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Current tendencies and future challenges for social psychologists

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Abstract

This article addresses the strengths and weaknesses of social psychology as a discipline. We will discuss the changes in research methodologies that occurred during the last decades and the implications for modern social psychological research. We will also discuss the relationships social psychologists entertain with researchers from other disciplines and with lay people who know little about social psychological research. Based on these analyses, three specific suggestions are made for the future: (1) social psychologists should make a greater effort to test their theoretical predictions with multiple methods; (2) social psychologists should try to better explain the contributions of social psychological research to colleagues from other disciplines; and (3) social psychologists should appear in public more frequently and insist on the fact that human behavior can and must be studied scientifically.

Key words: current tendencies, future challenges, methodology, other disciplines, public appearances.

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INTRODUCTION

The editorial board of *Current Psychology of Cognition/Cahiers de Psychologie Cognitive* has given us the opportunity to guest-edit a special issue on social psychology in two volumes. The first volume appeared in April 2004 (Volume 22-2) and was on *the self in social psychology*. The second volume is the present volume which is on *the group in social psychology*. The purpose of the two volumes of the special issue was to provide an overview of current research in social psychology.

Such an overview would not be complete without a discussion of the current tendencies and the future challenges for social psychologists. More precisely, it seems necessary to us to consider the position and the goals of modern social psychology, both in comparison with social psychological research in the past and in comparison with other disciplines. Such an analysis naturally leads us to recommendations on how currently unresolved issues can be addressed in the future. In what follows, we will make three specific claims: (1) Social psychology is a discipline with multiple methods. (2) Social psychologists have not succeeded in explaining their contributions to researchers from other disciplines, and (3) Social psychologists should be in closer contact with the press and decision makers in the real world. We will discuss each of these claims in turn.

SOCIAL PSYCHOLOGY – A DISCIPLINE WITH MULTIPLE METHODS

Social psychological research has evolved substantially during the last 40 years. Computers allow researchers to conduct response time experiments to assess participants' automatic associations in memory. New measurement instruments borrowed from physiology and neuroscience allow researchers to answer theoretical questions that their thesis advisors would not even have considered asking three decades ago. Palmtop computers permit researchers to conduct experience sampling experiments in which participants can be asked to report their current thoughts or feelings at random times of the day independent of where they are. Whereas a research assistant spent several months on a multiple regression analysis in the 1970s, the same analysis is performed in several seconds nowadays. Every year, new data analysis tools are added to the list of those already available.

Table 1 contains a list of the most frequently used research procedures, measures and data analysis tools in social psychological research. As can be seen in the table, researchers can choose among many different options when deciding how to address a particular theoretical question. Every research procedure has its disadvantages: It is difficult to eliminate subjective impressions and personal convictions in qualitative research, correlational studies often do not allow researchers to draw firm causal conclusions, and randomized experiments frequently force researchers to conceptually reduce the independent variable in order to be able to manipulate it. The same general reasoning applies to measures: self-report (questionnaire) data are vulnerable to social desirability concerns, response times measures are often are trade-off between speed and accuracy, and one seldom knows with physiological measures what psychological processes are being assessed. As a result, an empirical result obtained with one research procedure and one measure, even if replicated several times, may be nothing more than an artifact of the chosen methodology. There is only one answer to this dilemma: Psychologists have to test their theoretical predictions with multiple methodologies. The weaknesses of one methodology will be compensated for by the strengths of the other methodologies. This is especially true for social psychologists who study complex behaviors and higher-order mental processes. Given that these behaviors are likely to be determined by multiple causes, it is of utmost importance to use multiple methodologies to provide unambiguous evidence for a hypothesized empirical relationship.[1]

A researcher who commits to one methodology inevitably commits to one mechanistic account of the phenomena he or she studies. It is like they are saying "Although I have not yet done any research on this issue, I think that the generating mechanism for the observed phenomenon is X, and so I will use only one methodology, namely, the methodology that allows me to study X". The research on social facilitation effects and on social inhibition effects is a good example. Zajonc (1965) suggested that the generating mechanism for these effects was arousal. Recently, Blascovich, Mendes, Hunter, and Salomon (1999) used cardiovascular

