Responding to Internet identifiability:
Communicative behaviour, "flaming" and the communicative context

Karen Margaret Douglas

A thesis submitted for the degree of Doctor of Philosophy of the Australian National University

Division of Psychology

The Australian National University

February, 2000
Declaration

The research reported in this thesis is my own, except where indicated, and has not been submitted for a higher degree at any other institution.

[Signature]

Karen Margaret Douglas
# Table of contents

## Contents:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration of authorship</td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>viii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>ix</td>
</tr>
<tr>
<td>List of Figures</td>
<td>ix</td>
</tr>
<tr>
<td>Summary</td>
<td>x</td>
</tr>
</tbody>
</table>

## Chapter 1: Responding to Internet identifiability:
communicative behaviour, “flaming” and the communicative context.

### An introduction and overview of the research

- Introduction                               | 1    |
- Identifiability in computer-mediated communication | 2    |
- Hostility in computer-mediated communication  | 4    |
- Flaming as an intergroup phenomenon           | 6    |
- Summary                                     | 9    |

## Chapter 2: Computer-mediated communication: An overview and critique of early theories

### Introduction

- Computer-mediated communication              | 11   |
- Behaviour in CMC                             | 11   |
  - Organisational behaviour                    | 13   |
  - Friendships and relationships               | 16   |
  - Hostile behaviour                           | 19   |
- The social presence model                    | 25   |
- The cuelessness model                         | 26   |
- The reduced social cues perspective          | 28   |
- The deindividuating nature of CMC            | 31   |
Conclusions

Chapter 3: The social identity model of deindividuation effects (SIDE)

Introduction
Early approaches to deindividuation and the SIDE alternative
Crowd behaviour
Modern deindividuation theories
SIDE’s critique of deindividuation theory
The SIDE model: Principles and predictions
The cognitive SIDE
Cognitive SIDE research
The strategic SIDE
SIDE and flaming
Conclusions

Chapter 4: Measuring stereotypical language use

Introduction
Stereotypes and language
The linguistic category model (LCM)
The linguistic intergroup bias and its causes
Intentional control over the LIB
Motivations affect implicit behaviour: A paradox
Applying the LCM to measure stereotypical language in CMC

Chapter 5: A model of the effects of Internet identifiability on communicative behaviour

Introduction
Overview and hypotheses
The initial study

Chapter 6: Study 1 - An archival examination of the effects of identifiability on stereotypical language use

Introduction
Chapter 7: Studies 2 and 3 - Experimental examinations of the effects of identifiability on stereotypical language use in CMC: The impact of identifiability to ingroup and outgroup audiences

Introduction

Study 2
Method
Participants
Design
Procedure
Results
Language abstraction
Willingness to send messages
Hostility
Intergroup differentiation
Discussion

Study 3
Method
Participants
Design
Procedure
Results
Language abstraction
Chapter 8: Study 4 - Identifiability to an ingroup audience: An examination of stereotypical language use in relation to feelings of accountability towards an ingroup audience

Introduction
Method
Participants
Design
Procedure
Results
Language abstraction
Accountability and strength of feeling about the issue
Number of additional points made to messages
Explicit stereotyping measures
Discussion

Chapter 9: Study 5 - Strength of feeling about opposing racism and its effects on stereotypical language use

Introduction
Method
Participants
Design
Procedure
Results
Manipulation check
Language abstraction
Obligation, accountability, commitment and compliance
Discussion
Chapter 10: Studies 6 and 7 - Studies of sensitivity to communicative context with an ingroup audience

Introduction 177
Study 6 180
  Method 180
    Participants 180
    Design 180
    Procedure 181
  Results 186
    Manipulation check 186
    Language abstraction 186
    Sensitivity to audience 187
    Mediation of language abstraction 187
  Discussion 188
Study 7 190
  Method 190
    Participants 190
    Design 191
    Procedure 191
  Results 195
    Manipulation check 195
    Language abstraction 196
    Sensitivity to audience 196
    Mediation of language abstraction 196
  Discussion 198
General Discussion 199

Chapter 11: The effects of identifiability on communicative behaviour and sensitivity to the communicative context:

Summary and conclusions 201
Introduction 201
Theoretical background 201
Overview of findings 204
Theoretical implications of the model
Final comments

References

Appendix I: Statistical Appendix
Appendix II: Questionnaire Materials
Acknowledgements

I would like, first and foremost, to express my thanks to Craig McGarty for all of his time, help, encouragement and critical insights throughout my Ph.D. I will always be indebted to Craig for his role in my development as a social psychologist. It has also been great working with such a dedicated and generous person.

Thanks also to my friends and colleagues at ANU and around the world who have helped me develop my ideas and have provided support and insightful feedback at critical times. I would also like to thank the staff at the Victoria University of Wellington for their help and resources during my time there as a visiting fellow in 1998/99.

Special thanks also to my family, who have always encouraged and supported me throughout my education, and to Robbie Sutton for his care and support, and also his helpful comments on my work. It has been wonderful sharing this Ph.D. journey with him.
Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1</td>
<td>The Linguistic Intergroup Bias.</td>
<td>80</td>
</tr>
<tr>
<td>Table 11.1</td>
<td>Overview of results.</td>
<td>211</td>
</tr>
</tbody>
</table>

Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 3.1</td>
<td>The SIDE model.</td>
<td>58</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>A model of the effects of Internet identifiability on communicative behaviour.</td>
<td>112</td>
</tr>
<tr>
<td>Figure 6.1</td>
<td>Language abstraction as a function of identifiability of source and target.</td>
<td>121</td>
</tr>
<tr>
<td>Figure 7.1</td>
<td>White-power Internet message.</td>
<td>133</td>
</tr>
<tr>
<td>Figure 7.2</td>
<td>Language abstraction as a function of identifiability of source and target.</td>
<td>137</td>
</tr>
<tr>
<td>Figure 8.1</td>
<td>A revised model of the effects of Internet identifiability on communicative behaviour.</td>
<td>164</td>
</tr>
<tr>
<td>Figure 9.1</td>
<td>Commitment feedback in high commitment condition.</td>
<td>169</td>
</tr>
<tr>
<td>Figure 10.1</td>
<td>Message from university staff member concerning students’ attitudes to work and leisure.</td>
<td>192</td>
</tr>
<tr>
<td>Figure 11.1</td>
<td>SIDE model and additional findings.</td>
<td>214</td>
</tr>
</tbody>
</table>
Summary

This research examined the effects of identifiability on communicative behaviour, focusing particularly on computer-mediated communication. The central questions were: Is communicative behaviour different under conditions of identifiability than under conditions of anonymity? Also, if this is the case, what social psychological processes underlie these differences?

An overview of the literature on computer-mediated communication is presented in Chapter 2. Generally speaking, the research outlined in this chapter supports the notion that behaviour over the computer is different to face-to-face behaviour. Because of the physical anonymity involved, computer-mediated behaviour is said to be deindividuated, and hence is often anti-normative and negative. Flaming, or hostile interactions on the Internet are theorised to be a product of such deindividuation.

An alternative perspective is offered in Chapter 3, where the Social Identity model of Deindividuation Effects (SIDE) is examined. SIDE research shows that anonymous, computer-mediated behaviour generally adheres to group norms and standards rather than deviating from them. Further, behaviour under conditions of identifiability can be explicitly or strategically ‘geared’ towards an audience so that identifiability will impact upon group normative behaviour differently depending on the audience. It is also possible that flaming is a response to the communicative context and can reflect normative, acceptable behaviour in that context.

The present research examines whether flaming behaviour is affected by identifiability. The expression of stereotypes, using the linguistic category model (examined in Chapter 4), and the impact of identifiability on the expression of these stereotypical views in flaming communication, was examined. Chapter 5 outlines a series of predictions concerning the effects of identifiability on communicative behaviour, and also offers a prospective model of the effects of identifiability on communicative behaviour.

Seven studies are reported. The first of these studies was an archival examination of newsgroup communications on the Internet (Chapter 6). A significant interaction was found between identifiability of sources (persons writing the messages) and targets (the subjects of the messages), such that when the targets were anonymous, identifiable sources described their behaviour more stereotypically
than did anonymous sources. This unique effect was further investigated in experimental Studies 2 and 3 (Chapter 7), to determine the importance of audience type on this effect. These studies revealed that the effect is dependent on the presence of an ingroup but not outgroup audience.

Study 4 (Chapter 8) therefore attempted to explain why this effect (termed the identifiability/language abstraction effect) occurs under these conditions. Is it, as previous research suggests, related to an explicit motivation to positively present oneself to an ingroup audience? A post-hoc analysis revealed that an interaction between accountability and strength of feeling about opposing racism mediated the identifiability/language abstraction effect, providing support for this hypothesis. However, when manipulated in Study 5 (Chapter 9), this combination of variables did not mediate the effect. Instead, reversed feelings of compliance, or ‘autonomy’ mediated the identifiability/language abstraction effect. This suggests that communicators are, in general, sensitive to the consequences of communicating with an ingroup audience, but this sensitivity cannot be narrowed down to one variable.

A variety of variables related to communicative sensitivity were therefore examined in Studies 6 and 7 (Chapter 10). In contrast to Studies 4 and 5, these variables were measured before the task of writing a message, in order to test true mediation. It was found that when tested this way, none of the variables mediated the identifiability/language abstraction effect. Many of these explicit responses were influenced by identifiability, but none were related to stereotypical language use.

From these results, it is possible to draw some conclusions about the effects of identifiability on communicative behaviour. In particular, the results demonstrate a unique effect of identifiability on language use, such that the stereotypicality of descriptions of outgroup behaviours is increased when communicators are identifiable to an ingroup audience. Furthermore, identifiability impacts upon communicative sensitivity such that identifiable communicators report higher sensitivity to the communicative context than do anonymous communicators. However, these explicit concerns do not appear to be responsible for changes in language use. While the effects of identifiability on communicative sensitivity are explicit, the effect of identifiability on language use appears to be implicit. This finding sets the stage for a revised model of Internet identifiability that elaborates on the SIDE model. The revised model is presented in Chapter 11.
Chapter 1

Responding to Internet identifiability: Communicative behaviour, “flaming” and the communicative context. An introduction and overview of the research

Introduction

An increasing number of people throughout the world are choosing to use computers to communicate with others. Be it for business, educational or recreational purposes, computer-mediated communication (or CMC) is growing in popularity as a tool for interacting with others. For example, in 1995 an estimated 26.4 million people were using the Internet (MIDS, 1997) and this figure is estimated to double every year. It was estimated that by the year 2000, 10% of the world’s population would be ‘on-line’ or connected to the Internet (see McKenna & Bargh, 1998). The use of computers to communicate is therefore naturally a topic of increasing interest for researchers.

One of the most interesting issues that CMC has raised for social psychology is the effects of identifiability on communicative behaviour. Identifiability is a term which refers to the ability of communicators to know who other communicators are. Because of the physical isolation of CMC people are allowed the choice to conceal their identity completely and remain anonymous, to selectively present aspects of their identity, or to identify themselves completely. But what do people achieve from keeping their identity unknown and what do they gain from making themselves
known to others? Also, and perhaps most importantly, do communicators behave differently when they are anonymous than when they are identifiable? In this research, I investigate the effects of identifiability on communication via computers. In this introductory chapter, I:

1. Outline previous research that has investigated the effects of identifiability on behaviour in CMC.
2. Focus on hostility in CMC, explain why it is an important phenomenon for social psychologists to study and why it is useful in studying the effects of identifiability on communicative behaviour.
3. Introduce the idea of such hostility as an intergroup, not simply and interpersonal phenomenon, and suggest how intergroup hostility can be understood as the application and maintenance of stereotypical norms.

This chapter concludes by providing a brief overview of the way this volume will proceed in examining the issues outlined. An overview of the chapter structure of this volume is also provided.

**Identifiability in computer-mediated communication**

The effects of identifiability on communication via computers has received a great deal of attention throughout the literature. Studies of behaviour have focused on the anonymous aspects of CMC and on the hypothesis that communication via computers is changed because of anonymity. This idea has been explored extensively, in a variety of settings from work-related behaviour (e.g., Finholt & Sproull, 1990; Sherblom, 1988; Siegel, Dubrovsky, Kiesler & McGuire, 1986;
Sproull & Kiesler, 1986), the development of friendships and relationships over the computer (e.g., Lea & Spears, 1995; Parks & Floyd, 1996; Wilkins, 1991; Van Gelder, 1985) and the high levels of hostile, uninhibited behaviour observed in computer networks which is the focus of the current research (e.g., Dyer, Green, Pitts & Millward, 1995; Kiesler, Siegel & McGuire, 1984; Siegel et al., 1986; Sproull & Kiesler, 1986, 1991).

These studies have supported the hypothesis that behaviour in CMC is different than in face-to-face (FtF) interactions. Decision-making has been found to be less efficient than in FtF groups (e.g., Siegel et al., 1986), communication has been noted to be less ‘personal’ and more task-focused than FtF communication (e.g., Finholt & Sproull, 1990; Sherblom, 1988), people seem more likely to self-disclose personal information via computers than they would normally (e.g., Wilkins, 1991) and most commonly, studies report increased levels of uninhibited and hostile behaviour in CMC than in FtF groups (e.g., Kiesler, et al., 1984; Siegel et al., 1986; Sproull & Kiesler, 1986, 1991).

The most common explanation for differences between behaviour in CMC and FtF interactions, especially the high incidence of uninhibited behaviour, is the deindividuating nature of anonymity. Anonymity is said to reduce self-awareness which leads to reduced self-regulation as in other deindividuating situations (e.g., Festinger, Pepitone & Newcomb, 1952; Zimbardo, 1969). Both of these processes are said to lead to increased disinhibition (Kiesler et al., 1984) and more extreme behaviour (e.g., Sproull & Kiesler, 1986). According to this perspective, factors leading to a state of deindividuation ‘free’ people from normal constraints on behaviour and allow communicators to express more hostile, anti-normative views, and behaviour which is self-censored on most occasions. However, Matheson and
Zanna (1989, 1990) showed, contrary to this perspective, that the anonymity of CMC can increase focus upon the self. They found that private self-awareness, or awareness of internal standards of behaviour, increased in anonymous CMC. It is therefore unclear what social psychological processes occur in anonymous CMC, and also why hostility should often be the result.

The present research aims to show that there is more complexity to this issue than the deindividuation analysis provides. In particular, the existing analysis proposes that behaviour is changed and becomes less inhibited by varying identifiability, but does not elaborate fully on the social psychological processes involved. This research endeavours to do so by examining how behaviour is changed by identifiability and what explicit and implicit social psychological processes are involved. Firstly however, a brief outline of disinhibited, hostile behaviour in CMC is required.

### Hostility in computer-mediated communication

Hostility in computer-mediated communication has gained a great deal of attention throughout the medium’s brief history. Flaming is the term which is most often used to describe this type of behaviour (e.g., Lea et al., 1992) supposedly due to the ‘heated’ or inflammatory nature of the communication. Flaming is defined as the “hostile expression of strong emotions and feelings” (Lea et al., 1992, p. 89). It is also defined as “the practice of expressing oneself more strongly on the computer than one would in other communication settings” (Kiesler, Siegel & McGuire, 1984, p. 1130, emphasis in original version). It therefore refers to extreme communication: expression of views which, for one reason or another, are stronger than would
normally be expressed. Flaming is a well documented phenomenon (e.g., Chester, 1996; Siegel et al., 1986; Sproull & Kiesler, 1986). According to Selfe and Meyer (1991), flaming is a “common, if not universal, feature of computer-based conferences” (p. 170).

Flaming can take the form of swearing, insults, name-calling and other similar expressions of anger (Sproull & Kiesler, 1986). It can range from mild to extreme behaviour. Research has shown that levels of flaming are higher in anonymous communication than in identifiable communication, and CMC yields higher levels of flaming than does face-to-face communication (e.g., Hiltz, Turoff & Johnson, 1989; Kiesler, Zubrow, Moses & Geller, 1985; Siegel et al., 1986; Sproull & Kiesler, 1986).

Why then is flaming important for social psychologists to study? What can social psychologists gain by examining such hostile behaviour? Firstly, flaming is a specific type of hostility and studying it may add to the existing literature on hostility. Further, the social psychological processes involved in flaming are speculative and await empirical investigation. It has been noted that flaming occurs at higher levels under conditions of anonymity, but the reasons for this, whether they be explicit, motivational reasons or implicit, automatic processes, are unclear. In studying flaming, we can uncover these processes and see how they relate to our knowledge of other social psychological phenomena. The study of flaming will also generally aid in our understanding of the social psychology of computer-mediated communication.

Most importantly however, flaming will allow us to examine how identifiability affects both social psychological processes and behaviour. Research outside the domain of CMC has shown that the expression of normative group
opinions which may be seen as extreme and 'punishable' by an audience are inhibited by making people identifiable to that audience (Reicher & Levine, 1994a,b). The expression of hostile views in CMC may similarly be affected by this type of explicit inhibiting process under conditions of identifiability. Indeed, research indicating that hostility is more common in anonymous CMC than identifiable face-to-face groups would appear to support this idea. Hostility would therefore be a very good place to begin the examination of the effects of identifiability on communicative behaviour and the social psychological processes (both implicit and explicit) involved.

**Flaming as an intergroup phenomenon**

The study of flaming between individuals will be useful in determining what effects identifiability has on interpersonal behaviour. That is, we can investigate how people interact with each other as individuals and how identifiability can impact upon interpersonal relations. Indeed, most of the focus on computer-mediated behaviour has tended towards an analysis of flaming as an interpersonal phenomenon (e.g., Kiesler et al., 1984; Sproull & Kiesler, 1986). However, there is another way to approach flaming and behaviour in CMC which is more broadly 'socially' oriented than an individualistic approach. Instead of focusing on individual behaviour, it is useful to investigate the intergroup aspects of CMC. This is an area largely neglected until recently when the social identity model of deindividuation effects (SIDE, Reicher, Spears & Postmes, 1995; Spears & Lea, 1994) was developed and applied to CMC.
The SIDE model suggests that previous theories of deindividuation and earlier research have neglected the fact that people are social beings and are, at any given time, members of many different social groups. Drawing on self-categorization theory (SCT, Turner, Hogg, Oakes, Reicher & Wetherell, 1987), SIDE suggests that behaviour in CMC is not necessarily de-regulated and anti-normative. Depending on the salience or immediate importance of social categories or social groups, anonymous behaviour can be in line with group norms and standards (see Postmes, Spears & Lea, 1998 for a review). Theories explaining behaviour in CMC have perhaps therefore been too simplistic in suggesting that people as individuals are changed by the medium. Behaviour is not only dependent on individual personality characteristics, but also on the social norms and standards that are important at the time of communication. More will be said about SIDE in Chapter 3.

Flaming as an intergroup phenomenon, however, has received little attention throughout the literature. As mentioned earlier, flaming has been largely analysed from an interpersonal perspective and as such, research has measured interpersonal aspects of flaming such as personal insults and name-calling towards other individuals. However one exception is that of Lea et al. (1992) who proposed that flaming is the expression of group-normative behaviour in context. For example, in Internet newsgroups or bulletin boards indicating the word ‘flame’ in the title, flaming is accepted normative behaviour and occurs frequently. However in other situations, flaming will not be acceptable normative behaviour and it will therefore occur less frequently. Lea and colleagues claim that flaming is a normative process occurring when norms and standards of behaviour become salient. So, if flaming can be seen as the expression of group-normative behaviour in appropriate contexts, then what types of intergroup processes should be evident in flaming?
Flaming as a group-normative phenomenon should exhibit intergroup processes as are present in everyday intergroup interactions. One of these such processes is the communication of stereotypes about other groups. This is not to say that the communication and perpetuation of stereotypical views is always hostile, negative and prejudiced: research shows that this is not necessarily the case (e.g., see the discussion of Oakes, Haslam & Turner, 1994). However, in a situation where communicators are expressing hostile sentiments towards others, stereotypical descriptions should become a prominent feature of communication. The present research investigates the expression and perpetuation of such stereotypical norms in flaming, an area not examined until now.

Further, in considering the concept of identifiability, it is important to note that being identifiable implies that an audience is present. Whether the audience is one person or a group of people, behaviour should be dependent on who the audience is, and in particular, their evaluative properties. This relates directly to the audience's group memberships. Whether the audience is comprised of ingroup members, with whom one should agree, or outgroup members with whom one may disagree, this should influence what people say in the presence of that audience. As previously stated, people are less likely to express their own ingroup 'punishable' opinions when they are identifiable to a powerful outgroup (Reicher & Levine, 1994a, b). So, what will these strategic concerns (see also Spears & Lea, 1994) mean for the expression of stereotypical norms via flaming? In short, how will the nature of the audience and identifiability to that audience impact upon behaviour? Also, are the effects of identifiability on behaviour related to explicit strategies or are they implicit, automatic responses to the context of the communication?
Summary

This research aims to examine the effects of identifiability on communicators and their behaviour in CMC. The approach taken in this research is derived from the SIDE model (Reicher et al., 1995; Spears & Lea, 1994) in that it focuses on intergroup behaviour and intergroup processes, rather than an individualistic approach focusing on how anonymity changes individuals' behaviour. Taking into account that communicative contexts will always involve an audience, this research focuses on the effects that identifiability has on the expression of group-normative attitudes in the presence of audiences. Specifically, this research examines how flaming between different social groups allows us to investigate how identifiability influences the expression and maintenance of stereotypical norms. In doing so, this research will provide an account of intergroup behaviour in CMC, and uncover some of the underlying social psychological processes, both implicit and explicit, that are affected by identifiability.

