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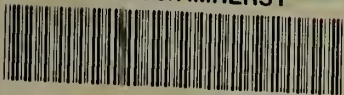*University of Massachusetts Amherst*

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IMPRESSION FORMATION IN AN INTERGROUP SETTING:

THE EFFECTS OF OUTGROUP POWER AND HOMOGENEITY

A Thesis Presented

by

ERIC F. DEPRET

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE

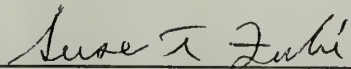February 1992

Department of Psychology

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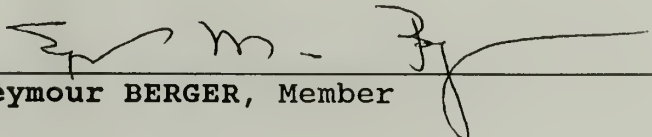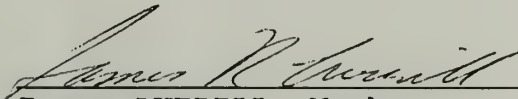
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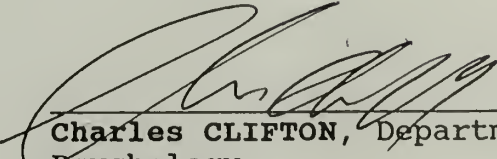Approved as to style and content by:

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ABSTRACT

IMPRESSION FORMATION IN AN INTERGROUP SETTING:

THE EFFECTS OF OUTGROUP POWER AND HOMOGENEITY

FEBRUARY 1992

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A central feature of stratified societies is the unequal partition of power between its members. Of fundamental importance for social psychology is the question of cognitive, emotional, and behavioral consequences of perceived power differentials, especially from the perspective of the powerless. As indicated by literature reviews, this issue has, however, been largely neglected. One reason for this lacuna may be a confused definition of the concept: social power should be distinguished from social influence and social status and may rather be defined in terms of outcome control. Because a sense of control over one's outcomes is central to the self-concept, the question of power becomes: how will the powerless cope with a threat to their sense of control? As suggested by research on impression formation, one strategy may be to individuate the ones in power, i.e. to pay particular attention to their idiosyncratic attributes, in an effort to gain indirect outcome control.

A first experiment investigated the effects of outgroup power and outgroup homogeneity on the formation of impressions of outgroup members, in a minimal group paradigm. As predicted, results indicate that outgroup power affected subjects' feeling of control, and led them to engage in more individuating impression formation processes, but only when the ones in power were perceived as a collection of individuals to begin with (heterogeneous condition). This individuating effect of power did not occur when the ones in power were perceived as a salient outgroup (homogeneous condition). Results are discussed in light of the continuum model of impression formation. The differential impact of perceived power, depending of its social categorization, opens fascinating perspectives on intergroup relation processes.

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CHAPTER 1

INTRODUCTION

Many philosophers and social scientists have argued
that power should be the focus of social sciences; to
quote Bertrand Russell (1938, p 10): "I shall be concerned
to prove that the fundamental concept in social sciences is
Power, in the same sense in which Energy is the fundamental
concept in Physics." As a matter of fact, the central
feature of stratified societies is the unequal partition of
power among its members: social control (which is
essential to society) presupposes a power structure for the
differentiated application of sanctions (Dahrendorf, 1968).
In other words, the fact that some individuals are in a
structural position to evaluate and sanction the behavior
of other individuals is a keystone of social functioning.
If indeed power is a central aspect of social interactions,
a crucial problem for psychologists is the question of the
psychological consequences of power differentials in
interpersonal and intergroup relations. Of particular
interest to the understanding of social change processes is
the issue of cognitive, emotional and behavioral
consequences of perceived power differentials from the
point of view of the powerless.

The present thesis is an attempt at understanding how
people form impressions of powerful others. Do people tend

to individualize and pay particular attention to the ones in power, perceiving them as a collection of "personalities"? or on the contrary, do they categorize them quickly as "the bosses"? After discussing some issues on social power, psychological control, and impression formation processes, I shall present the results of an experiment investigating, in an intergroup setting, the effects of outgroup power and homogeneity on forming impressions of outgroup members.

CHAPTER 2
SOCIAL POWER: CIRCUMSCRIBING THE CONCEPT

A number of psychologists have insisted on the importance of power to the understanding of human interactions. As Sik Hung Ng (1980, p 254) stated it: "The conditions under which human beings live are to a large extent shaped by the social arrangement of power which therefore should not be left out of social psychology." Surprisingly, however, the power variable remains largely absent from empirical research. Power is still a "neglected variable" in social psychology (Cartwright, 1959), and may be the most neglected aspect of small group research (Sherif, 1962). Many authors have pointed out that much of the experimental work on intergroup relations has ignored the question of power (e.g., Apfelbaum, 1979a, 1979b; Billig, 1976; Brown, 1988; Condor and Brown, 1986; Deschamps, 1982; Hogg and Abrams, 1988; Ng, 1980, 1982; Sachdev and Bourhis, 1985). A widespread feeling among researchers is that the "reality" of power cannot be easily simulated in laboratory settings (e.g., Hollander, 1985). But what is this "reality" of power? I want to argue here that the lack of research on power is partly due to a confused definition of the concept.

Power as Social Influence

Among sociologists, the concept of power proves to be compelling yet troublesome. It is often used in a very broad sense, presenting many faces, and therefore condemning any attempt at a single general answer to the question. In Bierstedt's terms (1950, p 730): "In the entire lexicon of social concepts none is more troublesome than the concept of power. We may say about it only what St. Augustine said about time, that we all know perfectly what it is until someone asks us" (see also Kaufman and Jones, 1954; Parenti, 1978; for a review see Lukes, 1986).

Psychologists have encountered the same difficulty in dealing with the concept of power, used in some overlapping and contradictory ways (Turner, 1991; for a review see Ng, 1980). However, most of them seem to have chosen to define power in terms of influence, or even to use the terms interchangeably (Hollander, 1985). In so doing they adopted a philosophical tradition conceiving of power as the production of intended effects (Russell, 1938) or the capacity to produce them (Weber, 1947). Indeed, most of the definitions of power proposed by social psychologists refer to the ability to exert interpersonal influence to a point where the concepts appear to be synonymous. In the tradition of field theory, power is conceived as the potential for effecting changes in the world (Lewin, 1951). One would then say that A has power over B when A can get B

to do something that B would not otherwise do (Dahl, 1957) or when A has the capacity to influence B in a direction desired by A (Pruitt, 1976). Social power would be the potential to direct the behavior of another person more so than the other way around (Mulder, 1977). In this tradition, power is a construct which accounts for the portion of influence that is under the actor's control: "Power refers to the ability to achieve ends through influence" (Huston, 1983, p 170; see also Cartwright, 1959; Hersey and Blanchard, 1982; Lippitt et al., 1952; Veroff, 1957; Willis and Levine, 1976; Winter, 1973; Wrong, 1979). Power is measured as the amount of successful influence (Lippitt et al., 1952; Mayhew et al., 1969; Peplau, 1979; Strodbeck, 1951; Szinovacz, 1981), so the many bases of power described by psychologists (French & Raven, 1959; Hinkin and Shriesham, 1989; Kelman, 1961; Raven and Kruglanski, 1970; Staheski et al., 1989; Tedeschi et al., 1972) are in fact bases of influence.