1. Note that multiple methodologies do not protect researchers from a confirmatory bias. Researchers who focus on results that confirm their hypothesis rather than on results that falsify it will tend to produce confirmatory evidence, independent of how many methodologies they use.

monitoring techniques such as EKG, impedance cardiography and continuous blood pressure monitoring to show that there is no general arousal of the cardiovascular system. Purported indicators of general arousal (e.g., heart rate) do not differentiate underlying cardiovascular states leading to the often false assumption/conclusion that arousal mediates many social psychological processes. Blascovich and his colleagues further demonstrated that social facilitation effects are driven by challenge (evaluation of resources outweighing demands) and that social inhibition effects are driven by threat (evaluation of demands outweighing resources) as indicated by distinctive patterns of cardiovascular responses associated with each other rather than simple arousal as postulated by Zajonc a few decades ago. As this example demonstrates, it is unwise to commit to one

Table 1
Research procedures, measures, and data analysis tools frequently used in social psychological research

TYPES OF RESEARCH PROCEDURES	
Qualitative research	Survey research
(Post-only) correlational design	Evaluation research
Quasi-experimental designs	Synthesis of existing research (meta-analysis)
Randomized experiments	Computer simulation
TYPES OF MEASURES	
Archival data	Response time measures
Content analysis	Experience sampling
Interviews	Physiological measures
Systematic observation	Neuroimaging measures
Questionnaires	
TYPES OF DATA ANALYSIS TOOLS	
Analysis of variance	Structural equation modeling
Regression analysis	Signal detection theory
Factor analysis	Cluster analysis
Non-parametric tests (χ^2, etc.)	Social relations model
Path analysis	Hierarchical (multilevel) analyses

methodology and to one mechanistic account when the goal of the research program is precisely to identify what this mechanistic account is.

As such, it is regrettable that some social psychologists still have an aversion to physiological measures (e.g., heart rate, blood pressure, skin conductance) and neuroimaging techniques (e.g., fMRI, PET-scan, evoked potentials). Frequently, this aversion is based on ideological beliefs rather than on knowledge about what these measures can and cannot do. Physiological measures and neuroimaging techniques have their strengths and weaknesses, like all other measures in psychological research. But there are certain situations in which these measures are particularly suited to address a theoretical question that cannot be tested otherwise. For example, neuroimaging techniques are quite useful when the goal is to determine whether two types of processes (e.g., judgments that are relevant to the self versus those that are not) are qualitatively different from each other (Craik, Moroz, Moscovitch, Stuss, Winocur, Tulving, & Kapur, 1999). Neuroimaging techniques also allow researchers to examine whether conscious beliefs (e.g., about an out-group) influence the processing of social information from the very beginning or come into play only later to correct for spontaneous reactions (Ito, Thompson, & Cacioppo, 2004). Some researchers argue that neuroimaging techniques are the solution to all our problems and that a research program is "scientific" only if it contains these types of measures. Other researchers argue that the neuroscience will ruin social psychology, and that social psychologists have to defend their identity by sticking to their traditional methodology. We argue against both these positions. We think that physiological and neuroimaging techniques should have the same status as all other measures listed in Table 1. They are neither better nor worse than other measures. They are part of the numerous measures that social psychologists have at their disposal in their effort to test theoretical hypotheses with multiple methods.

Using multiple research paradigms, multiple methods, and multiple data analysis techniques requires adequate training of graduate students and refresher courses for junior and senior scientists. Brauer et al. (2003) made numerous suggestions for how to work toward this goal. For example, methodology classes could be offered during scientific conferences. The international and national professional organizations (e.g., EAESP, ADRIPS) could organize, or at least co-finance, training workshops in which participants learn about particular research procedures, measures, or data analysis tools. The list of suggestions made by Brauer et al. is cer-

tainly not complete, and other initiatives are possible. The main point here is to argue that appropriate training opportunities are necessary for the use of multiple methodologies. The greater the range of methodologies used by social psychologists, the more confidence they can have in the causal relationships described by their theoretical models, and the more reliable will be the predictions that they derive from these models.