However, before examining the issues empirically, it is first necessary to explain CMC in more detail and also to outline the early social psychological theories which have been put forward to explain behaviour in CMC. Chapter 2 aims to meet these objectives. Chapter 3 outlines the SIDE model (Reicher et al., 1995; Spears & Lea, 1994) in which theory and associated research outline the effects of identifiability on social behaviour using a model which is especially applicable to CMC. This discussion focuses predominantly on the expression of group-normative behaviour and provides the basis for the predictions. As this research endeavours to examine the expression and maintenance of stereotypes in CMC, Chapter 4 outlines possible methods which could be used to measure these processes in text-based
communication. Here, the linguistic category model (Semin & Fiedler, 1988) is chosen to use as a measurement tool. Having the basis on which to make predictions and a measure of stereotypical language use, the research predictions and a model of the effects of identifiability on communicative behaviour are outlined in Chapter 5.

These research predictions and the model are tested in Chapters 6 through to 10 in a sequence of seven studies. In conclusion, Chapter 11 provides a general discussion of the issues raised in the research, discusses the implications involved and provides a final model of the effects of identifiability on communicative behaviour.
Chapter 2

Computer-mediated communication: An overview and critique of early theories

Introduction

This chapter reviews research conducted on behaviour in computer-mediated communication and provide an overview of the models put forward to explain these behavioural phenomena. In doing this, I take the following steps:

1. Define computer-mediated communication, explain the different types in use today, and outline why behaviour in CMC is of interest to social psychologists.

2. Review research conducted on behavioural phenomena in CMC. Special attention is given to the expression of hostility in CMC, because it is of central concern to the present research.

3. Review the explanations put forward for behavioural phenomena such as hostility in CMC and provide a critique of these perspectives.

Computer-mediated communication

Computer-Mediated Communication (CMC) is a term used to describe communication which is aided or mediated by computer technology. CMC has been described as follows:
CMC systems use a computer to structure, store, and forward communications among people. In text-based systems, one communicates by typing into and reading from a computer terminal or micro-computer, using either a typewriter-like printer or a video display. (Hiltz et al., 1989, p. 218).

Examples of CMC as we know it today include electronic mail (e-mail), 'chatting' through the use of Internet Relay Chat (IRC) or specialised Internet chat-rooms, computer conferences using computer and video links, and electronic discussion groups or bulletin boards such as newsgroups, also known as the Usenet. Some of these communication tools are synchronous, that is people communicate with each other in 'real time'. The communication exchange here is instantaneous. Examples of these are 'chatting' and computer conferences where people can communicate with each other and receive immediate responses or feedback. Others, and perhaps the most commonly used types of CMC, are asynchronous. Communication here is not instantaneous and there is a time delay at each stage in the communication process. Examples of these include e-mail, and the Usenet where communicators 'leave' messages for people to receive and respond to later. Communication via these means has been growing rapidly since its introduction in the 1970s. It has been said that one tenth of the world's population would be using computers to communicate at the onset of the new millennium (see McKenna & Bargh, 1998) and the use of CMC internationally doubles each year (MIDS, 1997).

Behaviours observed in CMC have attracted much interest from social psychologists. Studies of behaviour in CMC have focused on the characteristics of the medium and on the hypothesis that communication via computers is somehow different or unique because of those characteristics. That is, research has focused on
how the characteristics of CMC can change behaviour. Of particular interest has been the potentially anonymous nature of CMC and behaviour affected by anonymity (e.g., Joinson, 1998; Kiesler et al., 1984; Lea & Spears, 1995; Matheson & Zanna, 1990; Siegel et al., 1986; Sproull & Kiesler, 1986). CMC is typically associated with visual anonymity, where communicators cannot see each other, and communicators often have the choice to be completely anonymous by not supplying any personal details about themselves. Research has focused on how such factors can influence behaviour. Attention has been given to the propensity for behaviour in CMC to be uninhibited, de-regulated and inefficient. The specific types of behaviour investigated have been organisational or work-related behaviour over the computer (e.g., Finholt & Sproull, 1990; Sherblom, 1988; Siegel et al., 1986; Sproull & Kiesler, 1986), the development of friendships and relationships (e.g., Lea & Spears, 1995; Parks & Floyd, 1996; Wilkins, 1991; Van Gelder, 1985) and the high levels of hostile, uninhibited behaviour observed in computer networks (e.g., Dyer et al., 1995; Lea et al., 1992; Kiesler et al., 1984; Siegel et al., 1986; Sproull & Kiesler, 1986, 1991). The latter topic is the focus of the current research and will receive special attention later in the chapter. The following section, however, provides an overview of the research on behaviour in CMC.

Behaviour in CMC

Organisational behaviour

A body of research in the 1980s investigated the efficiency and relational aspects of groups working within anonymous computer-mediated environments. The
research focus was generally on the efficiency of the medium as a tool for information exchange and how decision-making processes might be different to FtF meetings. For example, Siegel et al. (1986) asked groups of three to reach consensus on career choice problems. To do this, groups communicated either FtF, via synchronous computer-mediated communication or through asynchronous computer mail. Groups communicating via computers made fewer remarks than the FtF groups, and took longer to make decisions. However, it was found that equalization, defined as more equal participation by all members, was higher in computer-mediated groups. However, despite this equalization, communication was slower and less information was exchanged. Siegel and colleagues acknowledged that time delays in communication could be partly responsible for inefficiency but that the physical anonymity and impersonal nature of CMC make it an inefficient medium for decision-making.

Sherblom (1988) performed a content analysis on 157 e-mail files from one middle manager in a large organisation. This was conducted over the course of several months and included all e-mails sent by the individual during that time. It was found that communication using e-mail was generally impersonal. The majority of e-mails were for the purposes of information exchange and less on “personal, social and negotiated communication.” (Sherblom, 1988, p. 50). Sherblom suggested that visually anonymous e-mail changes the complexion of communication within organisations, making it less social yet more work focused.

Finholt and Sproull (1990) also considered how computer technology, specifically e-mail, affects group behaviour in organisations. The researchers sampled 96 employees from a large corporation and saved both their in-coming and out-going e-mail for a three day period. It was found that 57% of communications
were work-related and most communications were for general circulation amongst
the corporation (so called 'required' messages). Contrary to other research, instances
of social behaviour and variety in communication (i.e., not just for work processes)
were observed but nevertheless, most of the contact initiated through electronic mail
was for work purposes.

This research demonstrates that CMC, in the organisational context, is
perceived to be different to FtF communication in a number of ways. The
anonymous nature of CMC in particular, is seen to make CMC less efficient (Kiesler
et al., 1984; Siegel et al., 1986), more oriented towards information exchange and
less towards social aspects (Sherblom, 1988), and generally more work-oriented
(Finholt & Sproull, 1990). The most popular explanation for these findings is that
computer-mediated communication is de-personalized. Kiesler et al. (1984) reason:

Because it is printed text, without even the texture of paper to lend it
individuality, electronic communication tends to seem impersonal.

Communicators must imagine their audience, for at a terminal it almost
seems as though the computer itself is the audience (p. 1125).

It is claimed that the anonymity of CMC leads to less social communication. It is
claimed that CMC is therefore a work-oriented (although somewhat inefficient)
medium with little personal association present.

It is interesting to note that while researchers have argued for the inefficiency
of CMC for decision-making with relation to the amount of time decisions take, the
quality of the decisions has not been explicitly examined. Siegel et al. (1986) found
that decisions made by CMC groups were more extreme than FtF decisions, and
shifted away from original individual choices, but the actual quality of the decisions was not examined. It may be that CMC ultimately produces better decisions because communicators have ample time to think about and discuss all issues at length. Thus, the researchers may have concluded that CMC was inefficient on the basis of an inadequate analysis.

From the research on work-place behaviour in CMC, however, we are generally left with the idea that CMC is asocial and task-oriented, albeit inefficient. It has been claimed that the anonymous and text-based nature of CMC precludes people from being 'social' with each other, and is an environment which encourages work-orientation and 'to the point' directness. However, there is a growing body of research which contradicts the idea that CMC is not conducive to social behaviour. There is increasing evidence that the anonymous nature of CMC provides an environment in which friendships and relationships can grow and flourish (e.g., see Lea & Spears, 1995 for a review; Parks & Floyd, 1996; Wilkins, 1991). This work is discussed in the following section.

**Friendships and relationships**

The formation of friendships and relationships between communicators who have never met FtF is a topic which has attracted researchers' interests over recent years (see Lea & Spears, 1995). In the research to date, individuals have reported that they meet people over the computer with whom they 'click' interpersonally and with whom they become very close (Parks & Floyd, 1996). Some individuals report that their computer friendships are as important to them as real-life friends. That is, computer friendships are often valued as much as more "traditional" relationships
involving FtF interaction. Some individuals eventually meet their communicative partners in real-life and often, marriages and romantic relationships are formed.

People also report high levels of self-disclosure when they communicate with their computer friends and acquaintances (Wilkins, 1991).

Anecdotal evidence (e.g., Van Gelder, 1985) suggests that loneliness may be an explicit motivation for seeking computer friendships. Van Gelder outlines a famous case known as the ‘Alex/Joan’ case, where a New York psychiatrist deceived a number of female computer users by posing as a woman and seeking their friendship. According to Van Gelder, the psychiatrist capitalised on the loneliness of the women in order to find out what it “felt like to be female, and to experience the intimacy of female friendship.” (p. 99). However, besides loneliness, there may be other explicit motivations to seek friendship over the computer and visual anonymity may play a vital role in motivating people to form computer friendships.

Initial impressions in CMC cannot be affected by visually differentiating aspects of peoples’ identities such as gender, age and physical attractiveness (Lea & Spears, 1995). People cannot see each other, and therefore cannot make judgements based on visual information, unless they ask for this information personally. Even then, communicators will have little way of knowing that the information they are given is indeed accurate. Whilst this deficiency can have negative consequences, for example in the case of Alex/Joan where deception was used for self-serving purposes, it has been said that the physical isolation and the need to form opinions based on other that physical information, adds “to the interaction possibilities, and for some this is the “magic” of on-line relationships” (Lea & Spears, 1995, p. 202).

Another example of this is the use of the Internet as a ‘global dating agency’. The growth of the Internet has added a new dimension to the process of meeting
people where Internet locations such as “The Globe” ([http://www.theglobe.com](http://www.theglobe.com)), “The Park” ([http://www.the-park.com](http://www.the-park.com)) and others have organised chat rooms functioning as virtual meeting places. In such places, singles can chat with others as future relationship prospects. They can choose where to chat according to factors such as age, interests, sexual preferences and other factors. Other sites such as “Bianca’s Smut Shack” ([http://bianca.com/shack/](http://bianca.com/shack/)) are places where people can engage in ‘cyber-sex’ with anonymous others. The lack of physicality is said to offer the freedom to experiment with sexual fantasies “devoid of the risks and complications normally attached to meeting others in the flesh.” (Lea & Spears, 1995, p. 203).

Generally, the anonymity of CMC is considered to be liberating and enables people to (a) meet others easily in the absence of everyday limits on behaviour, (b) become close with computer friends by making it easier to disclose personal information and (c) explore aspects of one’s sexual identity by providing a safe and anonymous channel with which to express oneself. More generally speaking:

computer-mediated communication, in comparison to FtF communication, will reduce feelings of embarrassment, guilt, and empathy for others; produce less social comparison with others; as well as reduce fears of retribution or rejection. (Siegel et al., 1986, p. 161).

CMC is claimed to be ‘easier’ than everyday interactions because it takes away normal limits to behaviour. Identifiability is said to change explicit factors such as feelings of guilt and embarrassment so that behaviour can be different to how people normally act. More will be said concerning this later when theories of behaviour in
CMC are outlined. However, reports of interpersonal friendships and relationships in CMC suggest that anonymity can facilitate, not inhibit, social behaviour.

**Hostile behaviour**

Anonymity in computer-mediated communication is said to lead to increased hostility and uninhibited language (e.g., Kiesler et al., 1984; Siegel et al., 1986; Sproull & Kiesler, 1986, 1991). Much research in this area has focused on the phenomenon of flaming and has been instrumental in shaping theories to explain behavioural phenomena in CMC. These theories will be outlined later in the chapter. The following section outlines the research on flaming and hostile behaviour, as they are central to the present research.

As explained in the introductory chapter, flaming is defined as the "hostile expression of strong emotions and feelings" (Lea et al., 1992, p. 89). It has also been defined as the “expression of strong and inflammatory opinions to others electronically” (Siegel et al., 1986, p. 161). Thompsen and Foulger (1996) described flaming to be clearly associated with the expression of antagonism.

According to Selfe and Meyer (1991), flaming is “heated, emotional, sometimes anonymous venting” and “is a common, if not universal feature of computer-based conferences” (p.170). Indeed, flaming is said to occur four times more often in CMC than in FtF interactions (Dyer et al., 1995). Flaming has been widely reported throughout the literature (e.g., Chester, 1996; Joinson, 1998; Lea et al., 1992; Siegel, et al., 1986; Sproull & Kiesler, 1986, 1991).

In flaming others, it is claimed that one expresses one’s views “more strongly on the computer than one would in other communication settings” (Kiesler et al.,
1984, p. 1130, emphasis in original version). Flaming takes a variety of forms such as "name-calling, aggressive messages" (Hiltz et al., 1989, p. 220) and more extreme behaviours such as harsh obscenities and even death threats. It has also been more vaguely described to be anything containing hostile communication units (Dyer et al., 1995). Flaming encompasses a wider range of behaviours such as being rude or impolite to a person or expressing personal opinions towards that person (e.g., Kiesler et al., 1985). Also, the use of uninhibited 'paralanguage' such as the use of capital letters to 'shout' and other typographical cues such as exclamation marks to convey anger are considered to be examples of flaming (e.g., Sproull & Kiesler, 1986). Finally, harassment, commonly reported amongst female communicators on the Internet (Spender, 1995) has been used as an example of flaming.

Kiesler et al. (1985) provided an early experimental report of flaming. In this research, pairs of participants who were previously unacquainted were asked to 'get to know' each other either by (a) using synchronous, anonymous CMC as a conversation tool or (b) FtF communication. It was found that participants who used CMC exhibited higher levels of uninhibited behaviour than did the FtF participants. That is, they were less polite, swore more and made more exclamations than did the FtF participants.

Siegel et al. (1986) examined the effects of CMC on a variety of group processes including interpersonal behaviour. They reasoned that the technologically induced anonymity would lead to greater levels of uninhibited behaviour in computer-mediated group decision-making processes. Three experiments were designed to test this prediction. Computer-mediated communication was compared with FtF communication in a repeated measures design. In three person groups, participants used both computer-mediated and FtF communication to reach
consensus on choice dilemma tasks. Each task involved selecting ‘acceptable’ levels of risk for career decisions which were attractive, but ‘risky’.

In the first experiment, groups were asked to reach consensus on choice dilemma problems in each of three contexts: (a) FtF, seated at a table in an office or classroom, (b) an asynchronous, anonymous computer-mediated condition where participants were isolated physically and no names were exchanged or linked to participants’ statements during the discussion, and (c) an asynchronous, identifiable CMC condition where participants were again isolated physically but typed their names along with their own comments. Uninhibited flaming communication was coded by counting the number of remarks containing “swear words, name-calling, and insults (e.g., “you jerk” or “you fool”)” (Siegel et al., 1986, p. 167). The study found that when groups used CMC, they were more uninhibited than they were in the FtF condition. Altogether, there were 34 instances of flaming in the CMC condition, but none in the FtF condition. There was almost four times the amount of flaming in the anonymous than the non-anonymous CMC conditions.

In Experiment 2, anonymous and identifiable CMC conditions were compared, but a FtF condition was not included. The other difference to Study 1 was that synchronous communication was compared with asynchronous communication. The results yielded similar findings to the first experiment. Flaming was present in both conditions.

In Experiment 3, Siegel and colleagues compared communication between synchronous, identifiable computer conferencing, identifiable, asynchronous e-mail and a FtF condition. It was found that members of groups using CMC displayed uninhibited behaviour as in previous studies. It was also found, however, that e-mail yielded less uninhibited behaviour than synchronous computer conferencing. It was
concluded that “the opportunity for reflection in computer mail may reduce “deindividuated” responses” (Siegel et al., 1986, p. 179) such that flaming is higher when communicators are less 'in control' of what they say. This idea introduces the notion that CMC produces a loss of control in the individual so that they are not responsible for their behaviour. That is, being anonymous reduces responsibility for one’s actions. I will devote some time to this idea shortly.

Sproull and Kiesler (1986) provide some field data on flaming within an organisational environment. The participants in the study consisted of e-mail users from a large office equipment firm. The participants were from a variety of levels in the company and represented both genders. Data were collected in an eight week period by interview, questionnaire, and coding of e-mail content. Flaming was measured by simply asking people how much flaming they saw in their e-mail and conversations. Results indicated that flaming was more common in e-mail than in the FtF condition. People reported seeing flaming in their e-mail messages a mean of 33 times a month as opposed to four times a month in FtF communication. From this, Sproull and Kiesler concluded that people behave less responsibly when they use e-mail, and flame more often.

Smolensky, Carmody and Halcomb (1990) conducted an experiment to examine the effects of task type, group structure and extraversion on the amount of flaming in CMC. Groups of three people were asked to communicate about a choice dilemma task either with or without a definitive solution. Groups were either pre-acquainted or non-acquainted. Smolensky and colleagues were interested in the amount of uninhibited speech which occurred within each group. To measure uninhibited speech, they counted the number of instances where group members swore, insulted other group members, called people names and made hostile
statements. The data revealed that flaming was prevalent in the communications, but was dependent on the type of task and the type of group. Pre-acquainted groups with a definitive solution task flamed the most. Furthermore, highly extraverted communicators tended to exhibit a greater amount of uninhibited behaviour than less extraverted communicators. The research also indicated that the more groups exhibited uninhibited speech, the less productive they were in terms of the number of decisions the group reached.

Hiltz et al. (1989) conducted a field study in which they investigated the effects of using ‘pen names’ on group decision making processes in CMC. It was expected that the introduction of anonymous pen-names would increase the probability of uninhibited behaviour. This, they hypothesised, would be evidenced in higher levels of flaming “name-calling, aggressive messages” (p. 220) for the pen-named communicators, with comparison to identifiable computer conferences and a FtF condition. They found little evidence to support their predictions. Overall, pen-named conferences contained no more flaming than did FtF or identifiable computer conferencing. However, in pen-named conferences, when flaming did occur, it was found that “once a participant has engaged in disinhibited behaviour, it appears that it is likely to be followed by more such comments when pen names are used” (p. 225). That is, when flaming did occur in the pen-named conferences, it was more likely to continue. This was not found in the other conditions. The researchers claimed that as their sample size was small (18 groups of five participants examined on a group basis) there were no differences in flaming. They did speculate however that there might be a ‘bandwagon’ effect of insults and swearing for pen name conferences moreso than named conferences or FtF communication.
More recent evidence of flaming was presented by Thompsen and Ahn (1992, cited in Lea et al., 1992). Thompsen and Ahn studied e-mail exchanges on a university campus and found that 38.8 per cent of e-mail users had observed flaming. Amongst those people who had observed flaming, 27.2 per cent estimated that they had seen more than 25 instances in a year.

Chester (1996) reported a case study where students participated in an on-line conference entitled “Negotiating our Space”. The conference was designed to allow students to think about the kinds of rules and/or norms that might be appropriate in computer-mediated communication and also to set boundaries in their own virtual community. It was found that all communicators, most of whom had some experience in using CMC, were aware of flaming and had witnessed it on a number of occasions. However, interestingly, in a conference designed to ‘get around’ the boundaries to positive communication in CMC, substantial flaming amongst participants was noted.

The evidence reviewed in this section generally supports the idea that flaming is more common in CMC than in FtF interactions. There have been several attempts to explain why this is the case and the following section addresses these approaches in turn, providing a similarly chronological overview to that of Lea and Spears (1992). Each of these perspectives has been used to address the issues related to communication over the computer such as anonymity, the lack of social cues and time constraints, and how they contribute to the phenomenon of uninhibited behaviour. Firstly, the social presence model is examined.
The social presence model

The social presence model (Short, Williams & Christie, 1976) has been applied to the study of CMC (e.g., Rice, 1987) and has been influential in framing ideas about the reasons behind social phenomena in CMC (see Spears & Lea, 1992). The social presence model was developed at the Communication Studies Group at University College, London. As computers were not widely used for communication during the 1970s, the research was primarily concerned with FtF communication, telephone communication, and audio/video links.

The model examines the concept of social presence, which is defined as a quality related to the interpersonal nature of a communication medium and the degree of interpersonal contact a medium provides. Social presence can be characterised along dimensions such as cold/warm or impersonal/personal (Short et al., 1976) to determine how ‘good’ a communication medium is for the purpose of interpersonal communication. Conducting rating studies that utilized these dimensions, it was possible to compare and rank media according to social presence.

Having examined the social presence of various communication media, Short and colleagues concluded that some media were ‘rich’ in social presence and others were not. Particularly, FtF communication was said to be the richest, scoring highly on the warmth and personal dimensions of social presence. On the other hand, business letters were found to be low in social presence, being both impersonal and cold (Short et al., 1976). Applying these ideas to CMC, the medium has been thought to fit close to the bottom of the scale, being perceived to be cold and impersonal mainly because it is simply text-based.
According to this model, e-mail would be ranked somewhere in between business letters and the telephone (Spears & Lea, 1992). There is little to make the medium ‘social’ in the sense of being interpersonal because text on a screen is socially minimal or bare. However, studies have not always supported the model when it has been applied to CMC (e.g., Rice, 1987; Sproull & Kiesler 1986; Walther, Anderson & Park, 1994). CMC has been found to elicit social behaviour in contrast to the predictions of the social presence model. As already outlined, relationship formation and interpersonal hostility are clear examples of the social nature of CMC. This model also does not directly examine the properties of communication media which may elicit flaming, and so at this point, it is necessary to turn to the more recent cuelessness model.