Together with this conception of power as influence, many psychologists seem to have adopted Nietzsche's (1968) assumption of a fundamental "will to power" in human beings (e.g., Adler, 1966; McClelland, 1975; Mulder, 1977; Winter, 1973). However, considering the negative connotations of power (Ng, 1980) as well as the costs of power (responsibility), it is not clear whether people are systematically motivated to influence, or be in a position

to influence others. More clear is that people dislike, resent and seek to avoid attempts by other to influence them.

In any cases, to equate power with influence leads one to consider power as a process or a consequence, but not as a determinant of social interactions (hence, a lack of empirical studies manipulating power as an independent variable). Such an approach does not account for power as a structural aspect of organized societies. Nor does it answer the question of the psychological consequences of perceived power differentials. In order to do so, it is necessary to differentiate the concept of social power from that of social influence: power can lead to influence, but not systematically, and influence can have other bases than power (see Moscovici, 1976; Turner, 1991).

Power as Social Status

Willing to integrate individual and societal levels of analysis, psychologists interested in intergroup relations have attempted to understand how individuals' cognitions, emotions, and behaviors influence and are influenced by relations between groups. They conceived of society as a stratification of social groups that stand in power, status, and prestige relation to one another (Hogg and Abrams, 1988). Social Identity theorists then assumed that, given a need for self-esteem, people are motivated to establish favorable intergroup comparisons between their

group and other groups (see Brewer, 1979; Tajfel and Turner, 1979, 1986). By doing so (e.g., discriminating against outgroups), they can reach or maintain a positive social identity.

Clearly, the focus of this approach to intergroup behavior is on group status. The question of power, however, has been rather quickly handled by assimilating power to status: power has been implicitly conceived as one of the valued attributes in the process of intergroup comparison. To my mind a confusion between power and status would jeopardize any attempt at understanding the specific effects of perceived power. Indeed, some data have indicated that power's connotation is negative (Ng, 1980) or that it does not correlate with self-esteem (Kipnis, 1972). People seem to have ambivalent feelings (composed of admiration and suspicion) toward the ones in power. Furthermore, there exist instances where power and status positions within a social structure are discrepant (Lenski, 1984). For example, although scientists have often more prestige than politicians, the latter have more power than the former. It is therefore necessary to consider power and status as different factors in the study of intergroup relations (Ng, 1980, 1982; Nigro and Serino, 1985; Sachdev and Bourhis, 1985, 1991).

A few empirical studies have then started to investigate the effects of group power on intergroup

discrimination (Ng, 1982; Sachdev and Bourhis, 1985,1991).
In these experiments, group power, the independent
variable, was operationalized as the amount of control each
group had over the resources allocated to both groups,
while intergroup discrimination, the dependent variable,
consisted in the actual resources that subjects would
allocate to ingroup and outgroup members. Results
indicated that ingroup power increases discrimination
toward the outgroup. These results were interpreted in
terms of Social Identity Theory: The search for positive
social identity is the psychological antecedent to
discriminatory behavior and power enables group members to
discriminate effectively. Obviously, power is here reduced
to a mediating variable, a "can factor", which leads to the
rather disappointing conclusion that one discriminates when
one can. I believe that power is more than a trivial
mediating variable and has some specific psychological
impact that needs to be dealt with.

<div align="center">Power as Outcome Control</div>

Approaching power as a structural aspect of social
interactions, I argued that it should be distinguished from
the concept of social influence. I also pointed out that
power cannot be assimilated with social status. I would
also argue that social power has to be defined in terms of
the relationships that bind individuals or social groups
together. From a social exchange perspective, the

interdependence between persons is specified by how they
control one another's outcomes which include, on one hand,
rewards and punishments and, on the other hand, costs and
benefits (Kelley, 1979). One could then say that A has
power over B when A has some control over B's outcomes.
The amount of power that A has over B would be defined by
the amount of control A has over B's outcomes (the amount
of control referring not only to the extent of control but
to the range and type of outcomes being controlled). A
power relation would then refer to a situation of
interdependence between social actors, whether symmetrical
or asymmetrical. But one could want to restrict the use of
power relation to refer to situations of asymmetrical
interdependence. In that case one would say that A has
power over B when A has more control over B's outcomes than
the other way around. Assuming that there is no third
party involved, the amount of power would be defined by the
amount of control A has over it's own outcomes as well as
over those of B (for such a definition of group power see
Jones, 1972; Sachdev and Bourhis, 1985).

However, if one wants to convey the structural
dimension of power in stratified societies (some people
being in a position to evaluate and sanction other people),
it may be necessary to include the notion of role
differentiation in the definition. A power relation would
not only be characterized by asymmetrical interdependence

but by non-reciprocal interdependence, i.e. by dependency. As a working definition, I shall propose here that, in a given social situation, A has power over B when A has some control over B's outcomes and not the other way around. The amount of power A has over B in this situation is defined by the amount of control that A has over B's outcomes (extent, range, and type of outcomes affected). One could object to this definition that, in many social situations, the subordinates have some control over the superiors'outcomes as the latter depend, to a certain extent, on the former. I would argue, however, that this "secondary" power relation is a by-product of the primary one which remains non-reciprocal: The secondary relation may be perceived, or not, as a possible counter-power depending on many "empowering" factors that are beyond the scope of the present work. In order to avoid confusion I shall define power as non-reciprocal outcome control.

Following this attempt to define social power, what hypothesis can be made about cognitive, emotional, and behavioral effects of perceived power differentials? Whether a power relation is referred to as interdependence, asymmetrical interdependence, or dependency, the emphasis is on the control of outcomes. I shall therefore suggest, in the next section, that some preliminary hypotheses can be derived from the literature on psychological control.