SOCIAL PSYCHOLOGY – A DISCIPLINE UNKNOWN BY RESEARCHERS FROM OTHER DISCIPLINES

Are researchers from other disciplines – such as cognitive psychology, cognitive sciences, sociology, behavioral genetics, physiology, neuroscience, psychiatry, anthropology, ethnology, epidemiology, ethology, linguistics, educational sciences, political science, and economics – familiar with social psychological research? Based on their personal experience with researchers from other disciplines and with articles published in non social psychological journals, the authors of this article have come to believe that social psychology as a discipline is relatively unknown by many researchers from other disciplines. Informal conversations confirm that this belief is shared by other social psychologists. Assuming it is real, this relative lack of familiarity with social psychological research is a problem because it is likely to have negative effects on the funding of social psychological research.

Given the number of references to social psychological research in cognitive psychology journals, it appears that a substantial proportion cognitive psychologists find social psychological research rather irrelevant for their own work. One gets the impression that numerous cognitive psychologists think that they study the basics (e.g., cognitive architecture, elementary cognitive processes), and that social psychologists then take these findings and "add" a social dimension to it. As a consequence, the transfer of knowledge presumably goes in one direction, i.e., cognitive psychologists do not need to know social psychological research whereas social psychologists cannot do research without familiarizing themselves first with the scientific literature in cognitive psychology. It is surprising that such a view still exists. After all, there is now ample evidence that social information is processed in a qualitatively different way than non-social information. Person memory does not obey the same laws as memory for neutral information, as has been demonstrated by the work on

spontaneous trait inferences and the integration of inconsistent information (Uleman, 1987; Hastie & Kumar, 1979). Social categories share many characteristics of categories of inanimate objects, but given that some of them necessarily include the perceiver, social categories are processed in a qualitatively different manner (Tajfel, Billig, Bundy, & Flament, 1971). Autobiographical memory is not equivalent to memory for neutral information, the perception of objects is qualitatively different from the perception of faces, causal reasoning relies on different processes than social attribution, and problem solving in a logical task has very little to with problem solving in interpersonal relationships.

It is not surprising that there is a qualitative difference between the processing of social and non-social information. After all, social information is likely to generate emotional, motivational, or evaluative reactions in the individual. Social information frequently involves the self, and has the potential to facilitate or prevent the individual from reaching his or her goals. The evidence for a qualitative difference between the processing of social and non-social information is abundant. Stone, Cosmides, Tooby, Kroll, and Knight (2002) found that the lesion of certain brain areas causes a selective impairment of reasoning about social exchange. They conclude that their "results are consistent with an increasing number of reports from the cognitive neuroscience and cognitive development literature that the processing of social information is distinct from the processing of other kinds of information" (p. 11535). Winkielman, Berntson, and Cacioppo (2001) take an even stronger position. After having reviewed the literature on psychophysiological experiments, they conclude that "mental processes involved in dealing with non-social objects derive from processes designed to deal with social objects. Thus, social cognition represents the general case in the study of cognitive processes, whereas research with non-social objects represents a special case in which the parameters on the social dimension are set to zero" (p. 102). Other empirical studies have reached similar conclusions (see Adolphs, 2001; Cheney & Seyfarth, 1990; Frith & Wolpert, 2004; Gallagher, Cole, & McNeill, 2002; Mitchell, Macrae, & Banaji, 2004; Stone, Baron-Cohen, & Knight, 1998). It appears, then, that social psychological research is highly relevant for cognitive psychologists and has made important contributions for the understanding of human cognition. But social psychologists have failed to bring across this message.