The cuelessness model

As in the case of the social presence model, the cuelessness model (Rutter, 1987) was developed before CMC became as widely popular as it is today and mainly focuses on comparisons between FtF communication, audio and also closed circuit televisions. The model has not been extensively applied to CMC, but the ideas are important to review as they are related somewhat to the reduced social cues approach (e.g., Kiesler et. al., 1984) to be discussed in the next section of this chapter. Broadly, the cuelessness model bears some similarities to the social presence model. The concept of cuelessness focuses on the number of social cues available to communicators in a medium (Rutter, 1984, 1987) and is said to affect the interpersonal nature of the communication. If there are few social cues, as in business letters, then the medium is said to be high in cuelessness, whereas if
multiple social cues are available, such as the case in F2F communication where both verbal and non-verbal cues are available to communicators, then the medium is low in cuelessness. The concept of cuelessness is therefore similar to social presence. However, the social presence model seems most concerned with the socio-emotive dimensions of a medium, whereas the cuelessness model focuses on the availability of information by explicitly counting the number of cues present.

Cuelessness is said to lead to greater psychological distance, meaning that the less cues that are available to communicators, the less 'social' the communication becomes. As a result, media high in cuelessness are usually more task-oriented and socially unspontaneous (Rutter, 1987). Therefore, using these ideas, CMC would be high in cuelessness, again because text is really the only cue available as opposed to other rich media such as F2F communication. According to these ideas, CMC should therefore be a goal-directed medium, and social behaviour should not be particularly prevalent as the medium simply does not make it possible. Rutter (1987) comments:

Cuelessness leads to psychological distance, psychological distance leads to task-oriented and depersonalized content, and task-oriented depersonalized content leads in turn to a deliberate, unspontaneous style and particular types of outcome. (p. 74).

As explained earlier, some of the research into work-related behaviour in CMC supports the idea that CMC is depersonalized and task-oriented (e.g., Finholt & Sproull, 1990; Sherblom, 1988). However, there are certain behaviours which contradict the notion that the medium is not conducive to social activity. If media containing few social cues inevitably leads to more task-oriented and depersonalized
communication (Rutter, 1987), then there will be difficulty in explaining the high incidence of flaming, which often involves interpersonal and intergroup attacks and derogation. It will also be difficult to account for ‘emoticons’ or paralanguage such as ‘smiley faces’ (e.g., Lea & Spears, 1992) where communicators attempt to convey emotion through the use of typographical cues. Similarly, it is difficult to explain the concept of ‘netiquette’ where users of the Internet have negotiated a comprehensive and followed set of norms and standards (see McLaughlin, Osborne & Smith, 1995). It is clear that the cuelessness model has problems in dealing with these types of social phenomena in CMC. The theory denies that a medium as bare in social cues as CMC could possibly bring about social behaviour of this nature whereas evidence suggests that CMC certainly does.

So, it is clear that CMC can elicit interesting social phenomena, and that principles derived from the study of other communication media do not necessarily apply to the study of CMC. As CMC began to grow in popularity during the 1980s, it therefore became necessary to conduct research specifically into the area of CMC, in order to explain and examine the seemingly unique aspects of the medium. The reduced social cues perspective was formulated in an attempt to explain these unique phenomena.

**The reduced social cues perspective**

Similar to the social presence model and the cuelessness model, the reduced social cues approach examined the effects of the lack of social cues on communication. However, research associated with this perspective did not make comparisons across different types of communication media, except comparisons
with FtF communication, but focused directly on the effects of reduced social cues on CMC. The research was conducted in the mid to late 1980s, a period where CMC was growing in popularity and technological advancement. The research, some of which has already been examined in this chapter in relation to flaming, was conducted by the Committee on Social Science Research in Computing at Carnegie-Mellon University in which 83% of the student population had a computer account in 1986. Siegel and colleagues considered this high level of computer proficiency an advantage to their research.

The reduced social cues perspective proposed that there are features of CMC that can lead to more extreme communicative behaviour (Kiesler et al., 1984; Siegel et al., 1986). Specifically, it was argued that because non-verbal cues, such as facial expressions and tones of voice are not available to communicators in CMC, a number of social psychological consequences make uninhibited behaviour more likely. As well as encouraging uninhibited behaviour, the lack of social cues present in CMC has been found to affect decision-making processes. Decisions become more polarized or extreme in the direction of a pre-determined norm, and decisions also become more risky (e.g., Kiesler et al., 1984; Siegel et al., 1986).

Further, the reduced social cues approach suggests that because CMC has few social cues available, it allows little feedback to be given to communicators about the appropriateness of their behaviour. For example, in FtF communication a frown may let a person know that a behaviour is inappropriate or disapproved of, yet in CMC this is not possible. Such constraints would normally regulate uninhibited (and indeed sometimes inappropriate) behaviour, but since such cues are not present, it is proposed that the likelihood that uninhibited behaviour will occur is increased (Kiesler et. al., 1984).
The approach proposes that a loss of inhibitions will be further enhanced by the fact that cues to leadership and power are also eliminated in CMC. However, we could argue that this will only be the case for anonymous CMC. Clearly, identifiable CMC will contain cues to leadership and power based on the names and titles associated with the messages. For example, a known manager in a corporation sending an e-mail to employees will inevitably give away cues to his/her leadership and power. Further, the claim that CMC has no cues to power is easily disputed as there is a body of research arguing that language itself is ‘powerful’ in that it is the primary instrument of persuasion (e.g., Gibbons, Busch & Bradac, 1992; Ng & Bradac, 1993, Petty & Cacioppo, 1986). The reduced social cues approach then, may be incorrect in assuming that because certain cues are not present in CMC, that people are more ‘free’ to exchange extreme arguments and engage in other types of uninhibited behaviour, as the threat from powerful others is reduced. It may not be reduced at all.

Research conducted under the framework of the reduced social cues perspective also examined communicative difficulties experienced in CMC and their effects on behaviour. For example, it has been proposed that time delays and other communication difficulties may increase frustration and perhaps also lead to increased uninhibited behaviour. Also, it is mentioned that to a degree, the computing ‘sub-culture’ advocates uninhibited, extreme behaviour (Siegel et. al., 1986). That is, norms associated with CMC tend to reject conventional norms and standards of conduct, so that behaviour deviating from the accepted norm is perhaps encouraged. Finally, however, and perhaps most influentially, the reduced social cues approach proposes that CMC creates conditions of deindividuation, which subsequently influences behaviour.
The deindividuating nature of CMC

Deindividuation is defined as the loss of personal identity and reduced self-awareness which comes about due to anonymity or submergence within a group (e.g., Zimbardo, 1969). Because of its anonymity, CMC is said to reduce self-regulation and self-awareness and increase disinhibition (Kiesler et al., 1984). This leads to the expression of extreme arguments (e.g., polarization, Kiesler et al., 1984; Sproull & Kiesler, 1986), and forms of uninhibited behaviour. Using this argument, Kiesler and colleagues attempted to explain phenomena such as flaming. According to the reduced social cues account, factors leading to a state of deindividuation, and a ‘freeing’ from social norms and standards allow flaming to occur.

However, there is some confusion in the literature concerning the effects of self-consciousness or self-awareness on behaviour. In one instance, Kiesler et al. (1984) argue that CMC reduces self-awareness and that this reduction in awareness of the self will bring about disinhibited behaviour. That is, anonymous communicators become less aware of their behaviour and less aware when their behaviour deviates from accepted norms. When they are anonymous, communicators ‘self-monitor’ less, ‘self-censor’ less, and the result of these deficiencies is uninhibited behaviour. On the other hand, Siegel et al. (1986) argue that a heightening of self-consciousness or self-absorption in the message, arguably closely related to self-awareness, may produce less sociable and more uninhibited ‘anti-normative’ behaviour. That is, becoming explicitly more aware of one’s own behaviour encourages anti-normative behaviour. This creates an obvious confusion. Indeed the concept of deindividuation implies a loss of self-awareness (Diener, 1980), yet there is inconsistency in opinions concerning the effects of anonymity on
explicit self-awareness, and explicit self-awareness on behaviour. This claim that CMC is deindividuating, has been investigated in the work of Matheson and Zanna (1988, 1989, 1990) in their work on private versus public self awareness.

It has been found that CMC leads to heightened private self-awareness, that is awareness of the covert aspects of the self such as personal feelings, attitudes, values and beliefs, but reduced public self-awareness, or reduced awareness of overt aspects of the self which are more sensitive to evaluation by others (Matheson & Zanna, 1988). Matheson and Zanna compared participants' levels of self-awareness whilst discussing a topic either FtF or via CMC. It was found that users of computer-mediated communication reported greater private self-awareness but lower public self-awareness than subjects communicating FtF. Further, utilizing a similar method, Matheson and Zanna (1989, 1990) found that computer users reported significantly greater levels of private self-awareness than those communicating FtF.

These findings (Matheson & Zanna, 1988, 1989, 1990) also challenge the reduced social cues approach. They suggest, contrary to the reduced social cues perspective, that communicators were not deindividuated in communicating via computers. This calls into question the conclusions regarding the deindividuating effects of CMC. Matheson and Zanna (1990) wrote that “rather than being oblivious to internal standards and needs, computer users are more likely to be driven and motivated by these needs.” (p. 6). That is, rather than being unconsciously affected by anonymity, people are explicitly aware of their norms and standards and are motivated by them.

Further, it could be argued based on these results that self-awareness clearly has two separate aspects and that combining the two provides an inaccurate picture. That is, Matheson and Zanna’s results separate awareness of the ‘inside’ or private
self and the 'outside' or public self and show that these different types of self-awareness are affected differently by the anonymity of CMC. Private self-awareness is increased, while public self-awareness is decreased.

Also, Lea and Spears (1992) have noted that using deindividuation to explain group polarization, a social influence effect, is problematic because it implies that social influence is an anti-normative phenomenon. Deindividuation implies that norms and standards are rejected, and in the case of social influence, this is clearly an incorrect analysis as polarization describes the situation where adherence to group decisions is accentuated (Lea & Spears, 1992). Generally speaking however, the claim that behaviour in CMC is anti-normative is problematic. Indeed, Spears and Lea (1992) stated that:

both behaviour (flaming) and outcomes (group polarization) have been described as antinormative to the extent that they are more negative or extreme than some general social standard. However, if antinormative behaviour has a clear directional form, this would seem to define some sort of 'norm', albeit an extreme and negative one (p. 41).

Lea et al. (1992) also sampled messages from 1300 different newsgroups and found that flaming was restricted to certain newsgroups, and from their observations, it was clear that flaming was restricted mainly to contexts where flaming was acceptable. They stated that:

The impression that this gives rise to – that flaming is normative behaviour for particular groups – is underlined by the fact that several interest groups
have elected specifically to include the word ‘flame’ in their formal title thereby defining the norm for all potential contributors (e.g., ‘alternative.flame.abortion’) (p. 107).

From these observations, it can be concluded that, instead of being anti-normative and deindividuated, uninhibited behaviour in CMC can be purposeful behaviour, which is dependent on context and audience. Postmes and Spears (1998) conducted a meta-analysis of the deindividuation literature, which gave further support to the idea that deindividuation manipulations can cause more normative behaviour.

Further, the reduced social cues approach does not distinguish between the effects of the lack of interpersonal visual cues (e.g., facial expressions) and the lack of cues to social aspects of the communication (e.g., biographical information about other communicators or the context of the communication). Knowledge or lack of knowledge of each type of cues may have completely differing effects on behaviour. For example, not being able to tell whether someone is frowning at you may have completely different effects to not being able to tell which racial group a communicative partner belongs to.

Another somewhat related approach has been taken by Walther (1992; see also Walther et al., 1994) which aims to make sense of the disparate findings in the reduced social cues approach. This social information processing approach is similar to the reduced social cues approach in that it focuses on a ‘lack’ of a certain cue in CMC. This time, the focus is on the lack of time available for communicators to form impressions in computer-mediated communication, a topic briefly mentioned by Siegel et al. (1986). It is proposed that it is this lack of time which contributes to the antisocial nature of CMC. It is claimed that, if given sufficient time,
communication via computers will become more similar in social content to that of FtF communication:

Given sufficient time for multiple message exchange and development, however, relational patterns in CMC and FtF settings should become similar (Walther, et al., 1994, p.466).

In a meta-analysis, Walther et al. (1994) examined the previous literature on flaming to examine the hypothesis that there should be a smaller proportion of antagonistic or negative, uninhibited communication in unrestricted (time unlimited) interactions. However, this hypothesis was not supported. Interaction restriction did not determine different amounts of antisocial communication within CMC, nor did it differentiate between CMC and FtF communication. Whilst Walther and colleagues found evidence that the amount of time communicators were allowed to speak increased the amount of socially oriented remarks as opposed to task-oriented remarks, the model cannot account for the variation in phenomena such as flaming across media.

Therefore, although the research under the broad banner of the reduced social cues approach is a good attempt at explaining social phenomena in CMC, especially flaming, it falls short in providing a believable and consistent account of the processes at work. In particular, questions have been raised regarding the reduced social cues approach’s focus on the lack of cues to leadership and power in CMC. Research (e.g., see the review by Ng & Bradae, 1993) contradicts the idea that CMC, or any language-oriented medium would be powerless. Also, the concept of deindividuation as an explanation for CMC phenomena has proven to be
problematic. It cannot account for increased group-normative behaviour in CMC and also, the fact that flaming, once thought to be anti-normative and chaotic, follows clearly context-dependent patterns and evidence of purpose.

Conclusions

In summary, theories explaining behaviour in CMC have focused on the primarily negative effects of the medium on communicative behaviour between individuals but have not provided a plausible explanation for the social processes (either explicit or implicit) which occur to bring about behaviours such as flaming.

Further, theories about and analyses of CMC have focused mainly on interpersonal communication in the medium. In particular, the relevant social psychological work has focused on the characteristics of the medium itself and the ways that characteristics of communicators are changed by CMC. Considerable emphasis has been placed on the limited social cues available to people using CMC (e.g. Rutter, 1987; Kiesler et al., 1984) and also the fact that CMC has the capacity to be completely anonymous and may be deindividuating (e.g., Siegel et al., 1986). Further, it has been suggested that the time constraints of CMC do not often enable people to be social with each other (Walther et al., 1994).

In each case, the approach has been to focus upon the behaviour of individuals and how the characteristics of individuals are affected by the characteristics of the medium. In this chapter, several problems have been exposed concerning these approaches and it is argued here that they are not capable of dealing with the broad variety of social behaviours in CMC exchanges. For example, CMC has been found to elicit positive interpersonal behaviour in contrast to the predictions
derived from the social presence model (e.g., Rice, 1987; Sproull & Kiesler, 1986; Walther, 1992). The social presence model predicts that a medium as low in social presence as CMC should not exhibit social behaviour, when this is clearly not the case. Also, the anecdotal evidence of friendship and relationship formation contradicts the ‘bare’ social nature of CMC. The use of typographical cues to convey emotion (e.g., see Lea & Spears, 1992), and the emergence of Internet rules and norms (McLaughlin et al., 1995) are also difficult to explain by saying that CMC is impersonal and work-oriented only. These accounts do not account for increased private self-awareness observed in CMC (Matheson & Zanna, 1989, 1990). Finally, hostile behaviour is difficult to explain using the social presence and reduced social cues models. Low social presence and increased task-orientation would be expected to preclude the existence of interpersonal and intergroup hostility.

Chapter 3 outlines a model which attempts to explain the effects of identifiability on behaviour and focuses on intergroup, not interpersonal behaviour. This SIDE model (Reicher et al., 1995; Spears & Lea, 1994) has been directly and successfully applied to the study of computer-mediated communication. It is a developing framework which attempts to avoid the shortcomings of previous theories of research in understanding social psychological processes related to identifiability.
Chapter 3

The social identity model of deindividuation effects (SIDE)

Introduction

Chapter 2 outlined the different approaches that have been used to explain social behaviour such as flaming in CMC. The major limitation of these models is their inadequacy in efficiently explaining the wide range of social behaviours in CMC and specifically the normative properties of flaming (see Lea et al., 1992). The influential reduced social cues approach in particular, attempts to explain behaviour by focusing on how the characteristics of CMC, in particular anonymity, make people less self-aware and less responsible for their own personal actions (e.g., Kiesler et al., 1984). Thus, it presents an individualistic analysis of the effects of anonymity on behaviour. As is explained in this chapter, the social identity model of deindividuation effects describes such individualism as the major weakness of deindividuation theory. This type of approach does not take into account how the group memberships of communicators, and the salience of social categories, influence behaviour. The SIDE model (Reicher et al., 1995; Spears & Lea, 1994) examines the effects of group salience on deindividuated behaviour, specifically CMC, and is discussed in the current chapter. This chapter:

1. Provides an overview of early theories of deindividuation and outlines SIDE’s critique of deindividuation theory.

2. Outlines the hypotheses of the SIDE model and provides an overview of the research conducted within this framework.
3. Examines the how the SIDE model might explain flaming, and the social psychological processes involved in flaming.

**Early approaches to deindividuation and the SIDE alternative**

The SIDE model was originally developed to challenge existing explanations for deindividuation effects, but SIDE theorists have also criticised early theories of behaviour in CMC. This section briefly overviews the early models of deindividuation, relates these to the most popular attempt to explain behaviour in CMC, the reduced social cues approach, and outlines SIDE’s critique of deindividuation theory. The structure of the following section follows that of Reicher et al. (1995).

**Crowd behaviour**

Theories of crowd behaviour, notably the work of Gustave Le Bon (1895/1947) provided the origins of modern deindividuation theory and have moulded popular conceptions of collective behaviour, including theories about behaviour in CMC. Le Bon’s work resulted in a politically motivated criticism of collective behaviour. At a time when French society was volatile and protests and riots were commonplace, Le Bon’s work, which described collective behaviour as irrational and fickle, was well received.

Le Bon believed that being in a crowd causes individuals to act differently than they would act when alone. Being submerged in a large group of people allows an individual to react on impulses which would normally be controlled, and perform
behaviours which would normally be self-censored. It is said that this occurs due to three mechanisms. Firstly, anonymity prevents people from being isolated or identified from others in a crowd. Being unable to be differentiated from others leads to a loss of personal responsibility, a sense of being ‘untouchable’ and a loss of self-control. This is similar to the proposed deindividuated nature of anonymous CMC. Loss of control, Le Bon argues, leads to contagion where this lack of responsibility spreads throughout the crowd and everybody begins to think and act in the same manner. Finally, people in the crowd become more suggestible. That is, being in a crowd leads to a blind acceptance of the demands of being in a crowd, and people unquestioningly follow “impulses emanating from their common unconscious” (Reicher et al., 1995, p. 162).

The above analysis suggests that the crowd is a messy, incoherent and often dangerous rabble where people are not capable of self-control and are the victims of a common, and inferior mind. It is difficult to directly relate Le Bon’s ideas to theories attempting to explain behaviour in CMC, however, modern theories of deindividuation, which have their origins in Le Bon’s ideas, have been heavily influential in framing theories of behaviour in CMC. Modern theories of deindividuation have applied and extended Le Bon’s principles to small groups and the examine the effects of anonymity within groups on behaviour. This is echoed in the reduced social cues account of behaviour in CMC. Modern theories of deindividuation will be discussed in the next section.
Modern deindividuation theories

The term deindividuation was coined by Festinger et al. (1952) to describe situations in which people cannot be individuated or isolated from others. According to Festinger and colleagues, being deindividuated in a group brings about a loss of individuality in its members. In a similar vein to Le Bon, Festinger and colleagues proposed that being deindividuated within a group reduces normal constraints on behaviour or norms and standards of behaviour, and people can do things they normally would not do because they are not directly accountable for their actions. They are in a sense liberated to do what they like. However, Festinger and colleagues elaborated little on the causes of the deindividuated state, and what specific behaviours would result from it (Reicher et al., 1995).

Zimbardo (1969) is responsible for the development of the deindividuation theory most commonly known today. Zimbardo was more specific about what variables would lead to a state of deindividuation, as well as the behaviours that should result from deindividuation. Specifically, Zimbardo said that factors leading to a state of deindividuation were anonymity, responsibility (shared, diffused or given up), group size and activity, altered temporal perspective so that focus is more on the ‘here and now’ rather than the past or present, arousal, sensory input overload, physical involvement in the act, reliance upon non-cognitive interactions and feedback, a novel or unstructured situation, and altered states of consciousness such as those brought about by the use of alcohol and drug-taking. Zimbardo claimed that all of these factors act to minimise self-observation and evaluation, reduce concern for social evaluation and lead to a weakening of controls based on feelings of guilt, shame, fear and commitment. Thus, thresholds for expressing inhibited behaviours
are lowered, and these behaviours are typically impulsive, irrational, emotional, distorted, difficult to terminate and generally aggressive or otherwise negative.

Diener (1980) provided a theoretical clarification of Zimbardo’s theory by introducing the concept of objective self-awareness (Duval & Wicklund, 1972; Wicklund, 1975). Objective self-awareness is high when people’s attention is drawn inward towards the self and people actively monitor their own behaviour. Objective self-awareness is low when focus is more outward and people monitor their own behaviour less, or not at all (Duval & Wicklund, 1972; Wicklund, 1975). According to Diener, deindividuation is caused by a reduction in objective self-awareness. Variables that can reduce this self-awareness can bring about deindividuation. Under conditions of deindividuation, attention is drawn away from the self and people are less capable of monitoring their behaviour with relation to internal norms and standards. People therefore become more receptive to external, environmental influences and act irresponsibly because they are less capable of evaluating the consequences of their behaviour. This implies an that people lose conscious awareness of their behaviours and the possible outcomes of their behaviours.