CHAPTER 3

PSYCHOLOGICAL CONTROL AND SOCIAL POWER

Control as a Basic Motivation

Many psychologists have postulated a general motive to
feel and exert control over environmental occurrences, a
sense of personal control being viewed as integral to the
self concept (Bandura, 1977; DeCharms, 1968; Fenichel,
1945; Heider, 1958; Hendrick, 1943; Kelly, 1955; White,
1959). A number of cognitive theorists have suggested that
causal inferences and attributional activity arise from a
desire to render the world predictable and controllable
(Heider, 1958; Jones and Davis, 1965; Kelley, 1967).
Consistent with this idea are the data showing that control
deprivation fosters attribution analyses and renders
subjects more attentive and accurate in processing
information (d'Agostino and Pittman, 1982; McCaul, 1983;
Pittman and d'Agostino, 1985; Pittman & Pittman, 1980;
Swann et al., 1981). Clearly, the new "New Look" in social
cognition, focusing on "hot cognitions", i.e. motivated
cognitions, gives particular importance to control
motivation (Fiske and Taylor, 1984, 1991; Higgins and
Sorrentino, 1990; Pittman & Heller, 1987; Weary et al., in
press).

Apart from boosting information processing, two main
patterns of reaction to loss of control are described in

the literature. The first one, reactance to perceived loss of freedom (Brehm, 1966; Brehm and Brehm, 1981; Wortman and Brehm, 1975; Wicklund, 1974), is characterized by reactions of anger, hostility, and behavioral efforts to restore perceived freedom. Some research suggests that a threat to a person's sense of control instigates aggression, which can be interpreted as serving to restore perceived control (Horwitz, 1958; McKellar, 1977; Worchel et al., 1978). The second reaction to loss of control, learned helplessness, arises when control-restoring efforts remain unrewarded (Abramson, et al., 1978; Seligman, 1975). It is characterized by a pattern of affective, cognitive, and motivational deficits such as passivity, anxiety, and depression. It may be that loss of control will lead to reactance when the expectation for control is high and to helplessness when the expectation is low (Wortman and Brehm, 1975).

Control as an Adaptive Illusion

Several authors have suggested that more important than effective control over environmental occurrences is the belief in such control. Control may well be an adaptive illusion (Taylor and Brown, 1988). Indeed, people usually tend to overestimate their degree of control over outcomes determined by chance (Goffman, 1967; Langer, 1975; Langer and Roth, 1975; for a review see Crocker, 1982). They also tend to overestimate personal causation (Miller

and Ross, 1975) and favor personality as an explanation for
behavior (Ross, 1977). In short, people tend to believe
that the world is controllable (Lerner, 1970). Hence, in
an answer to Skinner's famous essay (<u>Beyond Freedom and
Dignity</u>, 1971), Lefcourt (1973) argued that whatever the
reality of control is, it is a meaningful perception for
people: while freedom and control are both illusions,
inventions of people to make sense of their experience,
they do have important behavioral consequences.

Indeed, much evidence indicates that a feeling of
control has important adaptive value. It helps in coping
with aversive events and acts as a buffer against stress
(e.g., Cohen and Edwards, in press; for a review see
Thomson, 1981). A belief in personal control leads to
better performance and more success in tasks (e.g.,
Brunstein and Olbrich, 1985; Burger, 1985; Diener and
Dweck, 1980). In fact, numerous studies suggest that a
sense of control is an important factor of mental health
and that a loss of control plays a central role in
depression (for reviews see Alloy and Abramson, 1988;
Taylor and Brown, 1988). Most personality psychologists,
investigating individual differences in need for control
(see Matthews, 1982) and internal/external locus of control
(Rotter, 1966), have emphasized the adaptive value of
internal sense of control (for a review see Strickland,
1989).

Primary and Secondary Control

In the studies previously mentioned (describing control as a basic motivation or adaptive illusion), the notion of control is generally restricted to direct personal control over environmental occurrences. However, some researchers have pointed out different forms of control (see Thomson, 1981): mainly primary control (gaining control by influencing reality) has been distinguished from secondary control (gaining control by accommodating to reality). Although primary control is valued in occidental cultures, and secondary control emphasized in oriental values (individualism and autonomy versus fit with environment and collectivism), one can argue that they both reveal a need to feel in control (Weisz et al., 1984). Among secondary forms of control is vicarious secondary control, i.e. a tendency to align with powerful entities in order to enhance one's sense of power (Fromm, 1941; Hetherington and Frankie, 1967; Johnson and Downing, 1979). Other forms of secondary control include illusory secondary control, i.e. attributing outcomes to chance or luck as an attempt to feel allied with the forces of fate (Kahle, 1980; Weisz, 1983), and interpretive secondary control, i.e. changing perspective on realities in order to get meaning from them.

Altogether, it seems reasonable to postulate in human beings a general need to feel in control, a need that can

be expressed in various ways (e.g., group identification, religious belief, etc...) when direct personal control over environmental occurrences is not perceived as possible.

Psychological Control and Social Power

From this review of the control literature, what can be said about the issue of social power? Remember that I defined social power as controlling the outcomes of another individual or group. I have suggested that people are motivated to control their own outcomes, but it is not clear whether people are motivated to control others' outcomes, i.e. to have social power. Maybe social power can be sought as a default option when one feels one cannot have direct control over one's own outcomes. Controlling other's outcomes, in an interdependent situation, can be an indirect way to control one's own outcomes through social influence. But what to say about cognitive, emotional, and behavioral consequences of power relations for the powerless?

Interesting data from Beauvois and Dubois (1988) suggest that the tendency to make internal explanation of behavior (internal attribution) and of outcomes (internal locus of control) arises from the exercise of power. According to them, this "norm of internality" differs among social groups as it serves the function of justifying of one's power position. That is, internal explanation of behavior and outcomes justify the act of evaluating and

sanctioning others. In line with this idea one would expect members of dominated groups, experiencing prolonged exposure to powerlessness, to develop a low sense of personal control. If one accept the principle of a general motive for control, one would also expect this low sense of personal control to be compensated by the development of secondary forms of control. For example, one can expect females, as a dominated group, to develop a lower sense of personal control than males, as well as some forms of secondary control: Hence the classical gender difference on instrumental versus relational orientations, individual versus collective identity (see Lorenzi-Cioldi, 1988).

In the case of a temporary exposure to powerlessness, people should experience a threat resulting in a decrease of the feeling of personal control. This may seem to be a truism as I defined power in terms of outcomes control. However, it opens new perspectives and numerous hypotheses about the issue of powerlessness. Given the need to feel in control, the question of power becomes: How do the powerless cope with a loss of control and restore a sense of control in a specific situation? If the power relation cannot be challenged, one way may be to try to influence or adapt to the ones in power, in an attempt to get indirect control over one's outcomes. But this would probably require forming an accurate impression of the powerful persons, to be able to predict their behavior.

