an explicit action is more binding than an ambiguous one.

4 The irrevocability of the action: an irrevocable action is more binding than one that is not.

5 The repetition of the action: an action that is repeated is more binding than an action carried out once.

6 The consequences of the action: an action will be more binding if it is filled with consequences.

7 The cost of the action: an action will be more binding if it is costly in money, time, energy, etc.

8 The reasons for the action: an action is the more so binding that it cannot be attributed to external reasons (e.g. promises of a reward, threats of punishment) but can be imputed to internal reasons (e.g. personal values, personality traits). In other words, external reasons unbind while internal reasons bind.

According to the circumstances, subjects will feel more or less bound by the act they were induced into doing. We can therefore understand why Kiesler chose to define commitment as the link between people and their actions. It is quite easy to grasp, for instance, that the link will be stronger when the person acts in a context of freedom rather than in one of constraint. But one should be careful: it is not the subjects per se who commit to their actions according to their ideas. In such a case, we would indeed be authorized to talk about 'internal' commitment. We are referring here to 'external' commitment because the fact of committing oneself (or not) to one's actions derives from circumstances with their objective characteristics. Kiesler's definition is somewhat ambiguous on this main point. We would therefore prefer to use the following definitions that better underscore the external – and solely external – nature of a commitment: 'In a given situation, a commitment corresponds to the conditions in which an action can only be attributed to the person who carried it out,' or 'a commitment corresponds to the conditions in which an action was carried out and enabling an attributor (either an eyewitness, the person him or herself, or any person aware of what happened) to match this action to the person who carried it out' (Joule & Beauvois, 1998, 60).

The Path to Binding Communication

Throughout this article, we have shown that good ideas are not enough to make people change their ways. But we have also shown that it doesn't take much – namely, a few well-designed preparatory actions – to induce people into moving from ideas to actions. For this reason, we deem that communication campaigns could be more effective if the preparatory actions to be obtained by the target were not neglected. This is quite a challenge as it entails imparting to the target a status of player rather than merely receiver. From a practical point of view, the target's player status will lead him or her to carry out binding preparatory actions 'inconsistent' with the subsequent influences that we want him or her to resist (incitement to drug use or racial hatred, for example). To the contrary, the preparatory actions will actually lead the target to carry out actions consistent with the subsequent desirable influences (educational or awareness messages, for example). In any given program of communication, the main questions to be treated remain of course: 'What type of information should be conveyed?' 'What are the best arguments to offer?' 'What are the most appropriate channels, tools, supports, and medias?' etc., but more importantly, 'Which preparatory actions must I obtain from those I want to rally?' This last question imparts a status of player to the target, thus, setting apart a 'binding' communication approach from a more 'traditional' approach (see, in particular, Joule et al., 2004). To illustrate this point, we will describe a 'binding' communication action carried out in 11 schools in the south of France within the framework of the

European project ALTENER. The aim of this project, which took place during the 2002–2003 school year, was to encourage 9- and 10-year-old children and their parents to develop environmentally friendly behavior. Seven hundred families along with 28 teachers were involved. During the school year, the teachers did more than just inform (lessons, background information, etc.) and convince students of the importance of protecting the environment and of conserving energy, they made their students actually carry out preparatory actions (about once a month). The first action was to determine what were the environmentally friendly and energy saving 'good practices' and the 'not-so-good practices' in their school. In a second action, the children were asked to do the same thing at home by taking note of family habits that could be changed without causing much inconvenience. The third action involved parents (first preparatory action for the parents) who were asked to help their child fill in a questionnaire about energy savings at home. In the fourth preparatory action (second for the parents), the child put a sticker about the preservation of the environment on the family fridge, etc.

Obviously, the results of each preparatory action were shared with others in school. The children talked about what they had noticed at school and shared their findings about their own homes. The children read and analyzed together the questionnaires filled in with their families.