Prentice-Dunn and Rogers (1982, 1989) reformulated this idea by introducing the distinction between public and private self-awareness (e.g., Carver & Scheier, 1981) with relation to crowd behaviour to account for the wide range of deindividuated phenomena associated with anonymity reported in the literature. Public self-awareness is said to decrease due to anonymity such that people become less aware of how they appear publicly to others. Anonymous individuals are therefore less aware about how they present themselves and the resulting behaviour will tend to be anti-normative. Also, private self-awareness, or awareness of internal norms and standards, is posited to decrease due to the physiological arousal of being
in a crowd and the high levels of group cohesiveness. People become less aware of their own internal standards of behaviour, and this will also lead them to behave anti-normatively. Normally, this means that deindividuated persons will behave antisocially. Again therefore, deindividuation is said to impact upon behaviour by reducing the level of explicit control that people have over their thoughts and actions.

CMC theories such as the reduced social cues approach share a heritage with these ideas. Deindividuation theory proposes that factors such as anonymity decrease an individual's focus on their own internal norms and standards, resulting in anti-normative behaviour. Similarly, Kiesler and colleagues, advocates of the reduced social cues approach in CMC, assert that anonymity reduces self-regulation and self-awareness and increases disinhibition (Kiesler et al., 1984). Loss of inhibitions leads to the expression of extreme arguments (e.g., polarization, Kiesler et al., 1984; Sproull & Kiesler, 1986), and forms of uninhibited, anti-social behaviour like flaming. According to this perspective, factors leading to a state of deindividuation, and a 'freeing' from social norms and standards, allow flaming to occur.

However, as discussed in Chapter 2, there are problems with this type of analysis of behaviour in CMC. For example, the results of Matheson and Zanna (1988, 1989, 1990) suggest, contrary to the reduced social cues 'deindividuation' perspective, that communicators' self-awareness is not globally reduced during CMC interactions. Private self-awareness is increased, while public self-awareness is decreased. This challenges theories proposing that CMC frees people from their normal standards of behaviour. Further, Reicher et al. (1995) point out that there are complications with modern deindividuation theory more generally. This type of individualistic analysis is criticised by SIDE theorists because it claims that a loss of
individuality is equal to a loss of personality (Postmes, 1997). That is, when people are anonymous, they lose their sense of self. However, the conception of self here refers to personal identity only, and does not take into account the importance of social identities or group identities to the self.

SIDE’s critique of deindividuation theory

The primary SIDE criticism of deindividuation theory is the notion that anonymity leads to a loss of selfhood. The idea that deindividuated people act without self-regulation implies that they are not in control of their behaviour and act irresponsibly and anti-normatively because of this lack of control. That is, most of the time, deindividuation will bring out behaviours which never emerge under normal conditions, and these behaviours are typically negative and/or anti-social.

Reicher et al. (1995) propose that this notion of deindividuation as a loss of self and a loss of behavioural control, depends on an individualistic conception of the self, with which they disagree. They state:

The self is regarded as unitary, and refers to the unique set of dispositions and characteristics that mark the person as distinct from all other individuals. It is also the sole source of rational action. To put it slightly differently, rational action is equated with the self and the self is equated with personal identity. The loss of personal identity is therefore equated with the loss of identity and the loss of rationality (p. 168).
Further, deindividuation theory, even traced back to Le Bon, proposes that group membership is one of the antecedents of deindividuation. That is, group membership leads to a loss of selfhood, selfhood being the only basis for rational action, and a reduction in personal control over one’s actions. Essentially, being in a group results in meaningless, anti-normative and irrational behaviour.

In contrast, the SIDE model builds on social identity theory (e.g., Tajfel & Turner, 1986) and self-categorization theory (e.g., Turner et al., 1987) to argue that group membership does not equate to a loss of self leading to anti-social and anti-normative behaviour. SCT in particular, argues that in each individual, there are many levels of the ‘self’. The self is not only the individual’s personal identity, or what separates that individual from other individuals. The self also encompasses a range of possible social identities related to group memberships. That is, the self is not only determined by idiosyncratic properties, but properties that are shared with others, such as race, gender, and political opinion for example. Further, SCT suggests that when a particular group identity becomes salient or important, people feel more similar to others in their group, and different to other groups. This results in a “depersonalization of individual self-perception” or “self-stereotyping” as a member of a group (Turner et al., 1987, p. 49). People feel more like members of their own group separate from other groups.

When at any given time a person feels part of a group, or identifies with a group, then they will be aware of, or attuned to, the norms and standards of that group than they are at other times. They will be aware of what it means to be a group member, and this knowledge will guide behaviour. Therefore, group members do not have to be near to, or visible to other group members to be influenced by them. People do not have to be ‘with’ a group to feel like they belong to it, and so
they do not have to be 'with' the group to feel bound by its norms and standards (Turner et al., 1987). The SIDE model uses this perspective to challenge the idea that group membership prevents normative behaviour. That is, anonymity within a group may serve to enhance, rather than diminish commitment to group norms. This idea is of central importance to the SIDE model. The next section elaborates on this idea more fully in outlining the principles and predictions of the model and the research undertaken to test these predictions.

The SIDE model: Principles and predictions

In the 1995 formulation of SIDE, there are two components: (a) the cognitive dimension (which might also be called the self-categorical dimension, see Douglas & McGarty, in press; McGarty, Taylor & Douglas, in press) which relates to the salience of social categories, and (b) the strategic or identity enactment dimension which examines how behaviour might be related to the salience of social categories and the context of the interaction (Postmes et al., 1998; Reicher et al., 1995, Spears & Lea, 1992, 1994). Recent moves have been for an integration of the two components because of the possibility for interaction between cognitive and strategic factors (see Reicher, in press), however this overview will approach each separately for the purposes of clarity. I firstly focus on the cognitive SIDE and later the strategic SIDE which is of most importance to the present research.
The cognitive SIDE

In challenging deindividuation theory’s conceptions of group behaviour, Reicher et al. (1995) revisited Zimbardo’s (1969) paradigm for assessing deindividuated group behaviour. In Zimbardo’s paradigm, participants wore hoods and baggy overalls to be deindividuated. According to self-categorization theory and SIDE, asking people to wear such garments should have different effects on behaviour depending on the salient self-category and what is happening in the deindividuation manipulation. Reicher and colleagues argue that manipulating deindividuation by immersion in a group should reinforce the salience of a prominent social identity (should one be prominent) at the expense of personal identity. So, if personal identity is salient, wearing baggy overalls and hoods may increase personal focus and increase individual behaviour, but if group identity is salient, the deindividuation manipulation is more likely to have the effect of promoting behaviour consistent with norms of the group.

Further, SIDE argues that anonymity will either enhance or attenuate social identity depending on whether or not group salience is high to begin with:

If the group level of identity is already emphasized, then anonymity is likely to enhance the salience of social identity still further by emphasizing the interchangeability of group members and obscuring interpersonal differences (Reicher et al., 1995, p. 178).

Thus, when people cannot see others with whom they are interacting in their group, they will be less able to differentiate between group members, as they have no idiosyncratic cues on which to make judgements. This would be the case if group
members were interacting wearing hoods and baggy overalls. If, under these conditions, people are interacting in a context which allows a particular social identity to become salient (e.g., when everyone interacting is a student or when everyone shares a similar political ideology), and these shared characteristics are clear to the individual or pertinent to the interaction, then the process of depersonalization is more likely to occur, such that people are seen as more ‘alike’ or interchangeable. The salience of their shared group qualities or social identity, is enhanced. SIDE posits that this increase in salience influences behaviour. Under conditions of high group salience, anonymity will emphasise what people have in common, and this will increase attention to group norms. Anonymity is therefore likely to increase adherence to group-normative behaviour. Under conditions of low group salience, the picture is different:

However, anonymity is likely to have rather different effects if it is not accompanied by explicit group immersion. Where group salience is low and where group boundaries are indistinct, anonymity may undermine the process of depersonalization, by emphasizing one’s isolation from the group or by further obscuring group boundaries (Reicher et al., 1995 p. 178).

Under these conditions, anonymity will decrease group salience further. If there is no group identity salient, or if the salience of that group identity is low, then there is no sense of commonality amongst people engaged in the interaction. It is more likely under such conditions, that personal identity will become more important and people will adhere more to their own personal norms and standards.
Therefore, the cognitive component of the SIDE model proposes that cognitive or self-categorical consequences can arise from anonymity. Anonymity can increase or decrease the salience of social categories depending on the level of group salience or 'feelings of similarity' already present amongst interactants. As a result, anonymity can increase or decrease the influence of the group over its members depending on the social context, and group-normative behaviour can increase or decrease. Research undertaken to investigate these hypotheses, in particular in CMC, is examined in the following section (see also Postmes et al., 1998 for a review).

Cognitive SIDE research

The earliest study aimed to test these alternative deindividuation predictions related to the salience of social category was conducted by Reicher (1984), quite some time before SIDE was formally expressed as a model. The study brought science and social science students together in the same room, creating an intergroup scenario. Participants were either in a 'group' condition where science and social science students were seated at opposite tables in a room, facing each other, or an 'individual' condition where scientists and social scientists were mixed together facing the front of the room. The group condition was aimed to increase the salience of the categories 'scientist' and 'social scientist' for the participants, while the individual condition was aimed to increase the importance of individual identity. All participants in the group condition were told that they would be tested as groups, not as individuals, whereas in the individual condition, participants were informed that they would be tested as individuals. As in the original Zimbardo (1969) studies,
anonymity was manipulated by making participants wear baggy overalls and masks, so that others were not identifiable to them. Identifiable participants were dressed in their normal attire. In the group-anonymous condition, one group wore red masks and one wore white masks. This was so that groups were clearly differentiable from each other. In the individual-anonymous condition, all participants wore white masks.

Participants then viewed a video-tape concerning the issue of vivisection. In the video, scientists were presented as pro-vivisection and social scientists were presented as anti-vivisection. Participants' attitudes towards vivisection were measured. Results indicated that people conformed more to the ingroup norm when they were immersed in their group. That is, scientists in groups were more pro-vivisection than scientists tested as individuals, and social scientists in groups were more anti-vivisection than social scientists tested as individuals. Further, it was found that science students adhered more to the group norm (pro-vivisection) when they were deindividuated and when group membership was salient (the group-anonymous condition) than in the individual-anonymous condition. The effect was non-significant when participants were not deindividuated. It is not clear why this effect did not occur for social science students, but generally speaking, these early results are consistent with SIDE's alternative deindividuation theory. When group membership is salient, anonymity can serve to increase adherence to the norms of that group.

SIDE has been tested using CMC as a tool to manipulate deindividuation. As stated in Chapter 2, deindividuation theory has been employed to attempt to explain CMC phenomena such as flaming. SIDE research has challenged the notion that behaviour in CMC creates a classically deindividuating situation resulting in reduced
self-awareness and more extreme, disinhibited behaviour (Reicher et al., 1995). In particular, SIDE challenges the idea that group polarization observed in anonymous CMC comes about due to these deindividuating processes. Instead SIDE proposes, following from SCT, that group polarization is not simply a process of expressing an extreme, novel argument (e.g., see conclusions of Kiesler et al., 1984; Siegel et al., 1986). Rather, polarization is a process of conformity to the ingroup norm, relative to the position of the outgroup. That is, polarization is the expression of attitudes consonant with the ingroup prototypical norm, in light of known outgroup attitudes.

The first studies relating to SIDE in the CMC domain were therefore designed to test if anonymous CMC leads to heightened group polarization, because anonymity increases the salience of social categories and promotes adherence to group norms, not because people become less inhibited and behave more extremely.

Spears, Lea and Lee (1990; see also Spears & Lea, 1991 for further analyses of this data set) designed a study to explore the effects of deindividuation (using CMC) on group polarization. Participants consisted of Internet mail users who were asked, in groups of three, to discuss four controversial issues over the computer after having given their individual attitudes on these issues a few days earlier. After discussion of the issues, their attitudes were measured again to examine the possibility that attitudes became polarized during the course of the experiment. Group identity was made salient by informing participants that comparisons would be made between groups in relation to their efficiency in using the CMC system and their communication style. The individual condition informed participants that comparisons would be made between individuals in relation to their efficiency in using the CMC system and their communication style. In the deindividuated
condition, participants were physically isolated from the other participants. In the
individuated condition, participants were seated in the same room, facing each other.

Results indicated that polarization towards the group norm was greatest in the
deindividuated with salient group identity condition and lowest in the deindividuated
individual condition. Greater polarization was not related to the expression of more
uninhibited behaviour but indicated movements away from individual attitudes
towards the group norm. These results are similar to those of Reicher (1984) and
provided further support for the SIDE prediction that the effects of deindividuation
are dependent not only upon the manipulation of deindividuation, but also on the
salience of social categories. Furthermore, results contradict Kiesler et al. (1984) in
that polarization is not related to disinhibition. It is a response to the social context
of the interaction. Reicher et al. (1995) suggest that "it becomes necessary to ask
which level of self-categorization is operative and what are the norms associated
with it" (p. 183) in order to predict what behaviour will occur.

Postmes (1997, Studies 4.1 and 4.2) further investigated the issue of
polarization in computer-mediated groups. ‘Conservative’ business students from
Amsterdam and ‘liberal’ psychology students from Manchester were asked to discuss
three topics: homosexuality, drugs and the monarchy after having given pre-test
attitudes on these issues. After discussion, participants filled in a post-test
questionnaire related to their attitudes on the three issues, repeated the discussion
phase and filled in another post-test questionnaire. In the anonymous condition,
discussants were identified by their initials only. In the identifiable condition,
participants were identified by their first name and were informed that their video-
imaged pictures would be shown to the outgroup. During the experiment,
participants viewed pictures of three randomly selected supposed outgroup members.
Results indicated that when the two groups discussed the issues anonymously, bipolarization of attitudes occurred, such that groups’ attitudes polarized, or became more extreme in the direction of the group norm. That is, the two groups shifted further apart in favour of their own group norm. In contrast, identifiability tended to bring the attitudes of both groups together. The follow-up study further revealed “attenuation of attitude convergence” (p. 91) in the anonymous condition, although interestingly no bipolarization.

Postmes, Spears, Sakhel and de Groot (1999) conducted two studies in which the effects of identifiability on pre-established groups norms were tested. Participants were primed with either pro-social or efficiency-oriented behaviour in the form of scrambled sentences, in order to induce either a pro-social or efficiency-oriented norm. Groups of three or four were then asked to solve a dilemma using CMC to communicate with each other. Similar to Postmes (1997, Experiments 4.1 and 4.2), participants were visually identifiable by having their picture and those of other group members displayed on the screen), or visually anonymous to the rest of the group. Results indicated that anonymous groups’ behaviour was consistent with the primed norm, but identifiable groups’ behaviour was not. In a follow-up study, this finding was replicated and further enhanced by demonstrating that communication reinforces the group norm. When primed with a particular group norm, they saw their group as acting more in line with that norm.

Postmes and Spears (1999) investigated gender differences relating to dominance in meetings conducted via CMC. Gender stereotypes were primed and participants were engaged in discussions about gender-relevant issues. During discussion, participants were made either anonymous to each other, or made personally identifiable to each other through the exchange of biographical
information. Interaction style during discussion and the stereotypical perception of fellow group members were measured. Results indicated that stereotype activation teamed with anonymity produced the most stereotyping and gender-stereotypical behaviour. That is, anonymity can, if stereotypes are activated, elicit stereotypical gender perception and may actually increase stereotypical perception. That is, reduced biographical information group members induced stereotyping and stereotypical behaviour amongst the group in the same manner as SIDE predicts for visual anonymity.

Overall, research associated with the cognitive aspects of anonymity in CMC, and in other domains, consistently show that anonymity increases group-normative behaviour (see Postmes et al., 1998 for a review). Generally speaking, rather than allowing people to 'break free' from their group(s), anonymity increases people's adherence to the group norms expected of them in everyday life. In relation to CMC, this is an important challenge to previous theories explaining behaviour in the medium. In contrast to the idea that behaviour in CMC is anti-normative, deregulated and random, research conducted under the framework of the SIDE model has found CMC to be capable of reinforcing group boundaries and keeping behaviour in line with group norms (Postmes et al., 1998).

It is important to again note that cognitive SIDE research has focused on the behavioural effects of visual anonymity of group members to the self. In accordance with SCT ideas, visual anonymity obscures interpersonal differences within the group such that an individual's view of group members becomes depersonalized. Similarly, as in Postmes and Spears' (1999) study, the lack of biographical individuating information has a similar effect. If group membership is salient, then anonymity will increase this salience further because interpersonal differences are
obscured, and increased group-normative behaviour should be the result. The
cognitive SIDE, however, does not presently separate these phenomena from the
effects of visual anonymity to others, or the effects of identifiability not related to
visibility or biographical information (e.g., identifiability by name or concealment of
one’s identity by not supplying a name). Recently, SIDE theorists have considered
this issue (e.g., see Reicher, in press) however the strategic component of the SIDE
model explicitly addresses the possible effects of being anonymous or identifiable to
others.

The strategic SIDE

The cognitive SIDE stresses that manipulations of identifiability can increase
the impact of group norms under conditions of high group salience. That is,
anonymity can have cognitive or self-categorical consequences in making social
identity more or less salient, depending on the context of the interaction. The
strategic component of the SIDE model proposes that the impact of group norms on
behaviour can also be affected by another route related to the strategic expression of
identity (Spears & Lea, 1994; Postmes, 1997). If personal identity is made salient in
a social context, for example, during a person-to-person competition between
persons A and B, it encourages individual, idiosyncratic behaviour. Entering
anonymity into the equation allows Person A to express herself as an individual and
say things with which Person B may disagree. Because person A is anonymous, she
will not fear punishment from Person B and can express herself freely.

A similar process occurs in an intergroup context (Reicher et al., 1995;
Spears & Lea, 1994). If, for example, Person C identifies with a particular social
group, and is interacting with a group of others whom he considers to be members of
the opposing and powerful outgroup, under conditions of anonymity Person C will be
more likely to express aspects of his ingroup identity because he cannot punished by
the outgroup for doing so. That is, he will be more likely to act in line with his own
group norms in the presence of an opposing and powerful outgroup, as long as he is
anonymous and cannot be punished for it. More explicitly:

we would propose that group members will express those behaviours that are
consonant with their social identity but which are disapproved of by the
outgroup, only to the extent that they have the power to overcome any actual
resistance and/or retaliation by that outgroup. Any variable that increases the
power of the outgroup in relation to the ingroup will decrease the expression
of such behaviours. Any variable which increases the power of the ingroup
in relation to the outgroup will increase the expression of such behaviours
(Reicher et al., 1995, p. 186).

Being identifiable to the outgroup is one such variable that will increase the power of
the outgroup over the ingroup and should, according to SIDE, decrease the
expression of ingroup-normative behaviours. That is, increasing identifiability to the
outgroup increases the power of the outgroup to make ingroup members accountable
for their behaviour.

However, it is different when the audience, or co-present individuals are
ingroup members. Reicher et al. (1995) propose that under conditions where one is
identifiable to other ingroup members, the power of the outgroup over the ingroup is
diminished because the presence of the ingroup provides ‘support’ against the outgroup:

On the one hand, when ingroup members are made more identifiable with respect to the outgroup, the relative power of outgroup over ingroup will be increased by increasing their ability to hold ingroup members to account for their actions. On the other hand, when ingroup members are made more identifiable with respect to ingroup members, the relative power of outgroup over ingroup will be decreased by increasing the ability of ingroup members to support each other in resisting the outgroup (p. 187).

Specifically, co-presence with the ingroup will increase social support by the ingroup against the outgroup, and this should result in increased enactment of the salient ingroup identity. Being in the presence of others who share an identity, should encourage the enactment of that identity. On the other hand, identifiability to the outgroup will decrease the enactment of ingroup identity because of fear of punishment by the outgroup. Whatever audience is present however, it is important to note that the strategic SIDE proposes that social identity will be explicitly expressed or attenuated depending on the situation. A figure representing the entire SIDE model is presented in Figure 3.1.
Few studies have investigated these strategic effects on behaviour, and there is an important gap in the realm of computer-mediated communication. The current research therefore aims to extend this area instead of the more researched, yet still developing cognitive dimension of the SIDE model. Research conducted on the strategic dimension of the SIDE model has mainly focused on the effects of identifiability to powerful outgroup audiences and issues regarding surveillance by powerful outgroups, however more recent research has begun to investigate the...
importance of ingroup audiences. An overview of the literature associated with strategic and self-presentational behaviour is presented here.

Reicher and Levine (1994a) report the results of two studies in which they made participants identifiable to a powerful outgroup audience and measured the level of group-normative behaviour. In the preliminary study, the researchers asked participants to divide into groups based on whether they were opposed or in support of the British Campaign for Nuclear Disarmament (CND). Pro- and anti-nuclear disarmament participants were then either made visible or non-visible to the group of people holding the opposing view (the outgroup). Next, participants were asked to complete a nuclear disarmament attitude scale and then evaluate a debate between supporters and opposers of nuclear disarmament. During the debate, participants were asked to allocate points to each side based on the force of the arguments, and then allocate a final set of points at the conclusion of the debate. Whilst doing so, they were either visible to the ingroup and outgroup by being seated around the table so everyone could see everyone else, or non-visible to the outgroup (but still visible to the ingroup) by having the two groups separated by a screen.