Social psychological research is also relevant for neuroscience and brain research. An increasing number of researchers claim that our brain

evolved from millions of years of adaptation to the social interaction and group living (Byrne, 1995; Cosmides et Tooby, 1992; Dunbar, 2003; Frith & Wolpert, 2004; Tomasello, 1999). According to the "social brain hypothesis" (Dunbar, 1998), our brain evolved to deal with the constraints of the social environment, not of the physical environment. Social problems – such as group coordination, tactical deception, and coalition-formation – were considerably more complex than physical (ecological) problems – such as distinguishing ripe from unripe fruit, stimulating gum flow from a tree, or extracting termites from a termitarium (Dunbar, 2003). And scientific evidence seems to suggest that the complexity of the social problems drove the development of large brains. For example, social indices such as social group size are significantly correlated with relative neocortex volume in primates whereas ecological indices such as the species' foraging style are not (Dunbar, 1995). Language is necessary when individuals coordinate their efforts in a group. According to some researchers, one of the strong motivations for the development of language was the need to manage the more and more complex social environment of the evolving hominins (Bickerton, 1995), and language itself contributed in a major fashion to the development of the cerebral cortex (Arbib, in press). To summarize, there is scientific evidence to suggest that the human brain is nature's response to phenomena studied by social psychologists. The capacity to process complex non-social information may simply be a by-product of having large brains for social purposes, and the processing of complex non-social information is currently done by brain structures whose initial task was to process social information. These ideas suggest that researchers studying the functioning of the human brain might benefit enormously if they were familiar with social psychological research.

Social psychological research has implications for other disciplines, too. The work on social norms (Sherif, 1936), pressures to conformity (Asch, 1951), and people's reactions to deviance (Brauer & Chekroun, 2005) is highly relevant for sociologists. The research on leadership (Fiedler, 1967), habits (Wood, Quinn, & Kashy, 2002), and changing representations (Abric, 2001) is interesting for anthropologists. The empirical work of social psychologists on issues such as attitude change (Petty & Cacioppo, 1986) and commitment (Kiesler, 1971) is closely related to the preoccupations of communication researchers. The work on identity (Eastman, 1985) or social influence (Eiser & Osmon, 1978) provides valuable insights for linguists working on the changes in the use of language. Social psychologists working on the stability of attitudes and on attitude-behavior consistency (Fazio & Williams, 1986) address virtually the same questions as political scientists studying voting behavior. The work on social networks (Latané, Nowak, & Liu, 1994) and within-group processes (Leavitt, 1951) may be relevant for archeolgists. One could continue this list for a long time but an in depth discussion of these issues would go beyond the scope of this article. We merely want to suggest that social psychological research is highly relevant not only for cognitive psychologists and brain researchers, but also for researchers in the social and human sciences.

In itself, lack of knowledge about social psychology is not a problem. Social psychologists could simply continue to do their research and regret that researchers from other disciplines do not read their journals as often as they would want them to. But the fact that certain researchers from other disciplines do not know social psychological research very well becomes a problem when they think it is not necessary to fund social psychological research. In most industrialized countries, funding decisions are made by the scientific community, i.e., pluridisciplinary panels that work under the auspices of national funding institutions. Currently (in 2005), social psychology is not in a very favorable position. Social psychologists are virtually absent in the French "Centre National de la Recherche Scientifique" (CNRS), the French counterpart to the American National Science Foundation. The "Framework Programmes", the biggest research funding program of the European Union, specify a wide variety of topics to be funded, none of which are even remotely related to social psychological research. The American "National Institute of Mental Health" (NIMH) drastically cut all funding of social psychological research several years ago. It seems, then, that social psychologists could do a better job explaining the contribution of their research to other scientists. As such, social psychologists should consider being in closer contact with researchers from other disciplines, be it by attending pluridisciplinary conferences and explaining the relevance of social psychological research, be it by lobbying to a greater extent the scientists who are part of the decision panels of the national and international funding institutions, or be it by trying to get elected or nominated to these decision panels and to insist on the fact that a research proposal on social behavior cannot be funded if there is relevant social psychological work that has been ignored. In the late 1990's, a group of social psychologists and other researchers in the social sciences issued a report entitled "Basic Behav-

ioral Science Research for Mental Health" in which they discussed in great detail the role of behavioral sciences in the understanding, treatment, and prevention of mental and behavioral disorders (Behavioral Science Task Force, 1995). This report was a highly successful initiative that had an important impact on mental health researchers who came to realize the necessity of funding fundamental research in the behavioral sciences. There are numerous other ways to familiarize researchers from other disciplines with social psychological research. Our purpose is not to provide an exhaustive list of these possibilities, but to suggest that if social psychologists want to promote the future of their discipline and of their graduate students, they have to engage to a greater extent in "missionary activities" toward researchers from other disciplines.