Each child spoke about family reactions to the sticker on the fridge. At the end of the school year, each student was encouraged by the teacher to make a public and written commitment to change at least one of his or her habits, for example, to take a shower instead of a bath or to turn off the tap when brushing their teeth. Each child was to inform his or her parents of this commitment also encouraging them to make a specific commitment of their own: to leave the car at home when traveling short distances or to replace ordinary bulbs by low wattage bulbs. These commitments were made more official through the signing of two forms: the child signed one in the classroom, and the family signed one at home. The conclusions are very positive. The vast majority of children and parents (100% in some classes), made a written pledge to carry out specific actions likely to decrease energy consumption. Several studies have shown that written commitments are more likely to be followed through (see, in particular, for environmental issues: Katzev & Wang, 1994; Pallack, Cook, & Sullivan, 1980; Wang & Katzev, 1990, for a summary of the long-term effects of commitment, see Girandola & Roussiau, 2003). It's hard to imagine how parents, who, at the request of their son or daughter, have made a written commitment to replace ordinary bulbs by low wattage bulbs could not do it. Parents generally want to set a good example and do not want their child to perceive them as untrustworthy. But there is more. The dynamic set in motion by this approach has also led to improvements in some of the schools such as switching from ordinary bulbs to low wattage bulbs or setting up paper recycling bins. Finally, some students wrote to the local authorities to ask that timers be installed for the lights in school corridors. The above action represents a perfect example of a binding communication approach. It is not just about presenting targets with information and arguments. Efforts are put into encouraging targets (i) to carry out preparatory actions and (ii) to make specific commitments. In promoting this approach, our aim is to support the development of studies seeking to integrate, on the one hand, research on the role of commitment and free will compliance with, and on the other hand, research dealing with communication in general and those with a more specific focus on persuasive communication. This direction seems quite promising as it offers exciting new paths for research having important theoretical and practical implications.

Short Biography

Robert-Vincent Joule is Professor of Social Psychology at Université de Provence (France). He is Head of the Laboratoire de Psychologie Sociale. His research interests are in cognitive dissonance and social influence procedures (free will compliance). He is the author (with Jean-Léon Beauvois) of *A Radical Dissonance Theory* (London and Bristol: Taylor & Francis, 1996). His most recent research concerns communication and more specifically 'binding communication'. His best-known works are *Lasoumission librement consentie* (Paris: Presses Universitaires de France, 1998) (written with Beauvois) and also the *Petit traité de manipulation à l'usage des honnêtes gens* (Grenoble: Presses Universitaires de Grenoble, 2002), a best seller that has sold 200,000 copies in France and has been

translated in several languages (also written with Beauvois). He was awarded the Prix de la diffusion scientifique at the Festival des Sciences et des Technologies en 2002 (President of the Jury: Yves Coppens).

Fabien Girandola is Professor of Social Psychology at Université de Bourgogne (Dijon, France) and assistant director of the Laboratoire de Socio-Psychologie et Management du Sport. His research focuses on the theory of commitment, cognitive dissonance, social influence procedures (free will compliance), persuasion and resistance to persuasion, decision making. His most recent research interest is on 'binding communication' more specifically in the domain of environment, health. He is the author of *Psychologie de la persuasion et de l'engagement* (Presses Universitaires de Franche-Comté, 2003). Françoise Bernard is Professor of Information Sciences and Communication at Université de Provence (France). She is Head of the Centre de Recherche sur les Pratiques de Communication et de Médiation. She was President of the Société Française des Sciences de l'Information et de la Communication from 2002 to 2006, and is currently its Honorary Chair. She has worked on communication, change, and innovation within organizations. Her most recent research focuses on 'binding communication' and is conducted in partnership with Robert-Vincent Joule. She examines, among other things, the relationship between communication and action in the domain of the environment.

Endnote

* Correspondence address: Laboratoire de Psychologie Sociale, Université de Provence, 29 avenue R. Schuman, 13621 Aix-en-Provence Cedex 1, France. Email: joule-rv@up.univ-aix.fr.

References

- Albarracín, D., Durantini, M. R., & Earl, A. (2006). Empirical and theoretical conclusions of an analysis of outcomes of HIV-Prevention interventions. *Current Directions in Psychological Science*, **15**, 73–78.
- Albarracín, D., Gillette, J. C., Earl, A. N., Glasman, L. R., & Durantini, M. R. (2005). A test of major assumptions about behavior change: A comprehensive look at the effects of passive and active HIV-prevention interventions since the beginning of the epidemic. *Psychological Bulletin*, **131**, 856–897.
- Burger, J. M. (1999). The foot-in-the-door compliance procedure: A multiple-process analysis and review. *Personality and Social Psychology Review*, **3**, 303–325.
- Cialdini, R. B. (2000). *Influence: Science and Practice*. Boston, MA: Allyn & Bacon.
- Cialdini, R. B., Cacioppo, J. T., Basset, R., & Miller, J. A. (1978). Low-ball procedure for producing compliance: Commitment then cost. *Journal of Personality and Social Psychology*, **36**, 463–476.
- Dukes, R., Ullman, J., & Stein, J. (1996). Three-year follow-up of Drug Abuse Resistance Education (DARE). *Evaluation Review*, **20**, 49–66.
- Ennett, S., Tobler, N., Ringwalt, C., & Flewelling, R. (1994). How effective is drug abuse resistance education? A meta-analysis of project DARE outcome evaluations. *American Journal of Public Health*, **84**, 1394–1401.
- Freedman, J. L., & Fraser, S. C. (1966). Compliance without pressure: The foot-in-the-door technique. *Journal of Personality and Social Psychology*, **4**, 195–202.
- Girandola, F. (2003). *Psychologie de la persuasion et de l'engagement*. Besançon, France: Presses Universitaires de Franche-Comté.