Further, in the visible condition, participants were informed that afterwards, they would be asked to read their responses in front of the whole ingroup and outgroup, and that the outgroup had the power to partition points amongst the ingroup after the experiment. In the non-visible condition, participants were informed that they would read their responses in front of the whole ingroup who would collate scores for the outgroup. Again, the outgroup had the power to partition points amongst the ingroup.

Results revealed that groups generally favoured their own group (ingroup favouritism) by allocating more points to the ingroup. More interestingly, it was
shown that ingroup favouritism increased when participants were not individually identifiable to the outgroup. From these findings, Reicher and Levine conducted another study, hypothesising that visibility to a powerful outgroup would decrease the expression of behaviours which are consonant with an ingroup identity but which the outgroup opposes (1994a). However, it was also predicted that behaviours not opposed by the outgroup, or behaviours not consistent with ingroup identity will not be affected by the manipulation of visibility.

In this second study, either a ‘student’ or ‘scientist’ identity was made salient by informing participants that the researchers were interested in how students/scientists viewed particular issues related to work and leisure. Participants were asked to complete a questionnaire related to these issues either under conditions of identifiability, where participants were asked to write their names on the questionnaires, or anonymously, where participants were asked to use a nick-name. Participants were under the impression that their responses would be read by an outgroup audience, in this case, academic staff.

Results indicated that participants in the ‘student’ identity condition were more likely to make ‘punishable’ statements (e.g., choosing psychology because it is easy, that they would copy people’s work if they thought they could get away with it) when they were anonymous to the outgroup academics. However, those under the ‘scientist’ identity were not similarly more likely to make such punishable statements when they were anonymous to the academics. From these results, Reicher and Levine (1994a) concluded that the increased expressions of ‘punishable’ behaviours, disapproved of by the outgroup, are only facilitated by anonymity under conditions where the behaviours are in line with the currently salient ingroup identity.
In following up this idea, Reicher and Levine (1994b) conducted a further study in which physical education (PE) students were asked to complete a similar questionnaire related to attitudes on work and leisure. Half of the participants were made identifiable to the outgroup (the course organisers) by being asked to write their names on the questionnaires, and half were asked to write a nick-name on their questionnaires, and were therefore non-identifiable to the outgroup. Results indicated that for punishable items, identifiability led to decreased conformity to the ingroup stereotype, but for non-punishable items, identifiability to the outgroup led to increased accentuation of students’ differences from the outgroup. Decreasing identifiability to a powerful outgroup decreases the power of that outgroup to sanction punishable behaviour.

Reicher, Levine and Gordijn (1998) examined this issue further and also tested the SIDE prediction that co-presence with other ingroup members should enable people to explicitly resist the outgroup and assert their ingroup identity. In the first of three experiments, Reicher and colleagues asked participants to indicate whether they were pro- or anti-fox hunting, and asked the anti-hunting participants to complete a questionnaire responding to pro- and anti-hunting arguments. Results were contrary to predictions in that co-presence with the ingroup actually decreased the expression of anti-hunting (group-normative) arguments. However, it was reasoned that participants might have perceived the intergroup context as ‘participants versus experimenters’ instead of the desired ‘anti- versus pro-hunting’. In this case, visibility to other participants might have been used to resist an “experimentally imposed definition of themselves as favouring disruptive activity” (p.15). That is, if the experimenters were seen as a more extreme anti-hunting group,
then the participants would reject the extreme norms imposed upon them and this should lead to decreased expression of the ingroup identity.

Study 2 tested this idea by eliminating participants’ identifiability to the pro-hunting group, leaving the participants only identifiable to the experimenters. The results of the first study were replicated. Finally, Study 3 focused exclusively on the relationship between students and staff (participants and experimenters). As predicted, students increased their endorsement of ‘student’ activities that were punishable by staff, when they were identifiable to other students. This research therefore supports the SIDE model’s prediction that co-presence with other ingroup members increases people’s ability to resist the outgroup. That is, people consciously or explicitly express their ingroup identity because the presence of the ingroup members allows them to do so.

The effects of identifiability to an ingroup audience in the absence of outgroup involvement were studied by Noel, Wann and Branscombe (1995). In two studies, Noel and colleagues predicted that peripheral group membership of a desirable group would increase derogation of the outgroup under conditions of identifiability to the desirable ingroup. In the first experiment, participants were informed by bogus personality test feedback that they were either ‘Type P’ (the desirable group) or ‘Type O’ (the less desirable group). In fact, all participants were told that they were ‘Type P’ persons. However, half were told that they were just inside the Type P category (peripheral group members) or near perfect examples of Type P persons (core group members). Further, half were assigned to a public condition and half to a private condition. In the public condition, participants were informed that questionnaire responses they were to complete would be discussed amongst other Type P persons after completion, and the private condition,
participants were informed that their responses would be confidential. The dependent variable was the participants’ choices of conciliatory/co-operative versus coercive/threatening choices for ingroup (Type P) and outgroup (Type O) persons. Results supported the hypothesis that peripheral group members would engage in more outgroup derogation under conditions of identifiability to the desirable ingroup. Coercive and threatening influence strategies were chosen more by identifiable peripheral group members, than anonymous peripheral group members. This suggests that behaviour towards the ingroup was affected by identifiability, because private views of the outgroup held by peripheral ingroup members were not negative in the absence of the identifiability manipulation.

In the second experiment, American university sorority and fraternity members participated in groups of the same sorority or fraternity. The core group members consisted of already accepted and active members of the sorority or fraternity, while the peripheral group members consisted of ‘pledges’: people not yet in the sorority or fraternity but under the process of initiation to be allowed into the organisation. Participants in the public condition were told that they would be asked to share their responses with other ingroup members, whereas participants in the private condition were told that they would meet with their ingroup regarding another matter, but that their questionnaire responses were confidential. Participants completed the same persuasion questionnaire as in the first experiment and were also asked to complete an ‘outgroup derogation’ questionnaire by rating both the ingroup and outgroups on a list of positive and negative traits. Results indicated, similarly to the first experiment, that identifiable peripheral group members preferred coercive strategies to persuade the outgroup. Further, they were more derogatory towards the outgroup on trait adjective ratings. The research overall indicates that peripheral
group members behave differently when their responses are public, than when they are private. Noel et al. (1995) state that this is the case because peripheral group members need to present themselves positively to the ingroup, in order to be accepted into the ingroup. That is, an explicit strategy drives their behaviour. No such concerns are present for core group members who already have a stable position within the group.

Barreto and Ellemers (in press) examined group members’ choice to work on individual or on group status improvement in two studies and this willingness to work for the group was tested as a function of the degree of ingroup identification (high or low) and accountability of responses (anonymous or accountable to the ingroup). It was hypothesised that high identifying group members would be more likely to be concerned with the welfare of the group and would be more willing to work for the group, whereas low identifiers would only be persuaded to do so out of explicit self-presentational concerns when they are accountable to the ingroup. High and low identifiers were established by conducting a median split of scores in response to ingroup identification questions.

In Experiment one, participants were separated into minimal groups (see Tajfel, Flament, Billing & Bundy, 1971) of inductive or deductive reasoners and were seated in cubicles behind personal computers to complete the questionnaire. Accountability was manipulated by informing participants that their responses, along with their photograph, would be shown on the screens of other ingroup members. They were also told that they would have to justify their responses at the end of the session. Participants engaged in a decision-making task and were informed that the outgroup had out-performed the ingroup and that the in-group’s performance was also worse than that of the supposed norm for the student population. After gaining
this knowledge, participants were given the choice in a second task to either improve on this score by working alone or by working within the group. Results indicated that while accountability did not affect the responses of high identifiers, it significantly influenced low identifiers’ choice to work for the status improvement of the group. That is, identifiability influenced low identifying group members to adhere more to the group norm.

This was explored further in a second experiment. Participants engaged in a similar procedure to that of the first study, but in this study participants in the anonymous condition were told that their responses would remain anonymous. Participants in the accountable condition were told that their responses would be registered and shared with other ingroup members during a discussion, and each group member would be asked to justify his or her own responses. Results again indicated that low identifiers were more likely to follow group norms and work with the group when they were identifiable, rather than anonymous. High identifiers worked equally with the group under conditions of anonymity or identifiability. However, this study also showed that when the norm allowed for group as well as individual improvement, accountability had no effect on low identifiers’ responses. Thus, factors other than accountability determine which behaviour best serves positive self-presentation. In particular, the salient norm also affects which behaviour is most likely to be expressed.

Therefore, increasing identifiability to the ingroup can increase the explicit motivation to adhere to ingroup norms for explicit self-presentational reasons. Indeed, self-presentation theories state that behaviour in the presence of an audience is related to the desire to be positively evaluated by that audience (e.g., Baumeister, 1982). Being identifiable to an important or salient ingroup should similarly increase
the desire in the individual to be evaluated positively by that group (e.g., Barreto & Ellemers, in press; Noel et al., 1995). Whereas being anonymous to others in a group may allow "one to express one's true mind, or authentic self, unfettered by concerns of self-presentation, or even physical sanction" (Spears & Lea, 1994, p. 430), being identifiable to others in that group may increase pressure to conform to the norms and expectations of the group due to an explicit motivation to be positively evaluated by the group. That is, identifiability to a group should encourage adherence to its norms.

However, the idea that identifiability within an ingroup can increase both solidarity in the group in expressing ingroup norms (e.g., Spears & Lea, 1994), and pressure to adhere to those norms, presents somewhat of a contradiction which needs to be resolved. It is problematic because it implies that in the one sense, identifiability within a group is positive and helps people to express their views, and in another sense, it is implied that identifiability to a group can increase pressure - perhaps a negative effect - to be like that group in order to be positively evaluated. This problem can be solved by explicitly addressing the differences between the concepts of 'co-presence with' and 'identifiability to' others. It is probable that there are effects of being co-present with a group, which are entirely separate from being identifiable to a group. For example, Barreto and Ellemers' research (in press) indicates that accountability, or being made to justify one's responses, has independent effects to the manipulation of visibility. I also believe that visibility will not always have the same effects as identifiability through other means (e.g., supplying one's name and e-mail address) and so this research aimed to examine the concept of 'identifiability to' others more explicitly.
If we move into the realm of CMC, it is rarely the case that individuals are physically co-present with others. Communicators are generally in their own homes/offices/laboratories communicating with remote others who they cannot see. However, communicators often make themselves identifiable to others either by supplying their name, locality or e-mail address. I will call this type of identifiability *Internet identifiability*. It is likely that self-presentational concerns will be important to communicators under these circumstances, however this idea has not yet been examined.

It is conceivable that being identifiable and co-present with a group of like-minded people would increase a sense of solidarity within that group. People can see each other and “co-ordinate resistance to the out-group by gauging others’ reactions and responses” (Spears & Lea, 1994, p.447). However, in a physically anonymous intergroup CMC interaction where a person is communicating with both ingroup and outgroup members, they are communicating in an intergroup situation, but are not in the presence of, nor are they physically identifiable to the ingroup or outgroup. If conflict were to arise between the person and outgroup members, it is improbable that being identifiable to the ingroup (by name, or e-mail address for example) would provide the same kind of support as would being in their physical presence. It is more likely that group members would be enacting their identity not because they are supported by the ingroup in doing so, but because they want to be positively evaluated. If they can be linked to what they have said, it is likely that they will want their views to reflect the appropriate ingroup position, so that they will be positively evaluated by their group. Past research suggests that people strategically behave in ways which are favoured by their audience, group or team when they are identifiable, but perhaps not when they are anonymous (e.g., Deutsch & Gerard, 1955; Plant &
Devine, 1998; Williams, Nida, Baca & Latane, 1989). The current project examines the effects of identifiability on behaviour in a physically anonymous CMC situation, to attempt to extend the SIDE model further.

Furthermore, it is important to note that strategic behaviour, according to SIDE should always involve an explicit or conscious process (e.g., a desire to resist the outgroup). The possibility that group-normative behaviour may result automatically or through an implicit path due to identifiability has not yet been examined yet there is much evidence that group processes can result implicitly (e.g., Bargh, 1996; Banaji & Greenwald, 1994). Indeed, it is adaptive for people to be able to automatically adjust their group-normative behaviour if a particular situation calls for it. This may be particularly important in demanding communicative settings where immediate responses are required and communicators do not have a lot of time to consciously adapt to the situation. This research therefore attempts to extend the SIDE model by examining whether conscious responses to identifiability are indeed always responsible for changes in behaviour, or if automatic processes can also be implicated. Particularly, how identifiability impacts upon the hostile behaviour in CMC and the social psychological processes involved in this hostility, is the focus of this research.

**SIDE and flaming**

Because it examines the expression of intergroup behaviour, SIDE is applicable to the study of flaming. As stated in the introductory chapter, flaming can be seen as the expression of group-normative behaviour. As observed by Lea et al. (1992), flaming is a context-driven phenomenon and can be seen as the expression of
group-normative behaviour in that context. For example, newsgroups containing the word ‘flame’ in the title encourage flaming as a normative behaviour, yet in other newsgroups, flaming is inappropriate and occurs less frequently. Lea and colleagues claim that flaming is a normative process occurring when norms and standards of behaviour become salient. Similarly, a meta-analysis conducted by Postmes and Spears (1998) indicated support for the idea that deindividuation can cause normative behaviour.

The group-normative aspects of flaming can therefore be studied under the framework of the SIDE model. Particularly, if flaming can be seen as the expression of group-normative behaviour in appropriate contexts, then it is important to establish the types of intergroup processes that are evident in flaming, the underlying mechanisms by which these occur, and how they are influenced by identifiability manipulations. If flaming is a group-normative phenomenon then it should exhibit the types of intergroup processes observed in other intergroup situations. Processes such as group polarization, social influence and stereotyping, for example, should be present in flaming communications between different social groups.

The current focus is on the role of flaming in the perpetuation of stereotypes, an area not examined until now. In studying the expression and perpetuation of stereotypes in hostile flaming, I am not claiming that these processes are always hostile, nor that flaming will always contain stereotypical content. Quite to the contrary, evidence suggests that stereotyping is not typically hostile, negative and prejudiced (e.g., see the discussion of Oakes et al., 1994) and that flaming can be purely interpersonal; simply one person insulting another (e.g., Chester, 1996). However, social behaviour of all forms, be it hostile, negative or other, rests on stereotypical representations of groups, including stereotypes of ourselves as
members of ingroups, and others as members of outgroup (Turner et al., 1987). As an intergroup process, the perpetuation of stereotypes should be high under conditions of high group salience (see Oakes et al., 1994), which should be evident in flaming.

Conclusions

Both the strategic and cognitive components of the SIDE model make predictions about what will happen to intergroup behaviour under conditions of anonymity and identifiability and the explicit social psychological processes involved. These predictions can be extended to make hypotheses about the expression of specific types of intergroup behaviour such as stereotypical language in flaming CMC. They can also be extended to study the case of Internet identifiability discussed earlier, where identifiability is not dependent on physical cues, but other cues to identity such as name and country of residence.

The predictions derived from SIDE for this research are discussed in Chapter 5 at length. However, before examining these predictions relating to the perpetuation of stereotypes in flaming CMC, it is important to first discuss how the expression of stereotypical depictions can be measured in CMC. It is important to consider that CMC is a text-based medium, and so an examination of stereotypes in written communication was necessary. This is discussed in Chapter 4.
Chapter 4

Measuring stereotypical language use

Introduction

This chapter discusses the role of language in the expression and transmission of stereotypes, and focuses on a specific way of measuring these processes. In doing so, this chapter:

1. Provides a definition of the terms ‘stereotyping’ and ‘stereotype’ and discusses the role of language in stereotyping. It also provides a rationale for the use of the linguistic category model (Semin & Fiedler, 1988) to examine the communication of stereotypes.

2. Provides an overview of the linguistic category model.

3. Provides an overview of research into the linguistic intergroup bias (e.g., Maass, Salvi, Arcuri & Semin, 1989) and discusses the possible causes of the bias, including its potentially implicit functioning and also the possible role of motivated language use.

4. Concludes by stating how the LCM will be applied to the measure of stereotypical language use in CMC.

Stereotypes and language

According to Oakes et al. (1994), stereotyping is the “process of ascribing characteristics to people on the basis of their group memberships (p.1). The
“collection of attributes believed to define or characterize the members of a social group is a stereotype” (p.1, emphasis added). Therefore, if a person comments for example that ‘Kevin is a member of a white-power group, and therefore he is racist’, he/she is attributing the stereotypical characteristic ‘racist’ to Kevin, based on his membership in a white-power group. This also implies that all members of white-power groups are racist. Hamilton and Sherman (1994) comment that stereotypes act as expectancies that guide both the processing of information about the group as a whole and also about particular members of a group. That is, future perceptions of groups and members of groups are guided by the stereotypes and beliefs we hold about them. Of interest to this research is the use of language as a tool for the communication and transmission of stereotypes, and how other factors (notably identifiability) affect the communication of stereotypes.

The use of language as a tool for the transmission and maintenance of stereotypes has only recently received attention (e.g., Coupland & Coupland, 1990; Hamilton, Gibbons, Stroessner & Sherman, 1992; Van Dijk, 1988; see Maass & Arcuri, 1996 for a review). This is surprising considering that language is “probably the dominant means by which they [stereotypes] are defined, communicated and assessed” (Maass & Arcuri, 1996, p. 193). Language is the primary means by which stereotypes are communicated amongst people, and across generations. Recently however, particularly with the work of Anne Maass and colleagues, there has been increased interest in the role of language in stereotyping. Particularly, Maass and Arcuri (1996) emphasise the importance of language in the transmission and maintenance of stereotypes.

Firstly, in relation to the transmission of stereotypes, Maass and Arcuri argue that because language is a culturally shared phenomenon, it provides ideal means for
the preservation of stereotypic beliefs. This can occur through the vocabulary of a language and through ‘sayings’ about certain groups. An example of such a saying would be ‘whingeing Pom’; a statement used primarily by Australians referring to English people’s apparent propensity to complain a lot. Sayings embedded in a language at any given time portray social beliefs about groups, and these beliefs are automatically “absorbed” during language acquisition (Maass & Arcuri, 1996, p. 194). These beliefs are transmitted through the process of communication, and particularly mass communication (e.g., racist and sexist talk) and also at the interpersonal level through, for example, parent-child and teacher-pupil interactions. Stereotypes about groups can be transmitted to children when they overhear stereotypical trait descriptions about groups from valued elders. Such verbal labels provide details about what characteristics are associated with particular groups and serve to transmit stereotypes over generations.

In addition to the transmission of stereotypes, language also plays a vital role in their maintenance (Maass & Arcuri, 1996). The level of language abstraction used to describe behaviours that are congruent or incongruent with stereotypes about others becomes important here. This relates to the ways in which people describe specific behavioural episodes. Sometimes, a description of a behavioural episode implies that the behaviour is related to an enduring state or personal characteristic of the actor (see also Jones & Nisbett, 1972). For example, we may assume that one person hit another either because he/she dislikes the person, or because he/she is aggressive. However, on other occasions, people can describe behaviours as if they were isolated events and not characteristic of the individual performing the action. For example, the hitting episode could be described as merely ‘hitting’; an isolated
event, or perhaps ‘hurting’, which still emphasises the uniqueness of the event rather than characteristics about the actor that brought about the event.

The important point to be made here is that through differential use of verbs and adjectives, a speaker or writer can transmit and aid in the maintenance of impressions about a person or group member. Whether a person describes another person's behaviour as an isolated event, or as an enduring personal or group characteristic will affect the way people perceive that target in future (Maass & Arcuri, 1996). As such, the use of language becomes an invaluable tool to examine how people express their expectancies and stereotypes about others, and also how people’s descriptions of targets’ behaviour affect the perpetuation of stereotypes.

The use of abstract language implying stability of behaviours over time may also perform an expectancy or stereotype maintenance function. That is, it is possible to maintain existing stereotypes through language. However, before examining this issue, it is necessary to outline the linguistic category model which forms the basis of the measurement of stereotypical language.

The linguistic category model (LCM)

According to the LCM (e.g., Semin, 1994; Semin & Fiedler, 1988, 1991), there are four levels of language abstraction, ranging from most concrete to most abstract, with which people can describe other people and their behaviours. The model was originally formulated to examine the cognitive implications of linguistic categories (verbs and adjectives) for interpersonal descriptions (Semin & Fiedler, 1988). Semin and Fiedler (1988) introduced the four categories of descriptive action verbs (DAVs), interpretative action verbs (IAVs), state verbs (SVs) and adjectives (ADJs) to examine this issue.
Descriptive action verbs (e.g., “Bruce hits Jacko”) provide a description of an event or action where there is no implied connection with other events or behaviours. In this case, Bruce is hitting Jacko, but it does not imply that he will hit Jacko on future occasions. Further, no interpretation of the event is given. DAVs provide only a description of the action, which separates ‘hitting’ from other actions like ‘kicking’ or ‘tripping’. More generally, DAVs refer to one action and at least one physically invariant property of the action (e.g., hitting - fists). DAV actions have a specific beginning and end, and they are the most concrete category of the LCM.

Interpretative action verbs (e.g., “Bruce hurts Jacko”) go one step further by not merely being a description of the event, but also providing an interpretation of it. Bruce is no longer simply hitting Jacko. His behaviour towards Jacko is assigned meaning through interpretation. That is, IAVs are similar to DAVs in that they describe a concrete event with a specific beginning, end and verifiability of having taken place, but they add something more to the account of the event than simply a description. More generally speaking, IAVs refer to a general class of behaviours, involving a defined action with an obvious beginning and an end, but also having meaning.

