TESTING A BINDING COMMUNICATION STRATEGY IN A COMPANY: HOW COULD PERSUASIVE INFORMATION BE MORE EFFICIENT?

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The aim in this study was to improve persuasive communication in a French workplace context. Within the framework of a global progress plan, visual communication changes were proposed in an aeronautical factory. We applied the paradigm of binding communication to contribute to making communication more effective. In accordance with the theory of commitment, we induced employees to perform freely a visible preparatory act (i.e., answer a questionnaire) before the upgrading of notice boards and institution of a monthly newsletter. We compared behavioral variables before and after the introduction of these changes. The results indicated that employees consulted the newly available information more frequently. Moreover, according to 2 performance indicators, they significantly enhanced the quality of their work.

Keywords: behavior change, binding communication, commitment, persuasion.

One of the most objective definitions of communication has been provided by Lasswell (1948): “Who says what to whom in which channel with what effect?” (p. 37). A message (what) is issued from a source (who, the transmitter) to an individual or a group (whom, the receivers) using a specific communication mode (the channel), in order to induce the receiver/s to adopt a belief or opinion. As persuasive communication is unilateral from the source to the target, the latter cannot argue for or against the message. The individual using persuasion...
tries to change the attitudes of a person or group to obtain a change in attitudinal behaviors. Attitudinal change occurs when there is direct or indirect social interaction between individuals in a context of freedom. Persuasion may prove useful and efficient for different reasons. When one uses persuasion it permits one to focus on a precise subject, and provides knowledge, particularly in politics, the environmental field, or the public health field. By using persuasion one may be contributing to raising the awareness of individuals, citizens, or members of a team. This may, in the long term, encourage them to act in the way being advocated by the persuader.

However, results in the many studies that have been carried out have often been insufficient and they have not provided concrete action. Although one may be firmly convinced of the necessity of performing actions for underprivileged people or of giving one’s blood, one may not necessarily act in consequence of this belief. In a longitudinal study in Washington State, USA, by Peterson, Kealey, Mann, Marek, and Sarason (2000), the authors highlighted the limited effects of persuasion on behaviors. After having organized an antismoking prevention program for 8,000 young people for 10 years, the researchers came to the conclusion that the probability of becoming a 17-year-old smoker was no lower for young people who had taken part in 65 awareness sessions about the dangers of smoking, than it was for young people who had not followed the program. Most communication campaigns work on the assumption that to modify someone’s behaviors, one must begin by changing his/her ideas. However, this is not necessarily so: constructive ideas or intentions do not systematically lead to related acts (Joule, Girandola, & Bernard, 2007, pp. 493-494).

For decades, social psychologists have been trying to understand and explain the complex connections between ideas and behaviors. To improve the impact of persuasive communication, researchers have looked at the theory of commitment. According to this theory, when an individual freely accomplishes a decisional act, he/she is more likely to rush into a precise course of actions related to his/her first behavior. Kurt Lewin (1943, 1951), who is considered the founder of social psychology and the originator of the concept of commitment, characterized the intermediate link between attitude and behavior. While studying group dynamics and working on the best way to induce people to change their habits – in this case food habits – he defined the freezing effect. When comparing lecture and group decision procedures, Lewin (1943) concluded:

“The group decision had a ‘freezing’ effect for future action. This is an aspect missing in the lecture method. After a lecture many paths are still open whereas after a decision the person has committed himself to follow one path.” (p. 64).

Kiesler provided the theoretical basis for commitment and defined it as a pledging or binding of the individual to behavioral acts (Kiesler & Sakumura,
He made the assumption that the commitment variable could be manipulated. For example, to increase the degree of commitment, it was necessary to increase one or more factors, such as the explicitness, the importance, the irrevocability, and the repetition of the act, and the perceived degree of freedom within which the act was performed (Kiesler, 1971, p. 33).