SOCIAL PSYCHOLOGY – A DISCIPLINE ISOLATED FROM THE "REAL WORLD"

If one opens a daily newspaper, it is difficult to find an article on a topic that has not been studied by social psychologists: conflicts between ethnic groups, uncivil behaviors, abuse of power, quests for regional identities, shifting popularities of politicians, people's attitudes towards issues like the European Constitution, strikes and other collective actions, consumer confidence, cohesion in sports teams, jealousy and passion in intimate relationships, lack of motivation in school children and employees, aggressive drivers, heroic acts of helping, and so forth. Given that social psychology is among the few disciplines that have studied these phenomena scientifically,[2] one would think that every national and regional administration and every major enterprise has its army of social psychologists who assist the decision makers in their daily work. One would also think that many journalists have a social psychological background or, at least, are familiar with social psychological research. However, based on their personal experience, the authors of this article believe that this is not the case.[3] For example, the French government created in 2004 the

2. We are suggesting by no means that social psychologists are the only ones. Social scientists such as sociologists, anthropologists, and clinical psychologists – as long as they work empirically – also have studied these phenomena scientifically and have made important contributions in the past.
3. Admittedly, this belief may be more true for France than for other countries.

"Haute Autorité de Lutte contre les Discriminations et pour l'Égalité" [High Authority for the Fight against Discrimination and for Equality], a national commission whose task it is to think about measures to reduce discrimination. There is no social psychologist among the members of this commission, and this despite the fact that social psychologists have scientifically studied prejudice and discrimination for over 80 years.

When journalists ask an academic to comment on a societal phenomenon, it seems to us that they seldom contact a social psychologist.[4] One of the authors of this article still remembers an interview he listened to on French national public radio. Several days before, a young woman had been attacked in the Parisian metro by a group of young men, and none of the other passengers had helped her. France was traumatized by the news.[5] The journalist had contacted a sociologist and asked him to comment on this event. The sociologist explained how society had changed in the last twenty years and deplored the anonymity of big cities. For nearly forty years, social psychologists have studied people's tendency to be inhibited by the presence of others, a phenomenon that has been termed the "bystander effect" (Latané & Nida, 1981). The greater the number of bystanders, the smaller the chances that a given bystander will help in an emergency, exert social control, or engage into any other behavior that involves taking action. The initial work on the bystander effect has been published in 1968 (Darley & Latané, 1968). And yet, the journalist did not contact a social psychologist. This anecdote is one of many examples. Every social psychologist can remember a situation in which he or she heard a so-called "expert" say something about social behavior that was inconsistent with empirical research in social psychology. In virtually all cases, the expert was not a social psychologist.

We suggest that the relatively weak integration of social psychologists in administrations, commissions, and enterprises and the fact that they seldom appear as experts in the media is devastating for social psychology as a discipline. The absence of social psychologists prevents them from showing to people in the "real world" that they have a lot to contribute to decisions that concern human behavior. This indirectly affects the funding opportunities for social psychological research. The absence of social

4. Once again, this may be more true for France than for other countries.
5. It turned out later that the woman had made up the story but this is irrelevant for the present example.

psychologists is also devastating for social psychology students, both graduate and undergraduate, because they are not recruited by government institutions and businesses. Given the number of students that leave the university with a degree in social psychology every year, it would be desirable that a substantial proportion find an employment where they bring to bear their knowledge about methodology and human behavior.