Thirdly, state verbs (e.g., “Bruce hates Jacko”) relate to a psychological state of Bruce in relation to Jacko. It does not describe a particular event, rather it is a property not easily verified by an outside observer. It also has a hypothetical interpretative status and refers to the feelings, emotions or other psychological criteria of the actor within a particular context. It is also implied, to some degree, that the psychological state will be somewhat enduring. More generally, SVs refer to emotional or mental states with no specific beginning or end.
Finally, adjectives (e.g., “Bruce is aggressive”) relate to a specific personal characteristic of the actor. Saying that Bruce is aggressive implies that he possesses this characteristic relative to others who are not necessarily aggressive. Adjectives used to describe persons also imply that the property is enduring and that the actor will display the characteristic in future.

The final point is perhaps the most important in relation to use of the LCM to measure the expression of stereotypes. That LCM categories are relative measures of endurability of behaviour or personal characteristics is important for the consideration of measuring stereotypical language use. That is, descriptive action verbs imply that the action is a singular, not necessarily replicated event. There is no evidence from the DAV that the action is related to any specific disposition of the actor, nor that it will happen again. From IAVs, we gain a more general picture regarding the behavioural event, and most of the time will attribute the event (e.g., “helping”, “cheating”) to the actor rather than the receiver (see Fiedler & Semin, 1988; Franco & Arcuri, 1990). As the description of the behaviour becomes more abstract, it implies more about the characteristics of the actor rather than the event or the object itself. Similarly, SVs are the expressions of qualities of the actor related to their internal psychological qualities at the time of the interaction, and adjectives are trait descriptions of the actor, expected to endure beyond the specific event. So, as we move from concrete to abstract descriptions of an event, it is possible to infer more information about the actor him/herself and expect that this information will be consistent across occasions. That is, abstract language implies greater temporal and cross-situational stability (Semin & Fiedler, 1988).

The use of the LCM as a tool to measure stereotypical language use becomes clear when the work of Anne Maass and colleagues along with other research on the
linguistic intergroup bias (LIB) is examined (e.g., Arcuri, Maass & Portelli, 1993; Franco & Maass, 1996, 1999; Karpinski & von Hippel, 1996; Maass, Ceccarelli & Rudin, 1996; Maass, Milesi, Zabbini & Stahlberg, 1995; Maass, Montalcini & Biciotti, 1998; Maass, Salvi, Arcuri & Semin, 1989; Ng & Chan, 1996; Rubini & Semin, 1994; von Hippel, Sekaquaptewa & Vargas, 1997; Webster, Kruglanski & Pattison, 1997; Werkman, Wigboldus & Semin, 1999; Wigboldus, Semin & Spears, in press). The research into this phenomenon has applied the LCM, primarily designed to examine interpersonal descriptions, to an intergroup setting to aid in understanding intergroup relations and the processes involved in the expression and maintenance of stereotypes.

The linguistic intergroup bias and its causes

The LIB was first observed by Maass et al. (1989) and has since then sparked a great deal of interest in the power of language to transmit and perpetuate social stereotypes. Maass and colleagues state that the LCM has useful implications for the study of intergroup relations and stereotyping. They refer to the minimal group studies (e.g., Tajfel et al., 1971) which indicate that mere categorization of people into groups can lead to outgroup discrimination and ingroup favouritism. Social identity theory maintains that this is due to an explicit motivation to enhance the status and esteem of the ingroup relative to other comparison groups, in order to maintain a positive social identity. Consistent with this idea, Maass and colleagues also note that people tend to hold different expectancies of the ingroup and outgroup. Most commonly, people expect ingroup members to display positive attributes and behaviours than outgroup members (Howard & Rothbart, 1980).
is upheld, people are more likely to infer positive attributes about members of the ingroup, and negative attributes about members of the outgroup. That is, ingroup members will expect consistently more positive behaviours from the ingroup and consistently less positive behaviours from the outgroup.

However, behaviours that are inconsistent with one’s expectations will naturally occur from time to time, and there are, as Maass and colleagues state, at least two ways in which to reconcile unexpected or inconsistent behaviours. One can dissociate the actor from the group, or dissociate the act from the group member. For example, if a known member of a white-power supremacy group was seen hugging a black person, the two ways in which to come to terms with his/her behaviour would be to assume (a) that he/she is not a typical white-power group member and remove them from the category, or (b) say that the hug was just an isolated event and would not happen again. It is to this latter possibility that Maass and colleagues turn.

Maass et al. (1989) propose that in an intergroup context, language is used “in a manner that renders disconfirmation of preexisting ideas about in-group and out-group difficult” (p. 981). Maass and colleagues therefore hypothesised that the same behavioural episode (e.g., where Bruce is seen to be hitting Jacko) would be described in different ways depending on the group membership of Bruce, the person performing the behaviour, and whether it is congruent or incongruent with expectancies about Bruce as a member of that group.

Maass et al. (1989) specifically predicted that socially desirable ingroup behaviours and socially undesirable outgroup behaviours would be described using more abstract language (SVs and ADJs). The use of such language implies high stability over time, reflecting consistency with expectations, and also leading to resistance to disconfirmation. On the other hand, socially undesirable ingroup
behaviours and socially desirable outgroup behaviours were predicted to be described in more concrete terms (DAVs and IAVs), indicating instability of the action, inconsistency with expectations and openness to disconfirmation.

In Experiment 1, Maass et al. (1989) investigated a real-world intergroup situation of the ‘palio’ horse races in Ferrara, a northern Italian city. Each year, the horse race divides the town into quarters, who compete against one another in the event. Due to the long history of the palio, and the strong intergroup competition, identification with one’s quarter is high and intergroup hostilities are common during the event. Maass and colleagues sampled participants from the clubhouses of two of these quarters. In this study, participants were presented with ‘incidents’ in the form of cartoons, in which a member of their own group or the outgroup performed either a socially desirable or socially undesirable behaviour. They were informed that the events were real and had happened in the past two years. Participants were asked to select an explanation for the behaviour from one of four forced-choice response alternatives which related to the different levels of language abstraction in the LCM (concrete to abstract).

Results indicated, as predicted, that participants encoded undesirable outgroup and desirable ingroup behaviours at higher levels of abstraction than they did desirable outgroup behaviours and undesirable ingroup behaviours. That is, behaviours which were seen as stable, consistent with expectations and resistant to disconfirmation were encoded abstractly, and behaviours seen as unstable, inconsistent with expectations and open to disconfirmation were encoded more concretely. This relationship is displayed in Table 4.1.
Table 4.1. The Linguistic Intergroup Bias.

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingroup</td>
<td>abstract</td>
<td>concrete</td>
</tr>
<tr>
<td>Outgroup</td>
<td>concrete</td>
<td>abstract</td>
</tr>
</tbody>
</table>

A short follow-up study attempted to eliminate the possibility that participants simply described ingroup members as positively as possible and the outgroup as negatively as possible. That is, abstract language may inherently have more positive connotations for desirable behaviours and more negative connotations for undesirable actions. Maass and colleagues asked participants not involved in the palio, to rate the positivity/negativity of each response alternative without showing them the cartoons. It was found that abstract language was considered to be more positive for both desirable and undesirable behaviours, suggesting that the LIB effect was not merely a way to boost the status of the ingroup and derogate the outgroup.

Experiment 2 (Maass et al., 1989) aimed to replicate the LIB in a free encoding paradigm. Subjects from two of the palio quarters were confronted with the same scenes as presented in Experiment 1, and were asked to describe the scene briefly, in their own words, relating their description to the protagonist or actor. In using the LCM to measure linguistic intergroup biases in existing language, a linguistic abstraction index was created by weighting the four LCM categories (as per Semin & Fiedler, 1989) and dividing by the entire number of verbs and adjectives in the communication as follows:
Abstraction = \( (DAV^1 + IAV^2 + SV^3 + ADJ^4)/(DAV + IAV + SV + ADJ) \).

This linguistic abstraction index was then compared across conditions. Results revealed that, as in Experiment 1, participants described negative outgroup behaviours at a higher level of abstraction than positive outgroup behaviours. The expected pattern was however not replicated for ingroup behaviours. From this, Maass and colleagues concluded that the LIB is more pronounced for outgroup, than ingroup behaviours. This is consistent with the research of Fiedler, Semin and Finkenauer (1993) who found that outgroup statements and particularly outgroup-derogative statements were more abstract that statements of any nature related to ingroup behaviours.

Experiment 3 (Maass et al., 1989) aimed to explore the idea that abstract language supplies more information about the actor, than does concrete information. That is, more abstract language will say more about the protagonist than will concrete language. It was also predicted that abstract behaviour would yield higher expectation that the behaviour would be repeated by the actor in future. That is, abstract language should indicate to people that the actor will display that behaviour consistently across occasions, and is expected behaviour for that actor. Participants not involved in the palio were asked to rate how much information the explanations from Experiment 1 (of differing levels of language abstraction), revealed about participants, and how likely participants thought that the actor would behave the same way on future occasions. Results indicated that with increasing language abstraction, participants perceived that more information about the protagonist was
revealed, and that they expected the behaviour to be repeated in future. That is, abstract information says more about the actor and the consistency of his/her actions.

Maass et al. (1989) concluded from these studies that differential language use has important implications for intergroup relations and the durability of stereotypes. Positive ingroup and negative outgroup behaviours are expressed in different ways, indicating that positive ingroup behaviours are expected to be consistent and enduring, while the same is said for negative outgroup behaviours. People expect the ingroup to behave positively and the outgroup to behave negatively, and describe ingroup and outgroup behaviours in a way that is consistent with this bias. This language bias also influences the way in which people predict actors to behave subsequent to the interaction. If a behaviour is described using abstract language, it is expected that this behaviour will be repeated in future. Maass and colleagues posit that the LIB is representative of a “self-perpetuating cycle” (p. 990) where language use maintains group biases and stereotypes (see also Maass & Arcuri, 1992 for an overview).

This finding has been recently replicated with child participants, implying that the LIB is learned at an early age, and is perhaps therefore fundamental to language use (Werkman et al., 1999). Children were presented with a story of either an abstract or concrete description of a child’s behaviour. They were asked how often they thought the child would repeat the behaviour in future. Children generally inferred that a certain behavior was more likely to be repeated in future if described using abstract language, than if the behaviour was described using more concrete language.

Arcuri et al. (1993) provided further support to this argument. Participants were asked to read a short description of 20 events relating to interactions between
two people and were asked to select one of two explanations for each event. The events described 10 successful or 10 unsuccessful interactions between an actor and a partner and participants were asked to choose from two LCM categories (IAVs and SVs), what they believed to be the most likely things the actor 'did' to bring about the event. The protagonist shared a group membership with the participants half of the time (ingroup condition), and was an outgroup member on the other occasions. The LIB was replicated, such that participants preferred more concrete language for successful ingroup and unsuccessful outgroup behaviours. The reverse also occurred such that participants preferred more abstract descriptions for positive ingroup and negative outgroup behaviours. More specifically, when explaining unsuccessful interactions, concrete IAVs were used approximately twice more often for ingroup than outgroup actors. This implies that participants attributed less temporal stability and less cross-situational stability to undesirable ingroup behaviours. That is, undesirable ingroup behaviours were seen as isolated, concrete events, which are most likely not to be repeated in future. On the other hand, unsuccessful behaviours performed by outgroup members were expected to be performed again in future and were described by participants as enduring properties of the outgroup.

However, from these studies it could not be concluded whether the LIB reflects ingroup-protective motives, is a consequence of the expression of differential expectancies, or whether both processes were involved. That is, it is possible that describing the ingroup positively and the outgroup negatively is the result of an explicit motive to feel positively about and protect the ingroup at the expense of the outgroup. This may occur at the same time as, or separate to processes related to the expression of differential expectancies. Maass et al. (1995) attempted to answer this question. In Experiment 1, Maass and colleagues presented northern and southern
Italian participants with vignettes in which northern or southern Italian protagonists performed positive or negative behaviours. Adding to previous research, half of the behaviours were ‘typically northern’ behaviours and half were ‘typically southern’ behaviours. That is, half of the behaviours were stereotype-consistent, and half were stereotype-inconsistent. It was reasoned that if ingroup-protection was occurring, then the members of both groups should describe positive ingroup and negative outgroup behaviours more abstractly than positive outgroup and negative ingroup behaviours, regardless of their consistency or inconsistency with stereotypes. If, on the other hand, the expectancy-congruency idea is correct, then both groups should use more abstract terms when describing stereotype-congruent behaviours abstractly and stereotype-incongruent behaviours more concretely, regardless of the positivity/negativity of the behaviour and the group membership of the participant.

Experiment 1 found support for the latter hypothesis, suggesting that language use in intergroup settings is driven primarily by expectancies.

To test this explanation further, Experiment 2 was conducted in a situation where neither the participants nor the protagonists were members of particular social groups. Instead, the participants were asked to think of the protagonist as either their best friend (from whom one might expect positive behaviours) or their worst enemy (from whom one might expect more negative behaviours). These interindividual findings replicated those in the intergroup domain. Participants were more likely to encode desirable behaviours of a friend and undesirable behaviours of an enemy using abstract language than in the other combinations. This could not possibly relate to an ingroup-protective motivation, as no ingroup category was salient.

A third study was conducted (Maass et al., 1995) to rule out explicit self-protective motivations. The expectancy was induced that a certain person or group
possessed a certain trait. Cartoons were then presented to the participants depicting the protagonist in a situation where he/she either confirmed or disconfirmed the expectation. The differential expectancy hypothesis proposes that expectancy-congruent behaviours would be described in more abstract terms than expectancy-incongruent behaviours. The ingroup-protective view does not make a differential hypothesis here. Results provided further support for the differential expectancies approach. Expectancy-congruent behaviours were described more abstractly than expectancy-incongruent behaviours, regardless of the positivity/negativity of the behaviour. Therefore, referring to the original formulation of the LIB, it is not whether the behaviour is positive or negative that drives the effect, but whether or not the behaviour is consistent with expectancies. Again, this supports the expectancy-congruency idea, and that the LIB is related to the process of the expression of stereotypes.

The role of the LIB in expectancy maintenance was further investigated by Karpinski and von Hippel (1996). It was hypothesised that the LIB is an interpretative bias that “consequently mediates the extent to which people maintain their expectancies when they encounter incongruent information” (p. 144). That is, the LIB can also serve to determine how people will deal with expectancy-inconsistent information when they come across it. In the first experiment, participants were asked to imagine their best friend or worst enemy (similar to Maass et al., 1995). An initial expectancy of this person was induced by presenting participants with a short summary of the person. The description of the imagined best friend was positive and the description of the worst enemy was negative. After the initial induction phase, participants were presented with a number of scenarios depicting positive, negative or neutral behaviours of the person. Participants were
asked to choose from four LCM response alternatives to describe the behaviour and were asked to rate how well the chosen sentence described the behaviour. Results supported those of Maass et al. (1995). Participants showed a significant tendency to describe behaviours abstractly when they were consistent with prior expectancies, and concretely when they were not consistent with prior expectancies. Further, it was found that the LIB mediated future expectancies. For moderate (non-extreme) behaviours, it was found that participants displaying the LIB also expected the behaviour to be stable. That is, the LIB influenced the way that the information about the behaviour was encoded and understood.

In Experiment 2, rather than presenting participants with expectancy information, participants were given information about the protagonist’s political views, which allowed them to compare the protagonist’s views with their own and generate expectancies based on that information. Consistent with the first experiment, participants showed an LIB for moderate behaviours, and this resulted in a greater degree of expectancy-stability for expectancy-congruent information. The results overall suggest that people’s tendency to show the LIB mediates their tendency to maintain an initial expectancy. Descriptions of behaviour are not only biased in favour of expectancy-consistent information, but the LIB serves to maintain this bias. Karpinski and von Hippel (1996) conclude that the LIB is a tool for expectancy-maintenance.

Maass et al. (1996), again investigated the effects of explicit ingroup-protective motives in response to threat, on the LIB. In Experiment 1, an equal number of northern Italian hunters and environmentalists were asked to respond to a series of questions on environmental issues. To manipulate threat, half of the participants were given a message which, they were informed, had been written by a
member of the outgroup. The message was hostile towards the ingroup. The remaining participants received a conciliatory message from the outgroup. In line with Maass et al. (1989, 1995), participants were then presented with cartoons depicting either ingroup or outgroup positive or negative behaviours. Results revealed the predicted LIB pattern, but more importantly, for both groups, the LIB was significantly enhanced by the introduction of threat from the outgroup. That is, the LIB became stronger when explicit ingroup-protective motives in response to threat, were present. Maass et al. (1996) comment that this corresponds with social identity research, which indicates that ingroup threat can enhance both ingroup favouritism and outgroup derogation. Specifically though, this finding is consistent with an increase in salience produced by threat, as per self-categorization theory.

To further clarify this finding in relation to social identity research, Experiment 2 utilized the intergroup setting of northern and southern Italians and predicted that the LIB would be high under conditions of intergroup hostility, but lowered when comparison between a common superordinate group (Italians) and a common outgroup (Swiss) was made salient. It was also predicted that the LIB would be more pronounced for southern than for northern Italians because southern Italians are considered the low status group and may generally feel more threat from the higher status group (see Tajfel, 1978). Findings supported these hypotheses. The bias was strongest when intergroup hostility was induced between the two groups but decreased when the superordinate and common outgroup categories were made salient. Also, the low status group showed the strongest LIB. This research therefore indicates that under certain conditions, the LIB is dependent on explicit ingroup threat as well as by differential expectancies. Under conditions of group
conflict or group threat, the bias serves to maintain the status of the group at the expense of the outgroup.

However, because people displaying greatest ingroup-favouritism also differentiated the most between typical and atypical episodes, this suggests that both stereotypic expectancies and ingroup protection under conditions of threat may simultaneously drive the LIB. As Maass et al. (1996) state:

In many, if not in most real life situations, the two factors are likely to be intertwined in a complex and possibly circular manner. Not only may stereotypic beliefs determine whether or not the group setting is perceived as competitive and hostile, but any variation in intergroup conflict (e.g., because of scarce resources) may alter stereotypic perceptions of the out-group (p. 524).

Therefore, this language bias observed between groups is essentially a result of the expression of different expectancies about the ingroup and outgroup. However, different intergroup conditions, especially the introduction of explicit threat, can perhaps influence/change expectancies about comparison groups and the LIB is also influenced by such processes. That is, intergroup competitiveness or threat can change the way people perceive other groups, and this process may affect the LIB.

Further evidence that explicit motivations can play a part in the LIB was presented by Webster, Kruglanski and Pattison (1997). Webster and colleagues argued that the need for cognitive closure or motivated closed-mindedness "influences an individual’s preferred level of conceptual analysis and that this in turn differently impacts the abstraction level in the person’s communications about in-
groups versus out-groups” (p. 1122). Specifically, it was predicted that people with high need-for-closure would show a preference for more stable, general knowledge, and would therefore prefer more abstract descriptions of behaviours. That is, behaviour consistent with expectancies will be chosen to quickly fulfil the need for closure. Two experiments were conducted to test these hypotheses. In Experiment 1, participants scoring high or low in need-for-closure were asked to read about positive or negative behaviours performed by an ingroup or outgroup target. They were asked to freely describe the behaviour of the target, and their level of language abstraction was measured. Partial support for the hypothesis was found in that for positive ingroup and negative outgroup behaviours, high need-for-closure participants’ descriptions were more abstract. This result was replicated in a second experiment. Overall, the results suggest that the explicit motivation of need-for-closure increases the tendency for people to describe positive ingroup and negative outgroup (expectancy-consistent) behaviours using abstract language.

Wigboldus et al. (in press) investigated the role of expectancies in linguistic biases and the interpersonal communication of stereotypes. Wigboldus and colleagues define the linguistic expectancy bias (LEB) as the tendency to describe expectancy-consistent information at a higher level of abstraction than information which is inconsistent with prior expectancies. Wigboldus and colleagues assert that the LEB is a more general phenomenon than the LIB and refers to the processes involved in producing language biases in both intergroup and interpersonal settings. They propose that abstractly worded information due to the LEB will lead to stronger dispositional and weaker situational inferences than concretely-worded information and that the LEB mediates people’s inferences about others. Experiment 1 tested this prediction. Participants were asked to describe events in which male or female
friends acted in stereotypically male or female ways. Language abstraction was measured using the LCM. It was expected that stereotype-consistent behaviour would be described more abstractly than stereotype-inconsistent behaviour.

Participants then received and judged stories generated by another participant. It was predicted that expectancy-consistent messages would lead to stronger dispositional inferences than expectancy-inconsistent messages. This effect was predicted to be mediated by the LEB. The results supported the hypotheses, providing evidence for the idea that variations in language abstraction mediate people's inferences about others' stereotypical attributes.

A second experiment was conducted where participants were presented with unfamiliar targets (i.e., not their friends). In the first experiment, there may have been an inherent bias in that the friends may have simply been 'stereotypic' and so describing them in stereotypic terms may not reflect a bias at all. Further, in Experiment 2 participants were either made communicators or recipients to avoid people being affected in phase 2, by their part in phase 1. Half of the participants were asked to write a stereotype-relevant story of a Dutch or Flemish person acting in a stereotype-consistent manner. The remaining half of the participants were given the stories and were asked to make inferences (dispositional or situational) about the target's behaviour. All participants in the experiment were Dutch, making Flemish people the (supposedly non-threatening) outgroup. Again, the LEB was expected to mediate participants' inferences. Results were almost identical to those of the first study, again indicating that people's stereotypic inferences about target behaviours are mediated by language abstraction. However, in line with Maass et al., 1989, 1995, 1998), the LEB was much stronger for the descriptions of outgroup (Flemish) behaviours. In the third experiment, Wigboldus et al. (in press) manipulated
linguistic abstraction, the mediator in studies 1 and 2. Results again supported the hypothesis that abstract information gives rise to stronger dispositional inferences than concrete information. That is, abstract information allows people to infer stable qualities about an individual. This knowledge can influence people’s perceptions about future behaviours of the target (Maass et al., 1989).