CHAPTER 4
IMPRESSION FORMATION, CONTROL, AND POWER

Impression Formation and Interdependence

How do people form impressions of powerful others? The general question of impression formation processes is clearly a core question for the understanding of social interactions. Classically, social cognition theorists have stressed the importance of category-based cognitive schemata, i.e. stereotypes, in impression formation (for a review, see Fiske and Taylor, 1991, Chapters 4 and 5). It has been suggested that, because people have limited cognitive capacity, they first tend to categorize targets according to available labels, and then rely heavily on the cognitive schemata, thereby activated, while forming an impression. Indeed, stereotypes have been shown to bias information processing at levels of encoding, memory, as well as inferences. For example, when asked to form an impression of another person, people attend more to information that is consistent with their stereotypical expectations.

In the last decade, however, researchers have been more and more interested in motivational factors that influence cognitive processes, picturing the human processor more as a "motivated tactician" than a "cognitive miser". In this line, Fiske and Neuberg (1990), have

proposed a continuum model of impression formation: They suggested that, although category-based impressions are the default option, people can move towards more individuating processes when motivated to do so. Among those motivating factors, control motivation has been given particular importance. Much data have indeed suggested that in situations of interdependence, i.e. when target and perceiver's outcomes are under joint control, perceivers tend to form more individuated impressions of the target (Berscheid et al., 1976; Erber and Fiske, 1984; Fiske and Von Hendy, in press; Neuberg and Fiske, 1987; Ruscher and Fiske, 1990). Under conditions of outcome dependency, the perceivers pay more attention to the target's attributes, especially to those attributes that are inconsistent with category-based expectations. They also make more dispositional inferences about the target and tend to form more complex impressions. These results were interpreted in terms of control motivation: When one's outcomes are controlled, in part, by another person, one will pay particular attention to that person's attributes (especially the inconsistent ones as they are potentially more informative) in an effort to regain control. In other words, research on impression formation and interdependence has suggested that, given a need for control, interdependence-induced control deprivation will result in more individuating impression formation processes. This

interpretation, however, raises some issues related to the kind of interdependence that researchers have considered: symmetrical interpersonal interdependence.

Impression Formation and Power Relation

Most research has indeed dealt with cooperative interdependence, in which perceiver and target's outcomes were positively correlated (e.g., Erber and Fiske, 1984; Neuberg and Fiske, 1987). It can then be argued that the issue of outcomes control is confounded with phenomena of unit formation or ingroup categorization, which could be responsible for the individuating effect. Some research investigating competitive interdependence, in which perceiver and target's outcomes are negatively correlated, has, however, confirmed the individuating effect of interdependence (Ruscher and Fiske, 1990). Yet, to my mind, it is still difficult to ascertain that the individuating effect is due to the control manipulation in itself. Some sort of unit formation cannot be totally overruled as long as research is restricted to symmetrical interdependence. Both target and perceiver had equal control over the outcomes and were assigned the same role: The target may well have been perceived as a kind of teammate in the situation. A further test of the continuum model of impression formation would then be to manipulate directly the amount of control the target has over the

perceiver's outcomes in a non-reciprocal situation, i.e. in a situation of power relation.

Remember that power relations, as I defined them, are characterized by role differentiation and outcome dependency: A has control over B's outcomes, but not the other way around. The amount of power of A is defined by the amount of control A has over B's outcomes. If control motivation is responsible for individuating processes in impression formation we would expect that: (a) The more the target has power over the perceiver, the more the perceiver will experience a loss of personal control (b) This will result in a more individuating impression of the target (more attention to inconsistent information, more dispositional inferences). These predictions would be consistent with data suggesting that people have well-developed schemata for those in power (Rush and Russell, 1988; Sande et al., 1986).

Another question that arises from research on impression formation is the one of interpersonal versus intergroup situations. Indeed, most of the research has dealt with interpersonal interdependence, suggesting an individuating effect of both interpersonal cooperation and competition. I have just suggested that the individuating effect should also appear in powerless perceivers as a function of targets' power. But would this effect appear in intergroup situations? With observing natural

situations, it is doubtful that ingroup members will individualize members of an outgroup competing or having power over them. Available data would rather suggest that intergroup competition leads to stereotyping (Sherif et al., 1961). In a recent study, Ruscher and her colleagues (Ruscher et al., in press) have investigated impression formation in interpersonal versus intergroup competition. In the interpersonal condition, subjects were competing on a one-to-one basis, while in the intergroup condition, they were cooperating with ingroup members and competing against outgroup members. Results showed that subjects individualized the opponents in the interpersonal situation but not in the intergroup situation. In the latter, subjects were shown to individualize ingroup members. This individualization of ingroup members was proposed as an explanation for the lack of individualization of outgroup members: Attention to ingroup members would have drained subjects' limited attentional resources. To test this interpretation, it would be necessary to manipulate the intergroup/interpersonal dimension in a way that could control for the impact of ingroup members on subjects. Such a paradigm is available in the intergroup relations litterature.

Intergroup theorists have suggested that group behaviors can be elicited in minimal conditions, without any kind of interdependence or interaction between group

members (Tajfel et al., 1971). The mere fact of categorizing subjects into groups, without people knowing or seeing each other is sufficient to induce ingroup bias (Brewer, 1979). The important variable is then purely cognitive, in terms of self-categorization (Turner et al., 1987); every human interaction can then be conceptualized on a continuum from interpersonal relations (acting in terms of personal identity) to intergroup relations (acting in terms of social identity; Tajfel, 1978). In order to activate the "Us versus Them" dimension, one can manipulate the cognitive salience of a categorization. In perceptual terms, a stimulus is salient, grabs the attention, when it stands out in the context (Taylor and Fiske, 1978). In self-categorization terms, a categorization is salient when it maximizes intergroup differences an intragroup similarities (Oakes, 1987). For example, if I belong to group of females and the other group is made of males, the males-versus-females categorization is cognitively salient, or relevant. But if I belong to a group of females and the other group is made of both males and females, the males-versus-females categorization is less salient. In other words, by manipulating the homogeneity of the outgroup, one can make a categorization more or less salient and elicit more interpersonal or intergroup behaviors.