The absence of social psychologists in administrations, businesses, and the media is stunning if one considers the fact that social psychologists generally do quite well compared to other researchers in the social sciences when the goal is to describe and predict human behavior. Social psychologists have the methodological training that allows them to study human behavior scientifically, that is, with the tools that science has put at the researchers' disposal to study causal relationships. Social psychologists are aware that it is important to think about construct validity, internal validity, external validity, and conclusion validity. They know how to design questionnaires, how to set up experiments, and how to analyze data appropriately. They are trained to identify alternative explanations and to exclude them through additional empirical research. And yet, despite these advantages, the voices of social psychologists are seldom heard in the real world.

Why are social psychologists seldom recruited or consulted as experts? We believe that this is in part because many lay people believe they "know" how human beings function, and therefore, they do not need the help of social psychologists. The member of the city council "knows" what has to be done to increase recycling and the use of public transportation in his/her community, the member of parliament "knows" how to increase consumer confidence, the administrator in the national tax office "knows" what should be done to reduce tax fraud, the school teacher "knows" how to deal with the group dynamic in his/her classroom, and the boss "knows" how to motivate his/her employees. It is generally recognized that one has to be an expert in order to say something meaningful about molecular biology or quantum physics. The same is not true for social psychology. Many people think that they can make informed statements about human behavior without ever having read a single publication about empirical work in psychology. Their statements are based exclusively on anecdotal evidence acquired through personal experience. In addition, decision makers rarely evaluate the effectiveness of their decisions, which successfully prevents them from finding out whether their beliefs about human behaviors are correct. For example, the members of a typical city council will decide to invest several hundred thousand euros in an advertisement campaign to get dog owners to pick up after their dog but they will not have the idea to invest an additional two thousand euros in a study that evaluates the efficiency of this campaign.

In order to address the problem of people's tendency to overestimate their knowledge about human social behavior, social psychologists have to insist over and over again that (a) human behavior can and must be studied scientifically, (b) many lay beliefs about human behavior are incorrect, and (c) social psychologists, who have studied human behavior scientifically, are reliably better than non experts in explaining social phenomena, predicting behavior, and setting up intervention programs designed to modify people's habits. Social psychologists have to go out of their way (e.g., by writing letters to newspaper editors and to politicians, by calling in at radio or TV talk shows, by publishing articles in popular magazines, by participating in "cafés scientifiques" and other public events) to explain that it is possible to scientifically investigate topics such as the accuracy of eye witness testimony (Ginet & Py, 2001), the communication of stereotypes (Brauer, Judd, & Jacquelin, 2001), academic success (Toczek & Martinot, 2004), and attitude change (Eagly & Chaiken, 1993). It has to be explained that social psychologists use special scientific methods to study human behavior (e.g., experimentation, systematic observation) and that these methods are necessary if one wants to draw reliable conclusions.[6] Conclusions based on anecdotal evidence acquired through personal experience are likely to be incorrect because lay people are not systematic observers (i.e., personal convictions come into play) and tend to base their judgments on a biased sample (i.e., on members of their social environment). Lay people also tend to draw conclusions from too few data points, often have a confirmatory bias (i.e., they focus on evidence that confirms their prior beliefs), tend to process small probabilities inadequately, and fail to spontaneously consider the possibility that an observed covariation between two phenomena may be due to the fact that the two phenomena share a common cause (i.e., spurious relationship).

6. In this context, it may help to mention physiological measures and neuroimaging techniques, in order to demonstrate that one needs to have special training in order to become an expert in human behavior.

Given these shortcomings, it is not surprising that the beliefs of lay people are often false. Table 2 contains a list of widely shared beliefs that social psychological research has proven wrong. Once again, social psychologists should publicly talk about these erroneous beliefs whenever they have the opportunity, in order to demonstrate the necessity to study human behavior scientifically. Finally, social psychologists should not hesitate to publicly talk about the efficacy of intervention programs or political measures that were designed with the help of social psychologists. When Robert-Vincent Joulé, a social psychologist from the University of Aix-en-Provence, France, designed an intervention program to reduce energy consumption, he integrated social psychological findings related to the foot-in-the-door technique, verbal labeling, public commitment, and group dynamics (Joulé, Py, & Bernard, 2004). The result was a 7% reduction in energy consumption in the test city compared to the control city. Such an effect is of phenomenal size compared to the traditional intervention programs designed by individuals who are unfamiliar with social psychological research. When Robert Cialdini, a social psychologist from the University of Arizona in Phoenix, USA, created a TV advertisement campaign to increase curbside recycling, he was guided by his own work on descriptive and injunctive norms (Cialdini, Reno, & Kallgren, 1990). The campaign resulted in a 25% increase of curbside recycling in the State of Arizona, a behavior change of a magnitude that any publicity agent can only dream off.[7] As these examples make clear, there are benefits to asking the experts in human behavior, and social psychologists should not hesitate to talk about these benefits in public.