In relation to this idea, Maass et al. (1998) investigated the (dis)confirmability of stereotypic attributes on the basis of linguistic abstraction. In Experiment 1, half of the participants were asked to indicate typical attributes of Italians, Jews and Germans. They were also asked to write which, of the listed attributes were the most distinctive. The other half of the participants were asked to list what characteristics they thought others would attribute to these groups. They were told that they could use phrases or adjectives. Results indicated that participants generally described both the ingroup and outgroup abstractly when providing general descriptions. Also, the LIB was partially replicated in that negative characteristics of the outgroup were expressed more abstractly than positive characteristics. Maass et al. (1998) state:

Considering that concrete language implies specific, temporarily and situationally bound behaviours, such concrete descriptions of the outgroup seem to do little damage to the generally negative image of the outgroup while giving the appearance of fairness (p. 389).

The main part of Experiment 1 endeavoured to investigate whether ingroup and outgroup stereotypes differ in their susceptibility to confirming and disconfirming information. That is, it was examined whether or not stereotypes of outgroups in
particular, are difficult to disconfirm. In this part of the study, an independent sample of participants were requested to read a list of the traits attributed to Italians, Jews and Germans from participants in the first study. It is important to note that the traits were not linked to the racial group in the rating task. Participants were asked to rate how easy they thought the trait would be to confirm or to disconfirm. Results indicated that participants were more able to think of behaviours that confirmed the positive ingroup traits than behaviours that would confirm negative ingroup traits. On the other hand, disconfirming behaviours were easier to imagine for positive German traits than for negative German traits. It was concluded that this was due to the fact that negative outgroup traits require a “particularly great amount of disconfirming evidence” (p. 394). Further:

‘considering all traits in a given lexicon, does any single entry have the same chance of becoming part of a stereotype?’ The answer is clearly ‘no’. There are some attributes that are particularly likely to be part of an outgroup stereotype: namely those that are negative, abstract, easy to acquire and difficult to lose” (p. 395, emphasis in original version).

Maass et al. (1998) state that this has important implications for the understanding of how stereotypes are perpetuated over time. Generally speaking, if abstract information is difficult to disconfirm, then abstract content of stereotypes will also be resistant to change. It may even be the case that stereotypes become more abstract over time, rendering them almost impossible to disconfirm. Study 3 explored this possibility by asking participants to generate stereotypes of different ‘age’. That is, some stereotypes are older than others, and the older a stereotype is
the less likely it may be that the stereotype can be disconfirmed. Participants were asked to describe social stereotypes of Jews, homosexuals, Blacks and career women, as well as Italians for comparison. Results tentatively support the notion that stereotypes may become more abstract over time. There was a positive correlation between the age or history of the stereotype and language abstraction. Overall the results of Maass et al. (1998) indicate that stereotypes are described linguistically in such a way that renders them difficult to refute. Also, these stereotypes may become stronger with age, suggesting that linguistic transmission of stereotypes becomes stronger and less disconfirmable over time.

More evidence that linguistic biases play a part in the interpersonal transmission of stereotypes was found by Ruscher and Duval (1998). In four experiments the researchers investigated how impressions of ‘multiple’ (dyads of) communicators were affected by the uniqueness of information given to them, and whether or not the information was shared. Ruscher and Duval (1998, Experiment 1) requested dyads to read scenarios where an alcoholic displayed either stereotype-congruent or stereotype-incongruent behaviours, and they were also asked to imagine that they had been in the situation with the alcoholic. The same information was either given to both participants (shared condition) or different information to each participant (unique information condition). Dyads then talked between themselves so that they were aware that they had either shared or unique information. They were then asked to communicate their impressions of the alcoholic into a video camera based on the information they were given in their own scenario. It was found that, in the unique information condition, participants described incongruent outgroup behaviours more abstractly, thus maintaining that the stereotype-incongruent behaviours were stable attributes. People in the shared condition,
However, described the incongruent outgroup behaviours more concretely. Ruscher and Duval explained that this occurred because participants with unique information want to transmit an accurate picture based on the information they have. People with shared information about a target focused little on the positive (stereotype-inconsistent) outgroup behaviours and instead maintained their negative stereotype. Further support for these results was obtained in Experiments 2, 3 and 4, using both positive and negative stereotypes. Overall, Ruscher and Duval (1998) concluded that:

Because multiple communicators who have unique target information desire to be accurate and complete, the chance that they will transmit stereotype-incongruent attributes is heightened (p. 342).

On the other hand, those who share information about a target do not focus on stereotype-incongruent behaviours and instead, they describe behaviours in a manner which maintains the existing stereotype. These results provide an insight into the communication of stereotypes. They suggest that if participants share information, it is likely that a stereotype will be perpetuated. On the other hand, stereotypical impressions are discouraged when people have unique information about an outgroup member. That is, stereotypes are maintained to the extent that people share them.

These results taken together suggest that the LIB and its more general counterpart, the LEB, are a result of the expression of differential expectancies and stereotypes about ingroups and outgroups and also about individuals. That is, the bias is driven by stereotypes and expectancies of the ingroup and stereotypes and
expectancies of the outgroup as well as expectancies about the behaviour of 
individuals. These descriptions in turn can influence how people describe others 
(Wigboldus et al., in press). Abstract descriptions provoke more dispositional 
inferences about the target than do concrete descriptions. Also, abstract information 
induces the idea that the behaviour will be exhibited by the target again in future 
(Maass et al., 1989). Descriptions of outgroups in a stereotypical manner are also 
influenced by the sharedness of the information (Ruscher & Duval, 1998), and 
stereotypes transmitted through language are difficult to disconfirm and this may be 
perpetuated through time (Maass et al., 1998). Taken together, these results provide 
strong evidence that linguistic biases of the form of the LIB and LEB are both the 
expression of, and are able to perpetuate expectancies about groups and individuals. 
They serve a stereotype or expectancy-maintenance function. However, it is 
important to note that under certain conditions such as high ingroup threat (Maass et 
al., 1996) and high need for cognitive closure (Webster et al., 1997), the expression 
of these differential expectancies is also influenced in some way by explicit 
motivational concerns.

**Intentional control over the LIB**

Introducing motivational concerns to an explanation of the LIB provokes an 
interesting question: Is the differential language use of the LIB under intentional 
control? That is, can people's motivations explicitly or consciously alter the way 
they express their expectancies about people's behaviour? Whether or not 
stereotypical processes in the LIB are the result of intentional processes or whether
they occur in the absence of awareness was investigated by Franco and Maass (1996, 1999) and also by von Hippel et al. (1997).

Franco and Maass (1996) hypothesised that the LIB would be difficult to inhibit consciously. That is, while people may be explicitly aware of the positivity or negativity of the description they are using to describe a behaviour, they "may inadvertently use a greater or lesser degree of abstraction without being necessarily aware of this fact." (p. 339). In contrast to other explicit measures of prejudice, the LIB should therefore be more difficult to attenuate if explicitly asked to do so.

Franco and Maass administered two explicit measures of discrimination: fund allocations to ingroup and outgroup members and freely generated traits describing ingroup and outgroup members. Also, language abstraction measures similar to Maass et al. (1989) were administered. The participants consisted of supporters of two basketball teams: one with a long history of aggression towards outgroups, and one well-known for considering hooliganism dangerous and abhorrent. It was found that the group with norms that inhibit aggression showed less outgroup derogation than the aggressive group, when the measures were explicit and measured public behaviour. However, on the LIB measure, there was no difference between the two groups. This research supports the idea that the LIB is a measure which is not directly under intentional control. While people can censor or alter their responses to explicit or outward measures of stereotyping and discrimination, this is perhaps not the case for the LIB.

This phenomenon was further investigated by Franco and Maass (1999). It was hypothesised that where outgroups are normatively protected from prejudice, there will be a difference in the prejudice displayed towards those groups on implicit and explicit measures. That is, where it is not permissible to discriminate against a
group, people will not explicitly discriminate against them, but will do so on implicit measures because these measures are not under intentional control. On the other hand, when groups are not normatively protected from prejudice, there will be no difference in the prejudice displayed on implicit and explicit measures. Franco and Maass asked Catholic participants to view cartoons depicting positive and negative ingroup (Catholics) and outgroup (Islamic Fundamentalists and Jews) behaviours, and to select a description of the behaviour from a list of LCM alternatives. Explicit measures included reward allocation and like/dislike scales on which to rate the outgroup. Results provided support for the hypothesis. Explicit and implicit measures of prejudice were only related when the outgroup was not normatively protected from prejudice (the Islamic Fundamentalists). This lends further support to the idea that while explicit measures of stereotyping and prejudice can be consciously controlled, the LIB is not easy to inhibit.

von Hippel et al. (1997) also investigated the relationship between implicit and explicit measures of prejudice and stereotyping. In Experiment 1, von Hippel and colleagues asked students to view a videotape of either an African-American or Caucasian protagonist asking another person for some money. They were asked to indicate whether or not they thought the protagonist was threatening. Participants were then given a question booklet depicting several interactions between African-Americans and Caucasians. Some were stereotype-congruent and others were stereotype-incongruent. Participants were asked to choose a description of the behaviour from four LCM response alternatives. They were then asked to complete the modern racism scale (MRS, McConahay, Hardee & Batts, 1981). The LIB was again replicated, such that stereotype-congruent behaviours were expressed in more abstract language than stereotype-incongruent behaviours. This also lends further
support to the expectancy-congruency explanation of the LIB. It was also found that the LIB successfully predicted whether or not the protagonist was perceived as threatening (supposedly both the LIB and measure of ‘threatening’ behaviour were implicit measures of prejudice). These measures were not related to the MRS. This result was replicated in Experiment 2. In Experiment 3, it was further demonstrated that the LIB was significantly correlated with another implicit measure of prejudice based on the tendency to perform explanatory processing when confronted with stereotype-incongruency. These results indicate that the LIB is separate from explicit measures of prejudice and stereotyping but is related to other implicit measures that are not under intentional control.

This was further supported by Schnake and Ruscher’s (1998) study of the relationship between the (implicit) Modern Racism Scale and the LIB. In their experiment, ‘European American’ students were first asked to complete the MRS, and respondents were separated into ‘high’ prejudice and ‘low’ prejudice according to a median split on their scores. The participants were then asked to view a series of drawings depicting both a European American target (Mike) and an African American target (John) in various situations. These pictures were evaluatively neutral for the European American targets, but varied in their level of stereotypicality for African Americans (stereotypical and counterstereotypical), and their level of positivity/negativity as judged by a different sample of European American students (e.g., positive stereotypical – playing basketball, negative counterstereotypical – standing on a female’s foot whilst dancing). Participants were informed that they would be asked to describe the two target persons to someone else in another room, via closed circuit television. Participants viewed each picture for Mike and were asked to describe what was happening in each scene to their supposed partner in the
other room. The process was repeated for John. Results revealed that participants who were high in Modern Racism described stereotypical behaviours of the African American target at a higher level of abstraction than participants who were low in Modern Racism. That is, participants displaying higher levels of prejudice according to this more implicit scale of prejudice, described outgroup stereotypical behaviours more abstractly, or more stereotypically. This indicates further that the LIB is a more implicit (rather than explicit) measure of prejudice and that social psychological processes leading to increased language abstraction are not under intentional control.

**Motivations affect implicit behaviour: A paradox**

In light of evidence that the LIB is most likely not under intentional control, it is necessary to explain how explicit motivational concerns have been found to be able to affect the LIB. It seems problematic to say on the one hand, that the LIB is not able to be consciously controlled, yet that it is affected by explicit motivational concerns such as ingroup threat and need-for-closure, as evidence shows (e.g., Maass et al., 1995, 1996; Webster et al., 1997). How these motivations can come into play needs to be addressed. Webster et al. (1997) state that:

use of language is less straightforward than has been typically assumed and that it may reflect goals extrinsic to the communication’s overt meaning and related to the speaker’s epistemic motivations, as these interact with the social context (p. 1130).
That is, whilst people are unaware of the language choices they make, their language use is nevertheless indirectly influenced by various motivations. The linguistic intergroup bias therefore, can be affected by motivations brought about by the intergroup context, for example, the need to maintain positive self-esteem in the light of threat. As Maass et al. (1995, 1996) have noted, conflictual intergroup situations may also bring about a re-evaluation of the stereotypes or expectancies of the ingroup and outgroup, which will also affect the LIB. Therefore, motivations can, although indirectly, influence the LIB.

An alternative perspective is presented by von Hippel, Sekaquaptewa and Vargas (1995, 1997). They state that “explicit measures were designed to tap the content of people’s prejudicial attitudes, whereas the implicit measures were designed to tap the prejudicial processes in which they engage” (1997, p. 507, emphasis in original version). It is more plausible to assume that these processes are in some way influenced by people’s motivations, than to say that motivations play no part in internal processes involved in prejudice.

The idea that internal processes can be affected by explicit motivations is examined in depth by Kunda (1990) and is relevant to this discussion. Kunda notes that people’s motivations (e.g., to be accurate, or to think what one wants to think) can affect reasoning by influencing the strategies people use to access, construct and evaluate beliefs. That is, the external motivation drives the strategy used to organise beliefs and attitudes. Kunda argues that this leads to a greater likelihood of cognitively searching for ‘hypothesis-consistent’ rather than inconsistent evidence. This point is directly relevant to work on the LIB. It suggests that the bias towards expectancy-consistent information can be affected by explicit motivations of which
people are aware. Perhaps this in turn leads to description of these events in more abstract terms.

Interestingly, Werkman et al. (1999, Experiment 1) report research in which they propose that children use language strategically to convey impressions. This is further contrary to the position that the LIB is not under intentional control (e.g., Franco & Maass, 1996, 1999). In two studies, Werkman and colleagues presented children aged between 8 and 19 with cartoons of characters committing positive or negative behaviours. They were asked to picture the person as their best friend or worst enemy as in Maass et al. (1995). The children were asked to choose the best description of the behaviour from a list of LIB alternatives. As expected, the LIB was replicated and the LIB actually increased with age. Werkman and colleagues concluded that this was consistent with the fact that children increase in their selective use of abstract language with increasing age (see also Aloise-Young, 1993, Bennet & Yeeles, 1990).

However, this rationale, while possibly correct, is premature. Werkman et al. (1999) have simply demonstrated that the LIB exists in children and that it increases with age. To conclude that this is due to strategic factors on the basis of no explicit evidence related to strategic behaviour, is perhaps hasty. However, it is interesting that researchers involved in LIB research are prepared to acknowledge that explicit motivational or strategic behaviour can influence the linguistic expression of impressions. While the evidence for this is not clear, it is understood that linguistic biases may have a strategic behavioural component. This research explicitly examines this possibility.
Applying the LCM to measure stereotypical language in CMC

Overall, research indicates that the LIB is a result of differential expectancies about groups and individuals. If a behaviour is congruent with expectancies, then we are more likely to describe that behaviour abstractly, implying that (a) we believe the behaviour to be typical of that person or group, and that (b) we expect that behaviour to be displayed on future occasions. On the other hand, if a behaviour is inconsistent with our withstanding expectancies about a person or group, we are more likely to describe that behaviour more concretely, implying that (a) we believe the behaviour to be atypical of that person or group, and that (b) we do not expect that behaviour to be displayed by that person on future occasions. That is, abstract descriptions imply stereotypicality, whereas concrete descriptions describe isolated events.

The linguistic category model provides a reliable measure of this phenomenon and the model is effective in measuring the expression of differential expectancies in an intergroup setting, as seen consistently through the work of Maass and colleagues. If stereotypes are shared expectancies and beliefs about social groups (e.g., Hamilton & Sherman, 1994), then a measure of the expression and perpetuation of intergroup expectancies will be an effective way of examining the communication and perpetuation of stereotypes in an intergroup setting.

It seems plausible then to apply the LCM to the study of CMC to examine communicators’ textual descriptions of outgroup members’ behaviour. Descriptions that are consistent with and maintain stereotypes about the outgroup should be described using more abstract language, whilst descriptions that are inconsistent with and do not maintain current stereotypes about the outgroup should be described using more concrete language. A key question here is how these processes may be affected
by identifiability. Particularly, it is important to ask whether language use is influenced by explicit, strategic factors such as a desire to resist the outgroup, or increased self-presentational concerns brought about by identifiability to the ingroup.

Chapter 5 brings together ideas following from Chapter 2 on computer-mediated communication, Chapter 3 on the social identity model of deindividuation effects, and the current chapter on stereotypical language use. In doing so, I formulate specific hypotheses regarding the effects of identifiability on stereotypical language use in CMC.
Chapter 5

A model of the effects of Internet identifiability on communicative behaviour

Introduction

This chapter aims to bring together the previous chapters on CMC, SIDE and stereotypical language use, and puts forward a series of predictions forming a model of the effects of Internet identifiability on communicative behaviour. The predictions are tested in Chapters 6 through to 10. This chapter includes the following things:

1. An overview of the topic under investigation and reiteration of the main points drawn from each chapter.
2. A presentation of the hypotheses and model to be tested in this research.
3. An outline of the initial study in this programme of research.

Overview and hypotheses

Flaming is the expression of hostile emotions and feelings over the computer (e.g., Kiesler et al., 1984; Lea et al., 1992; Siegel et al., 1986; Sproull & Kiesler, 1986). It is considered to be a common feature of CMC, somewhat unique to CMC, and is considered to be a negative by-product of the anonymity of computer interactions. However, the underlying psychological processes (explicit and implicit) that bring about flaming behaviour are not clear, and await empirical investigation.
Specifically, research has indicated that flaming between individuals is more prevalent in anonymous CMC than identifiable communication (e.g., Hiltz et al., 1989; Kiesler et al., 1985; Siegel et al., 1986; Sproull & Kiesler, 1986), but the specific effects of identifiability on flaming behaviour, and the explicit and implicit psychological consequences of being anonymous or identifiable in this medium, are not yet clear. Possible social psychological explanations for this behaviour that have been put forward are the reduced social cues of the medium which are said to render the medium impersonal and ‘less social’ (e.g., Kiesler et al., 1984), and the process of deindividuation in which CMC supposedly reduces explicit self-awareness and allows people to act on impulses and shed their inhibitions (e.g., Siegel et al., 1986). However, evidence for these phenomena has been contradictory (e.g., see Matheson & Zanna, 1989, 1990), and so requires further investigation.

It is important to note that the vast proportion of research into flaming behaviour has tended towards an analysis of flaming and CMC in general as an interpersonal phenomenon (e.g., Kiesler et al., 1984; Sproull & Kiesler, 1986). That is, when people communicate in this manner they are changed somehow at an individual level by being identifiable, and this contributes to the increased hostility witnessed in the medium. Until recently, the intergroup aspects of flaming and behaviour in CMC more generally, have been left neglected. The SIDE model (Reicher et al., 1995; Spears & Lea, 1994) offers a new perspective on deindividuation phenomena and has been applied directly to behaviour in CMC.

Drawing on self-categorization theory (Turner et al., 1987), SIDE theorists offer a different perspective to CMC phenomena, which explains behaviour in relation to the intergroup aspects of CMC interactions. It is proposed that behaviour in CMC can be group-normative if the salience of group memberships is high. That
is, if the communicative context renders a specific group membership immediately relevant to an individual, then his or her behaviour is likely to be influenced by those norms rather than their own personal norms.

If we assume that flaming is influenced by the same processes, then flaming should also be affected by people's group memberships and the norms and standards associated with those group memberships, if they are important at the time of the interaction. Lea et al. (1992) argue for this alternative analysis of flaming by arguing that flaming can be seen as a normative process occurring when particular norms and standards of behaviour become important.

If we consider flaming as a group-normative phenomenon, measuring how flaming and the social psychological processes involved in flaming are influenced by identifiability will be best achieved by examining intergroup phenomena present in flaming and by examining how they are affected by identifiability. Of course, a textual measurement of intergroup phenomena is necessary to execute this task in CMC. The communication of stereotypes and expectancies about other groups can be examined in this manner. Measurement of these processes can be achieved by examining the language communicators use through the use of the linguistic category model (e.g., Semin & Fiedler, 1988) and quantifying the level of stereotypical language expressed. As previously stated, this does not assume that the communication of stereotypes is always hostile and negative (see Oakes et al., 1994 for an alternative perspective), but it does assume that where communicators are expressing hostile sentiments about others, and these sentiments relate to intergroup relations, that stereotypical descriptions will become a prominent feature of communication. This leads to the first hypothesis to be investigated:
Hypothesis 1: Flaming of outgroups should involve higher levels of stereotypical language than ‘everyday’ Internet communication about outgroup members.

Once this has been established, the next step is to examine the effects of identifiability on stereotypical language use. As previously stated, Internet identifiability allows people to be anonymous or identifiable by name and location, if they so desire. It is important to note therefore, that communicators (or sources) can be anonymous or identifiable, and so can their communicative targets. This being the case, identifiability may impact upon how sources behave, and also how the target is perceived or behaved towards. It is therefore important to examine how identifiability of both source and target impact upon behaviour on the Internet. This section focuses firstly on the effects of identifiability of the sources on their behaviour towards outgroup targets.