I shall therefore investigate the interpersonal/intergroup dimension, by manipulating the

perceived homogeneity of the outgroup, in a minimal group
situation (no interdependence or interaction). Outgroup
members would either belong to one category (homogeneous
condition) or to different categories (heterogeneous
condition). I expect that (a) In the heterogeneous
condition, in which the outgroup are perceived as
individuals, so the interaction is interpersonal, outgroup
power will have the individuating effect that I predicted
for interindividual situations (b) In the homogeneous
condition, in which the outgroup are perceived as a group,
so the interaction is intergroup, outgroup power will not
lead to individuation. Indeed, when the ones in power are
perceived as a collection of individuals, a good strategy
to gain indirect control over one's outcomes may be to pay
particular attention in order to adapt one's behavior and
influence the powerful persons. However, when the ones in
power are perceived as an outgroup, such strategy may not
be chosen because outgroups are expected to discriminate
against the ingroup (Leyens and Schadron, 1980) and
outgroups members are perceived as strongly committed to
their own group norms and therefore more difficult to
influence (Horwitz and Rabbie, 1982).

Altogether, these hypotheses provide further test of
the predictions of the continuum model of impression
formation related to control motivation. They also suggest
how perceived power differentials could affect the

powerless, and one of the ways the powerless may cope with a loss of personal control.

CHAPTER 5

THE EXPERIMENT

Overview

The following experiment manipulated perceived outgroup power and homogeneity, in a minimal group situation. Subjects, run individually in the lab, believed they would have to perform a concentration task together with other subjects. They also believed that a group of distractors would have more or less power over them, and would be either homogeneous (people from one category) or heterogenous (people from different categories). I expected subjects to report feeling less in control in the high power than low power condition. I also expected that this loss of control would lead to individuating impressions of the distractors in the heterogeneous condition (more attention to information that is inconsistent with stereotypical expectations, more dispositional inferences) but that this effect would not appear in the homogeneous condition (if anything the reverse is expected, i.e. more stereotypic impressions).

Method

Stimulus Material

Two pre-tests were conducted in order to choose the social categories and their associated stereotypes to be used in the experiment. The aim was to select a set of

traits that would be relevant to two different categories (the traits perceived as consistent with the first category being perceived as inconsistent with the second, and the other way around) so that the category membership of the target of the impression could be counterbalanced in the experimental design. I decided to investigate the stereotypes held by psychology students about students having other college majors, as categories of relevance to students.

In a first step, 200 psychology students were asked to select, from a list of 109 personality traits, the most typical traits associated with 20 different college majors (for each major, n=50). On the basis of the frequencies of the traits selected for each major, four pairs of majors displaying clear and opposite stereotypes were chosen (i.e., Art/Business, Art/Mathematics, Business/Physical Education, Mathematics/Physical Education). For each pair, inconsistent traits were generated and added to the list of consistent traits.

In a second step, 80 psychology students rated the consistency/inconsistency of the traits, for both majors of each pair, on seven point Likert scales (for each pair, n=20). The pair Art/Mathematics was chosen as showing the clearest and most opposite stereotypes. From the ratings, a list of eight traits was constituted such as four traits were perceived as consistent with Art but inconsistent with

Mathematics, and four other traits were perceived as consistent with Mathematics but inconsistent with Art (see Table 1).

From these eight traits, eight short sentences of self-description were generated. These sentences were constructed so that no information would be added to the traits, for example, for logical: "I try to be very logical in all I do." The number of words in the four sentences consistent with Art and in the four sentences consistent with Math was identical. The eight sentences, handwritten in an androgenous style on different sheets of paper, constituted the stimulus materials for the impression formation (see APPENDIX A).

Research Design

The experiment used a 2 x 2 x 2 factorial design with Outgroup Power (low, high), Outgroup Homogeneity (low, high) and Target's Category (math, art) as between-subjects variables. Target's Category was included in the design as a counterbalancing variable.

Subjects

The subjects were 99 undergraduate psychology majors (37 males, 62 females). They were randomly assigned to each of the conditions created by the between-subjects variables, with approximately the same proportion of males and females per condition. Subjects were contacted by phone and asked to participate a group experiment

Table 1. Stimulus materials: Ratings of
consistency/inconsistency for Art and Math majors

	Art Major			Math major		
	M	t(19)	p	M	t(19)	p
Creative	+2.80	30.0	.000	-1.35	4.1	.001
Emotional	+2.35	12.0	.000	-1.20	4.7	.000
Individualistic	+2.35	10.6	.000	-0.80	3.4	.003
Impulsive	+1.95	8.7	.000	-1.20	4.7	.000
Studious	-1.15	3.8	.001	+2.65	24.2	.000
Logical	-0.80	4.0	.001	+2.55	15.0	.000
Traditional	-1.50	6.4	.000	+1.60	6.8	.000
Conventional	-1.50	4.8	.000	+1.55	5.3	.000

entitled "How to study at home with noisy housemates", in exchange for one extra credit toward their course grade. The experimenter explained on the phone that the aim of the experiment was to measure students' ability to concentrate in a distracting environment. While trying to arrange an appointment, the experimenter insisted on the necessity to find a time which would be convenient for all five subjects. It was also stressed that, because it was a group experiment, it was important to be on time for the appointment. The experiment would last approximately 40 minutes.

Procedure

Subjects were run <u>individually</u> as described in this section. When introduced into the laboratory, the subject could see a row of five empty chairs, with numbers from one to five. Facing these chairs was another set of three chairs with androgenous coats and back-packs on them. The experimenter explained that, because of a last minute inconvenience (one of the five subjects could not arrive on time), he had to postpone the experiment for half-an-hour. Although he could get in touch with the three other subjects, he apologized for not having had enough time to advise her of this change. The experimenter also explained that, because of a meeting afterwards, he could not stay longer than originally planned and would therefore have to make the experiment shorter. The experiment was supposedly

composed of two phases: In a preparation phase, lasting about 20 minutes, subjects would be asked to fill out some questionnaires, in a second phase, lasting 20 minutes too, the group experiment itself would be taking place. Because the experiment would start later today, the questionnaire part would be skipped. The experimenter proposed however to the subject to do the questionnaire part while waiting for the others to arrive. All subjects accepted this proposition. After checking on a list, the experimenter told the subject she was subject #3 in today's group and invited her to sit in chair #3. Under this chair was hidden a microphone, connected to a tape recorder which was concealed in another part of the room.