When journalists decide to interrogate social sciences researchers, they seldom contact social psychologists. Why is that? Although we have no empirical data on this issue, it seems to us that researchers from other disciplines in the social sciences are less hesitant than social psychologists to extrapolate from minimal empirical evidence and, therefore, are easier interaction partners for journalists. One of the authors of this article remembers a presentation by a social scientist from another discipline who had obtained a large government grant to determine the causes of school drop out. The research of the social scientist consisted of conversations he had had with adolescents who had dropped out of school, as well as with

7. A TV campaign shown to several million individuals is considered a success if there is a 2% behavior change.

Table 2
Widely shared beliefs that have been proven wrong by social psychological research

Once people have changed their beliefs about a topic (e.g., recycling, donating blood) they will also modify their behavior so that they behave consistently with these beliefs (Lewin, 1947).
If one asks an individual to do something that is counter his/her attitudes and one gives him/she a big reward for it he/she will change his/her attitudes (Festinger, 1957).
If a child is rewarded for doing a moderately interesting activity, he/she will enjoy this activity in the future more than if he/she is not rewarded (Deci, 1971).
Group discussion moderates people's convictions (Moscovici & Zavalloni, 1969).
People are generally quite able to take into account the situational constraints that shape human behavior (Ross, 1977).
If a person feels aggressive, he/she will feel less aggressive after having engaged into an aggressive behavior (Geen & Quanty, 1977).
Groups are generally better decision makers than individuals (Janis, 1982).
Punishment is effective in learning situations (Skinner, 1986).
People generally change their negative beliefs about a social group when being in contact with members of this group (Miller & Brewer, 1984).
If one has to make a judgment and one is sure to be right, one is generally not influenced by what others say (Asch, 1951).
In order to be in good mental health and to be socially well adapted, it is best to have a realistic perception of one's capacities and performances (Taylor & Brown, 1988).
When a person has a malaise in the street, her chances of being helped increase with the number of people present in the situation (Latané & Darley, 1970).
Stereotypes are activated automatically when one perceives a member of a social group (Gilbert & Hixon, 1991).

their parents. He then reported the peculiarities he noticed during the conversations, making statements such as "The school drop outs are characterized by a negative attitude toward their neighborhood", or "The school drop outs generally have a conflictual relationship with their parents". It is evident that the social scientist's research program does not satisfy scientific standards. First, the social scientist obviously did not conduct structured, standardized interviews. Second, there was no control group so he does not know if adolescents who are no school drop outs are any different on the dimensions he considered. Third, even if there are differences, he would not know if they are statistically significant because he did not quantify his observations. Fourth, even if the differences are statistically significant, the social scientist does not know if the "peculiarities" are actually causes of school drop out, or if the peculiarities and school drop out are related because they share a common cause. Fifth, even if certain peculiarities are true causes, the social scientist does not know if their effects are moderated by other causes, i.e., if a given peculiarity exerts a causal effect only when another peculiarity is present, too. Despite these striking weaknesses, the social scientist was convinced s/he had identified the causes of school drop outs. S/he publicly talked about the factors leading to school drop out and about the implications of her/his research for the educational system and public policy.