Joule and Beauvois (1987, 1998) explored further the conceptualization of commitment and particularly insisted on involving the characteristics of an external environment with a committed nature that enables the individual to achieve his/her action. Thus, they considered that the link between the individual and his/her act was possible only if the environment was appropriate. “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” (Joule & Beauvois, 1998, p. 60). These authors extended the list of factors able to create a favorable situation by specifying, on the one hand, the cost and consequences of the act that must not be insignificant, and on the other hand, the reasons for the act that must be explained in an internal way (e.g., convictions, personal values).

In view of the freezing effect and under the circumstances of an external commitment, an individual, who decided by himself or herself to comply with an initial act, has more chance of performing subsequently consistent acts, even if they are sometimes costlier than the first one. When one or more preparatory acts are accepted or realized, a conceptual bridge is built between what one thinks and what one does. Some social psychologists referring to behavioral commitment use this theoretical foundation to make persuasive communication more effective. This approach has given rise to a new paradigm, binding communication, which was developed by Joule and colleagues (Joule, 2000; Joule, Girandola, & Bernard, 2007; Joule, Py, & Bernard, 2004). Thus, the definition provided by Lasswell half a century earlier can be completed by: “Who says what, to whom, in which channel, by making him do what, and with what behavioral effect?” (Joule et al., 2004, p. 217). A recent study in which the objective was to promote eco-citizen behavior is a relevant illustration of binding communication, even through a remote channel (Courbet, Bernard, Joule, & Halimi-Falkowicz, 2009). The researchers designed a website on which persuasive information on energy savings was displayed. Before reading persuasive information, preparatory acts were proposed: They consisted of clicking with the computer mouse to replace standard bulbs by energy saving light bulbs in an apartment setting. After the game, the target act was represented by a commitment form with an electronic signature to induce people to change at least one standard bulb to an energy saving one. It was found that 16% of participants immediately bought energy saving lightbulbs after visiting the committing site compared with 6% of participants who had visited a neutral site without preparatory acts. Getting an individual to perform initial actions without pressure before presenting him/her
with persuasive information converts the status of that individual from receiver to actor. This transformation enhances the probability that the individual will react in concrete terms to the message.

We implemented a binding communication strategy, based on this principle, in a work environment, a context that has rarely been used in previous studies. We hypothesized that employees, who complied with our initial request to answer a questionnaire about information circulation in their company, would positively change some of their professional behaviors. More precisely, we hypothesized that their participation, that is, the frequency of their consultation of visual information about the company’s operation, would significantly increase and their work performance, characterized by indicators related to the management of orders (service rate and deadline reliability) would be significantly enhanced.

**METHOD**

**PARTICIPANTS**

The study was carried out in a manufacturing unit of the Aerospace Department of the Segula Technologies Group, in the northwest of France. This factory produces metal components for customers specializing in aircraft construction. The teams in the factory are composed of boilermakers, fitters, and painters, and there are also organization, quality, and logistics managers. There are around 100 staff of whom 20% are temporary employees. We could not follow all the employees for the duration of the experiment. Indeed, in a free choice context, some preferred not to participate, and others only partly completed the preparatory act. The final sample included 62 people from different services. Their ages ranged from 26 to 35 years ($M = 32$).

**MATERIALS AND PROCEDURE**

In a global progress plan implemented in 2008, the improvement of internal communication on the production site was defined as a main objective. The head of the human resource (HR) service therefore decided, with representatives from the different teams, to develop visual communication inside the factory to inform employees about the company’s operation and its progress. The experiment took place over a year. We went on site twice to suggest to employees that they answer a confidential and personal questionnaire: time 1 ($T_1$) before the implementation of the visual communication actions and time 2 ($T_2$) several months after the implementation. We compared the employee samples before and after the introduction of the changes in communication methods and we studied the movement of different behavioral variables according to a pre-experimental methodology. Filling in the questionnaire at $T_1$ constituted the preparatory act. Employees answered open questions about the strengths and weaknesses of the
current communication methods in the company, and in particular about a small information board that was already in place. Two main communication changes were then made by the HR head. The first and most substantial action was the design and installation of larger notice boards on which information on the latest organizational changes in the factory was displayed. Quality and performance indicators illustrated by weekly or monthly frequency tables and charts were also displayed. The second HR action was the creation of an internal monthly newsletter containing stories on positive work experiences and interesting events that had occurred in the factory. These actions that encouraged employees to change their usual behavior took on a committing nature. Indeed, employees had the choice to read the visual communication and when they decided to do so, their act was visible, because the notice boards were installed in a central place. The visibility of the act, as defined by Joule and Beauvois (1998), takes into account its public, explicit, and irrevocable character. Moreover, if individuals repeat their acts, they are more likely to continue to do so and would have more difficulty not repeating the action again. In this study, employees consistently repeated their actions when they consulted the regularly updated display and when they read the periodic newsletter.