Experimental manipulation

Once the subject was seated, the experimenter said he would first briefly describe the experiment that was to take place half an hour later. An instruction sheet, describing the experimental manipulations, was handed out to the subject and read aloud by the experimenter (see APPENDIX B). The experiment was described as a test of concentration abilities in a distracting environment. Subjects, five psychology majors, would have to complete a task requiring concentration (writing down multiples of three, as fast as possible and without mistakes) and would be rewarded as a function of their performance (the final number they would have reached after 20 minutes). Facing

them would sit three other students playing the role of "distractors". The experimenter explained that the distractors had already arrived (hence the coats on the chairs) and were currently being briefed about their role in another room. In the Low Power condition, the distractors were supposed to "speak loudly to each other in order to distract you from your work". In the High Power condition, they would "do whatever they want (except touching you) in order to distract you from your work. They will also watch you and each time they think you have been distracted, even slightly, they will make you start again from scratch". The subject was told that, in order to avoid the distractors knowing them and being biased, the distractors had not been recruited among psychology students. In the Low Homogeneity condition, the experimenter said: "Actually, one is a Math major, another an Art major and the third a Business major" (for the Math Target condition) or "Actually, one is an Art major, another a Math major and the third a Business major" (for the Art Target condition). In the High Homogeneity condition he said: "Actually, they are Math majors" (for the Math Target condition) or "Actually they are Art majors" (for the Art Target condition).

Dependent Measures

Emotions and Control. After having read the instructions, the experimenter asked the subject to fill

out a first questionnaire concerning "What is your current
mood right now, and what do you think your concentration
abilities are?" This was justified by explaining that
maybe concentration performances can be affected by the
mood people are in. The questions were designed to assess
subject's emotional reactions and feeling of control (see
APPENDIX C).

Attention Time. After the first questionnaire was
filled out, the experimenter explained that in a natural
situation, such as working at home with noisy housemates,
people usually know the persons by whom they are being
distracted. In the present situation, however, subjects
would not know the distractors at all. Out of a concern
for realism, the experimenter wanted, therefore, the
subjects to have an idea of who the distractors were before
the concentration test starts. But at the same time the
experimenter did not want subjects and distractors to meet
each other before the test because this could have biased
the distractors. This explanation justified the fact that
the distractors had been asked to describe themselves prior
to the experiment and that this information was shown to
the subject. It was explained that, to make the task
easier for the distractors, they had been presented with a
list of personality traits on different sheets of paper and
asked to select the traits that best fit them as well as
write a brief sentence of self-description for each trait.

At this point, a folder containing our stimulus materials
and marked "Distractor #1, Major: Math" or "Distractor #1,
Major: Art" was presented to the subject. The eight pages
(the four consistent and four inconsistent information)
contained in the folder were placed in a random order. The
subject was specifically asked to "study these traits and
try to form an impression of the first distractor." The
subject was also asked to read the material aloud so that
the experimenter could verify that the subject understood
the hand-writing of this distractor. This would be used,
in fact, for the coding of the attention time to consistent
and inconsistent information. Indeed, while he was getting
the folder with the traits, the experimenter also turned on
the hidden tape recorder that would record the sound of the
pages being turned as well as the voice of the subject and
provide a measure of the time spent studying each piece of
information.

Dispositional Inferences and Impression Formed. Once
the previous task was completed, the experimenter explained
that the concentration test would be run several times with
different group of subjects, but he was not sure whether to
keep the same distractors or not. For that reason, it was
interesting for him to know what kind of impact these
distractors have on people. Specifically, the subject was
asked to give first impressions of the first distractor, by
answering a second questionnaire. It was made clear that

the answers would be kept confidential. These questions were designed to assess the dispositional inferences subjects would make about the target, as well as the quality of the impression formed in terms of positivity and typicality (see APPENDIX D).

Once the last questionnaire was filled out, approximately 30 minutes had passed since the subject was first introduced into the lab. The procedure of impression formation did not go on for the other distractors, nor did the "concentration test". Rather, the experimenter, checking his watch, proposed to interrupt the procedure because the others should arrive at any moment. The subject was first checked for suspicion and then carefully debriefed. The subject was given extra credit and a lottery was planned to distribute the money subjects could have won according to the cover story. After being debriefed for 15 minutes, no subjects showed signs of resentment for having been deceived and all consented that their data would be used for research purposes.

<div align="center">Variables Coding</div>

Attention Time

One judge, blind to conditions, coded the time spent by each subject on studying the four inconsistent and the four consistent information. This was done, using a stop-watch, from the sound of the turning pages recorded on the audiotape. The coding resulted in a total attention time

for consistencies and a total attention time for inconsistencies for each subject. Should an ambiguity occur on the recorded material, the observation was coded as missing data. This happened for 12 of the 99 subjects. Also, for technical reasons, the recording was not available for eight other subjects. Finally, the attention time for inconsistent information of one subject, being over three standard deviation from the mean, was deleted from the analysis[1].

Dispositional Inferences

For each subject, the number of inferred personality traits was recorded. All in all, 86 traits had been inferred in the Art target condition and 85 in the Math target condition, resulting in a total of 144 different traits. Nine judges (psychology students) were asked to code these traits, using seven point Likert scales, on three dimensions: typicality/atypicality for Math students, typicality/atypicality for Art students, general positivity/negativity. Judgments were highly reliable, (for all three combined, Alpha=.89). From these judgments, the traits inferred by each subject could be coded as typical, atypical or irrelevant to the target's category, as well as positive, negative or neutral. For each

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[1] The data of five subjects for the second questionnaire (impression formed), who had reported being suspicious at this point of the experiment, were also deleted from subsequent analyses.

subject, available data on dispositional inferences were:
Total number of traits, number of typical, atypical and
irrelevant traits, number of positive, negative and neutral
traits

Results

Emotions and Control

Subjects' answers to each question of the first
questionnaire were entered into an analysis of variance:
Outgroup Power (low, high), Outgroup Homogeneity (low,
high), Target's Category (art, math), Sex (male, female).
As predicted, Outgroup Power had a strong effect on
subjects' feeling of control (see Table 2): In the high
power condition subjects felt they had less personal
control over the outcomes $[F(1,83)=14.25, p=.000]$, and that
the distractors had more control $[F(1,79)=7.17, p=.009]$.
They also felt they had lower concentration abilities
$[F(1,83)=14.25, p=.000]$ and were less confident about doing
well at the test $[F(1,83)=12.42, p=.001]$[2]. Power did not
have an impact on reported emotions. However, subjects
reported feeling less tired, weary or unreactive in the

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[2] Interestingly, females' feeling of control was lower
than that of males: Personal control $[F(1,83)=4.43, p=.03]$,
Distractor's control $[F(1,79)=9.41, p=.003]$, Ability
$[F(1,83)=3.71, p=.05]$, Confidence $[F(1,83)=9.93, p=.002]$.

Table 2. Feelings of control as a function of outgroup power

	Outgroup Power	
	Low	High
Personal control	5.51 (n=47)	4.71 (n=51)
Distractor's control	3.77 (n=44)	4.58 (n=50)
Self-confidence	5.17 (n=47)	4.39 (n=51)
Personal abilities	4.87 (n=47)	4.18 (n=51)

high homogeneity compared to low homogeneity condition
[F(1,82=4.70, p=.03)][3].