Had a social psychologist been asked to empirically determine the causes of school drop out, s/he would have conducted a series of studies with different research procedures and different measures of the potential causes. S/he would retain a variable as a potential cause only if this variable consistently had a statistically significant effect in all studies. But even with such data, s/he probably would have been hesitant to talk about them to a journalist, claiming that his/her evidence was not yet strong enough. S/he would also refuse to speculate about measures to address the problem of school drop out, given that his/her research program did not include a systematic evaluation of the efficiency of the different measures. There is no doubt that the present description is a charicature. But nevertheless, it seems to us that social psychologists' good knowledge about methodology sometimes backfires. They are aware of the numerous alternative explanations that have not yet been excluded in a given research program and, as a consequence, they are hesitant to be interviewed by journalists.

How can this dilemma be solved? Obviously, the solution is *not* that social psychologists suddenly start publicly asserting ideas for which they

have no empirical support. It is possible, however, to make public statements that are based on an extrapolation of existing work. As long as the social psychologist makes clear to the journalist that his/her conclusion is based on a small number of studies, that his/her data do not prove the idea but are merely consistent with the idea, and that he/she is extrapolating from a small set of results that were obtained in a very specific context, it is acceptable to make statements that are not based on airtight empirical evidence. It is also possible to express "informed beliefs" – beliefs that do not yet have empirical support but that are based on the limited data that are currently available and on many years of experience working on the topic at hand – as long as these beliefs are clearly labeled as such during the interview with the journalist. All three authors of this article agree that they rather have a scientifically trained social psychologist speculate about potential causes of a social phenomenon than listen to some social scientist who "knows" what these causes are but whose knowledge is based on weak empirical evidence.

To summarize, social psychologists are not present enough in the "real world". Given that social psychologists are frequently the only ones to have sufficient methodological training to competently talk about a social phenomenon, the discretion of social psychologists is hard to understand. Social psychologists have to convince the general public that they are useful and that they have important things to say. Doing that contributes to creating job opportunities for social psychology students and to increasing the funding for social psychological research. It is therefore important that social psychologists leave their university offices and confront the real world as frequently as possible.

CONCLUSION

Our three claims that social psychology is a discipline with multiple methods, that social psychologists have not succeeded in explaining their contributions to researchers from other disciplines, that social psychologists should be in closer contact with the press and decision makers in the real world have been presented as if they were independent of each other. This is in fact incorrect because the three claims are closely related to each other. A common methodology can serve as a starting point for a scientific discussion with a researcher having a different background. Using different methodologies can therefore facilitate exchange with

researchers from other disciplines. Some decision makers and journalists have an irrational aversion toward certain methodologies (e.g., self-report measures). The use of different measures allows social psychologists to convince such critics of the predictive validity of their research. If social psychological research was presented more often in the media, researchers from other disciplines would learn more about it and perhaps be inspired to read social psychological journals more frequently. Finally, the fact that researchers from other disciplines are generally quite unfamiliar with social psychological research not only affects the funding opportunities but also the frequency with which decision makers and journalists ask social psychologists for advice. It is obvious that if researchers from other disciplines are unfamiliar with social psychological research they will not advise decision makers and journalists to contact social psychologists if they are asked a question about social behavior that they cannot answer. As these examples demonstrate, our three claims are closely related to each other. Our goal in presenting these claims was to discuss future challenges faced by social psychologists. We hope that this discussion proves useful and that social psychologists will contribute even more than today to developing their discipline and the future of their graduate students.

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RÉSUMÉ

Cet article vise souligner les forces et faiblesses de la psychologie sociale en tant que discipline. Nous discuterons des changements qui se sont produits durant les dernières décennies au niveau des méthodologies de recherche et leurs implications pour la recherche moderne en psychologie sociale. Nous discuterons également des relations que les psychologues sociaux entretiennent avec les chercheurs des autres disciplines et avec les profanes de la recherche en psychologie sociale. Fondées sur ces analyses, trois suggestions seront formulées pour le futur : (1) les psychologues sociaux devraient davantage tester leurs prédictions théoriques à l'aide de méthodes multiples, (2) les psychologues sociaux devraient essayer de mieux expliquer les apports de la recherche en psychologie sociale aux collègues des autres disciplines et (3) les psychologues sociaux devraient collaborer plus souvent avec la société civile et insister sur le fait que le comportement humain peut et doit être étudié scientifiquement.

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