MEASURES

We identified two dependent variables with which to evaluate the degree of employee behavioral change during the experiment. The first dependent variable, which expressed the effort of individuals to go and examine the notice boards, was defined as the consultation frequency. This variable was directly estimated by employees in the questionnaires at T₁ and T₂ by means of one item “How many times do you consult the notice boards? a) once per month; b) 1 to 2 times per month; or c) 3 times or more per month”. The second dependent variable concerned the management of customer orders in the factory and the level of respect for planned delivery deadlines. To assess this, we followed the development of two performance indicators related to the orders. The service rate measured the number of orders delivered on time by the total number of received orders. Deadline reliability measured the mean number of days of delivery delay. These indicators were calculated weekly and were updated by the logistics head and the foreman.

RESULTS

We ran a t test on matched samples to compare the mean of consultation frequency at T₁ and T₂. The results showed a significant augmentation between the two times (t(1, 62) = -3.50, p = .001, d = .44). The frequency increased from 1 to 2 times per month to 3 or more times per month. As a result of the binding
**Figure 1.** Service rate before and after T1.

**Figure 2.** Mean number of delay days on before and after T1.
communication strategy, employees were more likely to read visual persuasive information about the organization and production of the company. This result confirmed our hypothesis.

Figures 1 and 2 depict the follow-up of orders received by the main customers during the experimental period. They highlight the differences of service rates and reliabilities before and after T1.

A chi-square analysis was conducted to establish the impact of the strategy on the service rate as the first performance indicator, and a \( t \) test was conducted for the deadline reliability as the second indicator. The results showed important differences between the two periods (\( \chi^2(1, 7502) = 216.08, p = .000, \phi = .17 \) and \( t(1, 42) = 3.01, p = .005, d = .18 \), respectively). The service rate significantly increased from 73% to 87%, and the deadline reliability greatly increased, from 16 to 4 delay days on average. These results also confirmed our hypothesis. The preparatory act of answering a questionnaire before the implementation of the visual communication improvements had direct positive effects on the work quality of the employees.

**DISCUSSION**

The results showed that binding communication (Joule, 2000), the paradigm of which is at the intersection of persuasive communication and external commitment (Kiesler, 1971), can be very successful in bringing about individual behavioral change, even in an oppressive and demanding professional context. We found that employees whom we initially asked to freely give their opinions on the internal information circulation became more interested in what happened and more involved in the company. In their responses at T1, they suggested improving the current notice board, which, in their opinion, was inadequate and ineffective. Some employees also suggested creating an internal newsletter that would describe more personally the work life of employees. When the communication changes were implemented by the HR head, most of the suggestions made by the employees were acted on. That they felt that they had been heard was especially involving. Moreover, the employees paid more attention to the information in management orders which was, in fact, the reflection of their own work. They then made greater and greater efforts to improve delivery quality, as is illustrated in the figures. The employees developed a personal sense of responsibility, which represents one of the factors fundamental to a committing nature in a situation (Gueguen, 2002, p. 144-151). The commitment produced by the preparatory acts and the succession of target acts would have activated this feeling and explain the production of persistent behaviors.

The concept of commitment provides a real added value in the persuasive communication process, allowing individuals to assimilate the visual information
data themselves. By becoming actors in the communication process, their participation in the relevance of its content is greater. The results of this experiment showed that the development of top-down communication in a committed work environment could exert a real and positive influence on behaviors. We could envisage the possibility of applying this approach of change management in other activities, fields, or contexts.

REFERENCES