Girandola, F. (2005). Action and commitment theory. In V. Alexandre & W. Gasparski (Eds.), *French and Other Perspectives in Praxeology* (Vol. 12, pp. 117–130). New Brunswick and London: Transaction Publishers.

Girandola, F., & Roussiau, N. (2003). L'engagement comme source de modification à long terme. *Les Cahiers Internationaux de Psychologie Sociale*, **57**, 83–101.

Guéguen, N. (2002a). *Psychologie de la Manipulation et de la Soumission*. Paris: Dunod.

Guéguen, N. (2002b). King of touch, gender and compliance to a request: A pilot study. *Studia Psychologica*, **44**, 167–172.

Guéguen, N. (2002c). Nonverbal encouragement of participation in a course: The effect of touch. *Social Psychology of Education*, **7**, 89–98.

Guéguen, N., & Pascual, A. (2000). Evocation of freedom and compliance: The 'but you are free of ...' technique. *Current Research in Social Psychology*, **5**, 264–270.

Guéguen, N., LeGouvello, J., Pascual, A., Morineau, T., & Jacob, X. (2002). Request solicitation and semantic evocation of freedom: An evaluation in a computer-mediated communication context. *Perceptual and Motor Skills*, **95**, 208–212.

Joule, R. V., & Beauvois, J. L. (1998). *La Soumission Librement Consentie*. Paris: Presses Universitaires de France.

Joule, R. V., & Beauvois, J. L. (2002). *Petit Traité de Manipulation à l'usage des Honnêtes Gens*. Grenoble, France: Presses Universitaires de Grenoble.

Joule, R. V., Gouilloux, F., & Weber, F. (1989). The lure: A new compliance procedure. *Journal of Social Psychology*, **129**, 741–749.

Joule, R. V., Py, J., & Bernard, F. (2004). Qui dit quoi, à qui, en lui faisant faire quoi? Vers une communication engageante. In M. Bromberg & A. Trognon (Eds.), *Psychologie Sociale et Communication* (pp. 205–218). Paris: Dunod.

Katzev, R., & Wang, T. (1994). Can commitment change behavior? A case study of environmental actions. *Journal of Social Behavior and Personality*, **9**, 13–26.

Kiesler, C. A. (1971). *The Psychology of Commitment. Experiments Linking Behavior to Belief*. New York: Academic Press.

Kleinke, C. (1973). Compliance to requests made by gazing and touching in field settings. *Journal of Experimental Social Psychology*, **13**, 218–223.

Lewin, K. (1947). Group decision and social change. In T. Newcomb & E. Hartley (Eds.), *Readings in Social Psychology*. New York: Holt.

Moriarty, T. (1975). Crime, commitment, and the responsive bystander: Two field experiments. *Journal of Personality and Social Psychology*, **31**, 370–376.

Pallack, M., Cook, D., & Sullivan, J. (1980). Commitment and energy conservation. *Applied Social Psychology Annual*, **1**, 235–253.

Peterson, A. V., Kealey, K. A., Mann, S. L., Marek, P. M., & Sarason, I. G. (2000). Hutchinson Smoking Prevention Project: Long-term randomized trial in school-based tobacco use prevention— results on smoking. *Journal of the National Cancer Institute*, **92**, 1979–1991.

Steward, L., & Lupfer, M. (1987). Touching as teaching: The effect of touch on students' perceptions and performance. *Journal of Applied Social Psychology*, **17**, 800– 809.

Wang, T. H., & Katzev, R. D. (1990). Group commitment and resource conservation: two field experiments on promoting recycling. *Journal of Applied Social Psychology*, **20**, 265–275.