Attention Time

Scores of attention to consistent and inconsistent information were entered into a mixed model analysis of variance (the previous between-subjects variables plus Information Type (Consistent, Inconsistent) as a repeated measure). As predicted, the analysis yielded a two-way interaction between Outgroup Power and Information Type: Subjects paid more attention to consistent information in the low power condition, but the opposite was true in the high power condition [F(1,70)=12.93, p=.001].

I also predicted that Outgroup Power would increase attention when homogeneity was low, but that this would not happen when homogeneity was high: This interaction effect was confirmed [F(1,70)=3.70, p=.05]. When attention to consistencies and inconsistencies were entered into two separate analyses of variance, no effect reached significance for consistent information. For inconsistent information, however, there was a main effect of Power [F(1,61)=5.16, p=.02] and an interaction effect of Power by Homogeneity [F(1,61=4.43, p=.03]: Subjects increased their

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[3] Also, males reported feeling less calm, relaxed or at ease when the target was an Art major, while females reported the same but for Math major [F(1,83)=9.29, p=.003].

attention to inconsistencies in the high power condition,
but only when homogeneity was low (see Table 3 and 4).

Dispositional Inferences and Impression Formed

The different numbers of traits inferred by subjects
(total number, number of typical, atypical and irrelevant,
number of positive, negative and neutral) were entered into
an analysis of variance, with the usual variables. As
predicted, the analysis yielded a two-way interaction
between Power and Homogeneity on the total number of traits
$[F(1,73)=3.85, p=.05]$. In line with the attention data,
subjects made more dispositional inferences in the high
power condition when homogeneity was Low, but the opposite
was true when homogeneity was high (see Table 5).
Interestingly, however, the power manipulation did not
affect the typicality of the traits inferred. Subjects
simply inferred more typical traits when homogeneity was
low $[F(1,73)=5.60, p=.02]$, and more irrelevant traits when
homogeneity was high $[F(1,73)=4.65, p=.03]$.

The number of positive and negative traits were not
directly affected by the power manipulation[4]. However, a
significant interaction between Power and Homogeneity
occurred for neutral traits $[F(1,67)=8.44, p=.005]$:
Subjects inferred more neutral traits in the high power

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[4] However, females inferred more positive traits than
males did $[F(1,73)=4.75, p=.03]$. Females also inferred more
negative traits in the high power condition while the
opposite was true for males $[F(1,67)=6.21, p=.01]$.

Table 3.   Attention to consistent information (in seconds)

		Outgroup Power	
		Low	High
Outgroup Homogeneity	Low	19.95 n=19	22.15 n=20
	High	21.84 n=19	20.33 n=18

Table 4.   Attention to inconsistent information (in seconds)

		Outgroup Power	
		Low	High
Outgroup Homogeneity	Low	18.53 n=19	22.95 n=20
	High	20.53 n=19	20.72 n=18

Table 5.   Dispositional inferences (number of traits inferred)

		Outgroup Power	
		Low	High
Outgroup Homogeneity	Low	2.77 n=22	3.64 n=22
	High	3.00 n=20	2.33 n=24

condition when homogeneity was low, but the opposite was true when homogeneity was high. Subjects' answers to the second questionnaire were entered into an analysis of variance with the usual variables. The power manipulation did not affect the general impression that subjects reported having formed[5].

Discussion

The hypotheses were largely confirmed. Outgroup power clearly affected subjects' feeling of control. It increased attention to the target, but only when the outgroup was heterogeneous, i.e. was perceived as a collection of individuals. It also led to more dispositional inferences, but again, only when the outgroup was heterogeneous. This suggests that, in order to regain indirect outcome control, people would be motivated to pay particular attention to the ones in power, as long as they are perceived as a collection of individuals, but that this strategy would not be chosen when the ones in power are perceived as a homogeneous group. The lack of result on the questions designed to tap emotional reactions and the impression formed may have resulted from the measures being too obvious and so suggests the use of non-obtrusive measures. Along that line, the quality of dispositional

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[5] Females reported having formed a more positive impression than males did [$F(1,75)=4.52$, $p=.03$], and subjects reported preferring in general Art majors to Math majors [$F(1,61)=4.38$, $p=.04$].

inferences was analyzed. Surprisingly, Outgroup Power did not affect the typicality of the traits inferred, although subjects had paid more attention to inconsistent attributes. Things happened as if, in order to restore control, subjects would pay more attention to the most informative attributes, but when asked to infer other attributes, they would rely primarily on their category-based schema. Outgroup Homogeneity did, however, affect the quality of inferences: Subjects inferred more typical traits when the outgroup was heterogeneous and more irrelevant traits when the outgroup was homogeneous. This can be explained by the fact that subjects anticipated having to form an impression of the other distractors too, which would require differentiating them from each other. Finally, the fact that subjects inferred more neutral traits in the High Power/Low Homogeneity condition, suggests that having paid more attention, subjects would form a less extreme impression of the target, which is consistent with the extremity-complexity hypothesis (Linville, 1982).

CHAPTER 6

CONCLUSION

I started the present thesis by asking what are the psychological impacts of perceived power differentials from the perspective of the powerless. Review of the social psychological literature on power indicated that the problem did not receive the attention it deserves. I suggested that one reason for this lacuna may be a confused definition of the concept. Power should be distinguished from social influence or social status and may be defined in terms of outcome control in a non-reciprocal situation. As a theoretical basis, the literature on psychological control led to considering the control of one's own outcomes as an important human motivation. The question of power became: how the powerless will cope with a threat to their sense of control?

One answer came from the literature on impression formation. The continuum model, developed by Fiske and her colleagues, postulates that people can be motivated to go beyond initial stereotypes when the target of the impression has some control over their outcomes. In other words, people will pay particular attention to the ones who control their outcomes in an effort to restore a feeling of control. This individuating effect was verified in situations of joint control over the outcomes, i.e.

cooperative and competitive interpersonal interdependence. Yet, a strong test of the model would be to manipulate the amount of control the target has over the perceiver's outcomes in a non-reciprocal situation, i.e. a situation of power relation. Furthermore, if the crucial variable is control, the individuating effect, previously mentioned, should apply as well to situations of intergroup relations. Some research suggested it does not, as in intergroup situations the best strategy to gain control over one's outcomes would be to pay attention to ingroup members with whom one cooperates. To control for this effect, I proposed to use a minimal group situation, such as described by Tajfel and his colleagues, and manipulate the cognitive salience of the intergroup dimension.

This first experiment investigated the effect of outgroup power and outgroup homogeneity (the categorization salience manipulation) on impression formation processes. Results showed that the power manipulation affected subjects' feeling of control, and led to more individuation of the target, but only when the ones in power were perceived as a collection of individuals (heterogeneous condition). This suggests that control motivation may indeed cause individuation in interpersonal relations. Interesting results suggested that, although control deprivation led to more attention to atypical traits and dispositional inferences, these inferences remained largely

based on stereotypical expectations. Maybe a loss of control induces a general activation of information processing, leading to increased attention to both environmental information (the actual traits) <u>and</u> cognitive information (the schema-based traits)? A striking result was that the power manipulation did not lead to individuation when the ones in power were perceived as a salient outgroup (homogeneous condition), although subjects' sense of control was affected. Outgroup members are usually perceived as committed to group norms and therefore more difficult to influence than distinct individuals. The perceived opportunity to influence the ones in power, in order to gain indirect control over one's outcomes, may then be a crucial intermediate variable between loss of control and individuation. Obviously, many hypotheses about the relation between control and impression formation in interpersonal and intergroup cooperation, competition, and power relation remain to be tested.

Let us come back to the question of the psychological consequences of perceived power differentials for the powerless, and more specifically to the question of how the powerless form an impression of the powerful. Do people individualize the ones in power or not? Well, it depends. Data suggest that power leads to individuation when it is perceived as belonging to individuals, but not

when it is perceived as belonging to an outgroup. This differential impact of social power, depending on how power is categorized, opens interesting questions. In particular, many hypotheses on intergroup relations and social identity theory could be tested by proposing that **the group one identifies with contributes to one's sense of control**. How does group power affect personal control? How does perceived power affect group identification? Results from a first follow-up study, manipulating power categorization in a natural environment are currently being analyzed.

I believe that investigating the strategies by which people cope with a loss of control offers fascinating perspectives for the understanding of social change processes. After all, what is politics but a discourse on power and its social partition?

STIMULUS MATERIAL

Consistent with Mathematics Major and Inconsistent with Art

Studious: I think of myself as being very studious

Logical: I try to be very logical in all I do

Traditional: People say that I seem very traditional

Conventional: I find I can be conventional sometimes

Consistent with Art Major and Inconsistent with Mathematics

Creative: I have always chosen a creative way of living

Individualistic: I tend to be more of an individualistic
person

Emotional: I guess I am considered an emotional person

Impulsive: I realize I am a bit impulsive

EXPERIMENTAL MANIPULATIONS

Instructions for High Power High Homogeneity Condition

It is very important for students to be able to concentrate for long periods of time and study in distracting environments, like when you have to work at home and your housemates are distracting you. This is the situation we want to reproduce here today.

This experiment is part of a vast study aiming at testing and comparing the concentration abilities of different college students. The group of subjects we want to test today are ....

Your task, together with the other subjects, will be to write down numbers starting from zero and adding three each time (that is: 0, 3, 6, 9, 12,...) for 20 minutes. You should do this as fast as possible, and without mistakes, because the number you will have reached, after 20 minutes, will be the number of cents you will earn in the experiment (for example, if you go up to number 2000 without mistakes, you will get $20).

However, in order to reproduce a distracting environment, we have hired a group a students, lets call them the distractors, who will sit in front of you and do whatever they want (except touch you) in order to distract you from your work. You should try not to pay any

attention and remain concentrated on your work because the distractors will also watch you and, each time they think you have been distracted, even slightly, they will make you start again from scratch.

The three distractors have been recruited in another UMass department than the subjects. This is because we do not want them to know you. Actually, they are ....

Instructions for Low Power Low Homogeneity Condition

It is very important for students to be able to concentrate for long periods of time and study in distracting environments, like when you have to work at home and your housemates are distracting you. This is the situation we want to reproduce here today.

This experiment is part of a vast study aiming at testing and comparing the concentration abilities of different college students. The group of subjects we want to test today are ....

Your task, together with the other subjects, will be to write down numbers starting from zero and adding three each time (that is: 0, 3, 6, 9, 12,...) for 20 minutes. You should do this as fast as possible, and without mistakes, because the number you will have reached, after 20 minutes, will be the number of cents you will earn in the experiment (for example, if you go up to number 2000, without mistakes, you will get $20).

However, in order to reproduce a distracting environment, we have hired a group a students, lets call them the distractors, who will sit in front of you and speak loudly with each other in order to distract you from your work. You should try not to pay any attention and remain concentrated on your work.

The three distractors have been recruited in other UMass departments than the subjects. This is because we do not want them to know you. Actually one is a ...., the other a ...., and the third a ....

FIRST QUESTIONNAIRE

Please indicate how you feel right now by giving a score (using this scale: (not at all) 1 2 3 4 5 6 7 (very much)) to each of the following groups of emotions:

- happy, cheerful, or joyous _____
- angry, irritated, or annoyed _____
- unhappy, sad, or gloomy _____
- frightened, worried, or threatened _____
- energetic, aroused, or keyed-up _____
- tired, weary, or unreactive _____
- jittery, shaky, or nervous _____
- calm, relaxed, or at-ease _____
- enthusiastic, alive, or alert _____

Would you say that your concentration abilities are:

not very							very
good	1	2	3	4	5	6	7 good

How confident are you about doing well in this experiment ?

not very							very
confident 1	2	3	4	5	6	7 confident

How much control do you feel you will have over your outcomes in this experiment ?

very little

control   a lot of

control   1   2   3   4   5   6   7   control

How much control do you feel the distractors will have over your outcomes in this experiment ?

very little

a lot of

control   1   2   3   4   5   6   7   control

How hard do you expect the distractors to try to disturb you ?

not very

excessively

hard   1   2   3   4   5   6   7   hard

Would you like, in a second step, the roles to be reversed, that is your group to become distractors and the distractors to become subjects ?

not at

very

all   1   2   3   4   5   6   7   much

APPENDIX D

SECOND QUESTIONNAIRE

- How clear is your impression of this distractor ?

very

                                         very

unclear   1   2   3   4   5   6   7 clear

- How positive is your impression of this distractor ?

not very

                                         very

positive 1   2   3   4   5   6   7 positive

- How do you feel about having this person as one of the distractors ?

rather

                                         very

unhappy   1   2   3   4   5   6   7 happy

- According to you what other personality traits may characterize this person ?

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- How typical of .... students do you think this person is ?

very

very

atypical 1   2   3   4   5   6   7 typical

- How much do you like .... students in general ?

not very

very

much   1   2   3   4   5   6   7 much

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