It is difficult to make predictions based on the cognitive dimension of the SIDE model (Reicher et al., 1995; Spears & Lea, 1994) regarding the effects of identifiability on the expression of stereotypical norms. The cognitive SIDE proposes that when a person is anonymous within a group, and therefore cannot see others in the group, they become less aware of people’s individual characteristics and focus more on the knowledge they have of their category memberships. In a situation where group salience is high (as could be argued to be the case in intergroup flaming), anonymity within the group increases this salience further and leads to an increase in group-normative behaviour. Under these circumstances SIDE might predict an increase in stereotypical language of communicators’ descriptions of outgroup targets.
However, in the case of Internet identifiability, where all communicators are visually anonymous, but are identifiable by name/location and/or e-mail address, it is not clear that the same principles will apply. The cognitive SIDE relies on the concept of visual anonymity, and the reason for attention to group characteristics is because individual characteristics are usually obscured. However, it is possible that people who choose not to identify themselves by choosing not to supply information which makes them identifiable will become less aware of their individuality than those who supply their details. This rationale is consistent with early CMC research suggesting that anonymity causes people to lose a sense of their individuality and personal responsibilities (e.g., Siegel et al., 1986). In relation to SIDE, this reduced awareness of idiosyncratic features, instead of allowing people to act irresponsibly and irrationally, could increase the salience of prominent social category memberships such as race or gender and in turn, anonymous communicators might act more in line with the norms of the salient category. Thus, if predictions based on the cognitive SIDE are upheld in the case of Internet identifiability, then it is predicted that:

**Hypothesis 2:** If Internet identifiability reduces social category salience, then identifiable sources should show lower levels of stereotypical language to describe outgroup targets, than should anonymous sources.

This predicted path can be observed in Figure 5.1: A model of the effects of Internet identifiability on communicative behaviour, under 'self-categorical effects'.

Although a self-categorical response to identifiability is possible, a strategic or self-presentational account is also possible. Firstly, when one considers the
importance of positive evaluation by important or valued ingroups, group members should perhaps be more likely to strive to seek positive evaluation from ingroup members when they themselves are identifiable to those important others. One way to present oneself positively to the ingroup is to adhere to the group’s norms. Research on self-presentation indicates that identifiable communicators are more likely to adhere to group norms and standards because of this explicit desire to achieve positive ingroup evaluation (e.g., Noel et al., 1995). For anonymous communicators, this is less of a priority because their responses cannot be linked to them personally.

It therefore follows that communicators who have supplied their name and location, or their e-mail address are identifiable to the ingroup members of the audience. They may wish to be positively evaluated by these group members, and so they should align themselves more with the norms of the group than should anonymous communicators. Further, the presence of other ingroup members in an audience may increase feelings of solidarity within the ingroup, giving them power to resist the outgroup (see also Reicher et al., 1998). However, it is important to note that this concept relies on physical co-presence which is clearly different from Internet identifiability, and thus may not occur. However, if such social support plays a part in determining behaviour, this would increase group-normative language use. These predicted paths related to ingroup audiences can be observed in Figure 5.1 under ‘strategic/self-presentation effects’.

Secondly, unless punishment from the outgroup is feared (Reicher & Levine, 1994a,b), group-normative behaviour should also increase with identifiability to the outgroup members of an Internet audience, as predicted by the strategic SIDE. Reicher and Levine proposed that ingroup members are more likely to express their
group identity in the presence of the outgroup as a means of distancing themselves from the outgroup and letting their own group identity be known. As long as no punishment from the outgroup is feared, identifiability to outgroup members of an audience should also increase the expression of group-normative behaviour. This predicted path can also be observed in Figure 5.1 under ‘strategic/self-presentational effects’. Since both the research on self-presentation and the strategic SIDE would predict the same behavioural outcome in the event of both ingroup and outgroup audiences, it was hypothesised that:

**Hypothesis 3:** Under conditions of Internet identifiability to both the ingroup and the outgroup members of a CMC audience, stereotypical language used to describe outgroup targets should be higher for identifiable sources than for anonymous sources.

However, having said this, predicting that communicators will behave strategically towards their audience through their use of more abstract language implies that language use of this nature is under intentional control. In relation to the LIB, Franco and Maass (1996, 1999) have argued to the contrary, stating that language use is not under intentional control and is not related to other measures of stereotyping and prejudice. However, other research suggests that language use can be influenced by extrinsic motivations. For example, Maass et al. (1996) found that under circumstances where the outgroup threatens the ingroup, and participants are therefore motivated to eliminate this threat, participants used more abstract language to describe the outgroup. Admittedly, such threat may have also served to increase social category salience. Also, Webster et al. (1997) have shown that participants
with high levels of need-for-closure also use higher levels of stereotypical language. Evidence that strategic motivations to present oneself positively to an audience can affect the way in which people linguistically express their views, would suggest that an implicit outcome (language abstraction) can be affected by explicit motivational processes. In addition however, examining language allows us to examine the effects of identifiability on language use, compared with the effects of identifiability on clearly explicit behaviours such as hostility. This has not been investigated until now. For example, the strategic SIDE assumes that explicit responses to identifiability will result in changed behaviour. Measuring language abstraction gives us the opportunity to go beyond this analysis to investigate perhaps more implicit responses to identifiability.

So far, this chapter has discussed the effects of identifiability on the behaviour of ingroup sources towards outgroup targets. It is also important to consider the effects of the identifiability of the targets on how they are described. Based on the work of Wilder (1978) and the cognitive dimension of the SIDE model, if no visual individuating information about the target is available, then it is more likely that the target will be evaluated on the basis of their known group memberships. That is, if characteristics that make the target unique cannot be seen, this means that the target will have to be evaluated on the basis of other known characteristics such as nationality and gender. Under these circumstances, a judgement of the target on the basis of stereotypical knowledge is more likely.

In the case of Internet identifiability, the same reasoning should apply. Under anonymous conditions where no information is available to individuate the target, descriptions of a target who chose to remain anonymous should be based more on assumptions about the target’s salient group membership. That is, if all
communicators are anonymous, yet a target outgroup member supplies a name and an e-mail address, there is more information available about that person and they should be less likely to elicit a stereotypical judgement than an anonymous target. Of course this is not the same as being able to see a person’s face and identify them as ‘someone like me’ or ‘someone not like me’, but knowledge of an individual that indicates certain individuating features should encourage more individuation than if there was no information available at all (see Figure 5.1 under ‘self-categorical effects’). It was therefore hypothesised that:

Hypothesis 4: Anonymous outgroup targets should be described by higher levels of stereotypical language than identifiable outgroup targets.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Self-categorical effects</th>
<th>Strategic/self-presentational effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifiability (of outgroup target)</td>
<td>Increased individuation of target</td>
<td>Identifiability (to powerless outgroup audience)</td>
</tr>
<tr>
<td></td>
<td>Decreased group salience*</td>
<td></td>
</tr>
<tr>
<td>Processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decreased stereotypical language use</td>
<td>Increased stereotypical language use</td>
</tr>
<tr>
<td>Outcome</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(* if social identity is already salient)

Figure 5.1. A model of the effects of Internet identifiability on communicative behaviour.
The initial study

The initial study was an archival field study examining language from pre-existing communications on Internet newsgroups. As such, it was not possible to measure potential mediating variables such as salience or motivation. In this initial study it was, however, possible to test if (a) intergroup flaming involves higher levels of stereotypical language than normal communication, (b) if anonymous or identifiable sources use more stereotypical language to describe outgroup targets, and (c) if anonymous outgroup targets are described by using higher levels of stereotypical language than identifiable outgroup targets. It was also possible to compare the effects of identifiability on language abstraction and the explicit variable of hostility.
Chapter 6

Study 1 - An archival examination of the effects of identifiability on stereotypical language use

Introduction

The hypotheses and model outlined in Chapter 5 were tested in studies in both naturalistic and experimental settings. The initial study was an archival, quasi-experimental examination of hostile intergroup communications that had been posted on Internet newsgroups.

As explained in Chapter 2, newsgroups are asynchronous discussion groups where users can ‘post’ contributions to continuing discussions (called ‘threads’), or create their own threads to which other people can contribute. There are hundreds of newsgroups on the Internet, each devoted to a specific topic. Common newsgroups include those for the discussion of television programs, movies, music, books, and lifestyle issues such as gay and lesbian issues. There are also newsgroups designated by the title ‘alt.’. These are alternative groups where specific topics are usually the focus but discussion may be less restricted than in some other newsgroups. There are no explicit regulations and fewer implicit rules on what people can write in ‘alt.’ groups. There are some newsgroups specifically set up for flaming purposes. The purpose of posting to such a group is to flame other users and there are no specific topics of discussion. People post to these flaming newsgroups simply to engage in ‘flaming wars’ with other users. Flaming is prevalent in newsgroups specifically
devoted to the perpetuation of the activity (e.g., alt.flame), and other ‘alt.’
newsgroups and occurs less frequently in other newsgroups.

There are four important things to note about newsgroups. Firstly, when
people communicate with others using this system, they can choose whether or not to
be identifiable. Often newsgroup posting systems forbid users to post anonymously,
but nevertheless this does occur frequently. So, communicators can choose to let
their identity be known to others, or conceal it so their messages cannot be linked to
them personally. Examining newsgroup communications therefore allows the
opportunity to examine how identifiability impacts on communication, as it exists
naturally under conditions of free choice. In the absence of demand characteristics, it
is possible to investigate the differences in language use between anonymous and
identifiable communicators.

Another interesting point to note about newsgroups is that newsgroup
audiences are broad or varied collections of people. At any given time, members of a
newsgroup audience can consist of different nationalities and genders, different
political persuasions and so forth. This means that newsgroup audiences can consist
of both ingroup and outgroup members at the same time if a particular group
membership is salient for a communicator. A study of communication in this
medium therefore allows for an examination of the consequences of audience
presence for communication. In later research, this can be refined to examine the
consequences of being anonymous or identifiable to specific audiences.

Also, conducting investigations with a newsgroup sample allows for a direct
examination of the concept of Internet identifiability, to see if the predictions derived
from SIDE regarding visual identifiability apply in this CMC setting. Finally,
examining newsgroup communications makes it possible to compare the effects of
identifiability on explicit processes (e.g., expressed hostility) and perhaps more implicit processes (e.g., language use).

To re-iterate the predictions outlined in Chapter 5:

1. Stereotypical language should be more prevalent in flaming communication between groups than normal ‘everyday’ communication.

2. If strategic or self-presentational motivations affect stereotypical language use, then identifiable sources should use higher levels of stereotypical language to describe outgroup targets than should anonymous sources.

3. If cognitive or self-categorical factors affect stereotypical language use, then anonymous sources should use higher levels of stereotypical language to describe outgroup targets than should identifiable sources.

4. Anonymous targets should be the subject of more stereotypical descriptions (higher levels of stereotypical language) than identifiable targets.

The archival study will not enable direct inference regarding the fate of these hypotheses, nor can it assess the social psychological processes involved, because social psychological processes cannot be measured in this archival setting. However, this study provides an investigation of the predictions and model and provides the basis and directions for future studies.

Method

The materials for this study consisted of items that had been posted to Internet newsgroups recently before the data was collected. As such, it was not possible to measure the demographics of the communicators. This chapter reports
the results of a pilot study and the main study itself. For the pilot study, 100 flames and 100 non-flames were collected and for the main study, 200 flames were collected.

**Pilot Study**

The purpose of the pilot study was to examine possible differences in stereotypical language use between a hostile flaming sample of communication on the Internet newsgroups, and a sample of general communication. In doing so, it was possible to examine the hypothesis that hostile intergroup flaming would involve more stereotypical language use due to the antagonistic intergroup nature of the interaction, where the use of stereotypical descriptions should be prevalent.

The flames were collected in the following manner. The data set was collected from people whose postings had been placed on the Internet newsgroups recently before the study was conducted. I entered words into the ‘Deja News’ database of newsgroup postings specifically to target negative flaming communication. Initial observations indicated that flaming of racists or perceived racists was prevalent. Therefore, words specifically used for searching were ‘flame’, ‘racist’, ‘racism’, and selected profanities or common ‘swear words’. These words were entered into the database and the output was examined. From the output, flames fitting the criteria were selected.

All flames selected for analysis constituted negative communications to outgroup members. None of the selected flames were directed at other ingroup members. It should also be noted that all flames were of an obvious intergroup nature. Each flame was aimed at a particular group membership of the target.
Anonymous communicators were those who chose to attach an alias to their e-mail address (e.g., ‘Bozo’, whose real name could not be obtained), and those who chose not to include their e-mail address. Identifiable communicators were those who chose to supply their name and e-mail address. Flames varied in length but were always in excess of one sentence. An example of a typical flame from an anonymous user is presented below:

All Australians are racist pigs! We come here and all we get is this racism from pigs who treat us like dogs!

Racist, narrow-minded assholes! Pauline Hanson-lovers! [Pauline Hanson is an Australian politician who is opposed to immigration]

Non-flames were collected using the same method as used for the collection of flames but instead of inserting specific words I entered random three-letter sequences. However, some of the non-flames obtained using this method were graphics files with no text communication. These particular items were discarded.

After data collection, I compared the two samples' language abstraction using the linguistic category model. Only the sections of a message referring to specific attributes or behaviours of a group or person were analysed. Descriptive action verbs were weighted as ‘1’, interpretative action verbs were weighted as ‘2’, state verbs were weighted as ‘3’, and adjectives were weighted as ‘4’, as per Semin and Fiedler (1989). The overall measure of language abstraction was obtained for each item by using the following formula:
Abstraction = (DAVx1 + IAVx2 + SVx3 + ADJx4)/(DAV + IAV + SV + ADJ).

(DAV, IAV, SV and ADJ represent the frequency of occurrence of each category).

Language abstraction scores were thus in the range of 1.0 and 4.0. Results indicated that language was more abstract in flaming ($M=2.66$) than language in general newsgroup communication ($M=2.24$), $t(198)=4.01$, $p<.001$, suggesting that flaming contains higher levels of stereotypical language, as predicted. See Appendix I for $t$-test table. The LCM therefore appears to be sensitive to linguistic differences between hostile and non-hostile interactions and it was used in subsequent investigations to examine the conditions which promote or undermine differences in stereotypical language use in flaming.

Main Study

Design

This study utilized a 2 (source: anonymous/identifiable) x 2 (target: anonymous/identifiable) between-subjects design. The main dependent variable was the level of language abstraction contained in the messages.

Procedure

The main study utilized the same procedure for collecting flames as in the pilot study. However, this time 200 flames were collected and no non-flaming sample was required. Flames were collected so that each of the four cells equally
contained 50 communications. All e-mail addresses were checked for validity by using the directory services function in the Macintosh Eudora e-mail software package. This was done in order to verify that identifiable communicators were indeed who they said they were.

Communications were again coded using the linguistic category model, as outlined beforehand, and a measure of language abstraction was obtained for each individual communication. Communications were also rated for hostility by the author and another rater working independently. There was an acceptable inter-rater reliability ($r = .74$). The raters were simply asked to rate how hostile they thought the communication was on a scale of zero ‘not hostile at all’ to 100 ‘extremely hostile’.

**Results**

**Language abstraction**

Note that all analyses reported observe a significance level of $\alpha = .05$ and are two-tailed unless otherwise indicated. After results were coded and measures of abstraction were obtained for each individual communication, an average measure of language abstraction was obtained for each condition. The results are presented in Figure 6.1. Statistical tables for Study 1 and all other studies are presented in Appendix I.
Figure 6.1. Language abstraction as a function of identifiability of source and target.

There was a significant interaction between source and target, $F(1,196)=5.63$, $p<.05$. Specifically, when the target was anonymous, sources used more abstract stereotypical language to describe the target when they themselves were actually identifiable but much less so when they were anonymous ($M_s=2.84$ vs. $2.57$), $t(98)=2.02$, $p<.05$. No other pairwise comparisons were significant.

No main effect for source was found, $F(1,196)<1$, ns. That is, there was no difference in language abstraction between the anonymous ($M=2.67$), and the identifiable source ($M=2.71$) conditions. Secondly, there was no main effect for target, $F(1,196)<1$, ns. There was therefore no difference in language abstraction between the anonymous ($M=2.70$), and the identifiable target ($M=2.68$) conditions.
Hostility

Hostility ratings were no higher when the sources were anonymous ($M=69.40$) than when they were identifiable ($M=65.35$), $F(1,196)=2.36$, ns. There was also no difference in hostility between the anonymous ($M=65.88$) and identifiable target ($M=68.88$) conditions, $F(1,196)=1.29$, ns. Therefore, hostility of the messages did not differ across conditions as language abstraction differed across conditions, and so could not be mediating the observed effect between identifiability and language abstraction. Also, the correlation between hostility and language abstraction was not significant ($r=.10$).

Permissibility and normative context

After having collected the data, an additional dependent measure was collected. A brief questionnaire was placed on a variety of Internet newsgroups. The questionnaire listed the social groups who were targeted in the data for this study (a total of 36 social groups), and users, who completed the questionnaire voluntarily, were asked to rate how ‘permissible’ it was to flame each of these groups. In other words, as regular users on the Internet they were asked how often they saw these specific groups being flamed (ranging from A ‘it is generally accepted to speak negatively of this group’ through C ‘neutral’ to E ‘it is never accepted that this group is spoken of negatively’). This therefore provided a measure of permissibility amongst Internet users of flaming certain groups. Eight respondents completed this questionnaire. The questionnaire is presented in Appendix II.

Permissibility measures were coded from one ‘it is never accepted to speak negatively of this group’ to five ‘it is generally accepted to speak negatively of this
group'. There was no difference in language abstraction between communications to high permissibility flaming targets ($M=2.655$) and low permissibility flaming targets ($M=2.733$), $t(198)=.80$, ns. Permissibility could therefore not have mediated the effect of identifiability on language abstraction observed in this study.

Newsgroups were also divided into those that included 'flame' in the title, and those that did not to examine the impact of normative context on language abstraction. Note that the newsgroup origin of one of the communications was not recorded and these communications were not included in the analysis. This was included as a factor in the analysis and it was found that there was no significant difference in language abstraction between the flaming newsgroups ($M=2.71$) and the non-flaming newsgroups ($M=2.55$), $t(197)=1.28$, ns, and that there were no interactions involving newsgroup context. This implies that the context of the flaming could not have mediated the effect of identifiability on language abstraction.

**Discussion**

Contrary to the hypotheses, there was no main effect on language abstraction for either source or target identifiability. This is inconsistent with the predictions drawn from the strategic dimension of the SIDE model (Spears & Lea, 1994), the cognitive component of the SIDE model (Reicher et al., 1995; Spears & Lea, 1994), and Wilder's (1978) work on deindividuation of the outgroup combined in the model of Internet identifiability. However, for *anonymous* targets, language abstraction was significantly higher when the sources describing the targets were identifiable than when they were anonymous. Sources were more likely to describe the anonymous outgroup member in stereotypical terms when they themselves were
identifiable to the newsgroup audience. This specific finding is partially consistent with the prediction drawn from the strategic dimension of the SIDE model and from research on self-presentation. That is, identifiable users were more likely to use stereotypical language to describe the outgroup target, but only when the outgroup target was anonymous.

The results rule out certain prospective explanations for the observed effect, which relate to the overall normative context of the communication. Firstly, the acceptability or permissibility of flaming certain groups was not mediating the effect. An examination of this issue revealed that there was no stronger relationship between language abstraction and identifiability for high and low permissibility of flaming. That is, language abstraction was no different under conditions where it was ‘OK’ to flame than when it was ‘not OK’. Secondly, there was no reason to believe from the results that global normative contexts were responsible for the effect. Flaming was not significantly more or less abstract in flaming ‘acceptable’ than flaming ‘unacceptable’ newsgroups. Thirdly, it was not the case that anonymous communicators were more hostile than users who were identifiable, nor was hostility affected by identifiability of the outgroup members. It may be that because all communication was selected to be particularly hostile, there may have been very little variation on the hostility measure in general. However, there was no evidence that hostility was related to language abstraction or identifiability, and therefore it is not a plausible mediator for the effect observed. This is interesting, because it indicates that language abstraction is influenced by identifiability, but explicit hostility is not. However, it is possible that variation in hostility may be higher in a controlled laboratory setting. In case this was true, and this study did not provide an
accurate measure of the effects of identifiability on hostility, hostility was retained as a dependent variable in Studies 2 and 3.

In summary, this study shows that:

1. Contrary to the model of Internet identifiability proposed in Chapter 5, there are no main effects of identifiability on stereotypical language use.

2. Stereotypical language is highest under conditions where sources are identifiable and targets are anonymous, partially in line with the model of Internet identifiability.

3. Permissibility, perceived hostility and global normative context are unrelated to the effect and cannot explain it.

How then, can this effect be explained? It is possible that a qualified strategic/self-presentational account (as outlined in the model of Internet identifiability in Chapter 5) can explain the effect, based on evidence that the predicted relationship occurs under conditions where the target outgroup member is anonymous. However, there is no evidence from this archival study that strategic motivations were driving the effect because communicators’ motivations could not be measured, and so this idea needs to be tested empirically. If strategic behaviour is responsible for high levels of stereotypical language use, this complements research indicating that the use of abstract language can be affected by explicit motivational processes under certain conditions (e.g., Maass et al., 1996; Webster et al., 1997).

Having said this, a self-categorical account cannot be ruled out. Perhaps being identifiable to an audience when communicating about an anonymous outgroup target increases the salience of the social categorization by making the intergroup encounter more prominent. That is, the source’s own identifiable status may contrast with the anonymous and possible cowardly status of the target.
In exploring the reasons for the effect of identifiability on language abstraction, two broad questions were framed for the next two studies. Firstly, was the effect due to what Spears and Lea (1994) term cognitive (self-categorical) or strategic factors? That is, could the higher stereotypical language for identifiable sources communicating about an anonymous target be attributed to strongly stereotypical perceptions or was it due to self-presentational and related factors? Secondly, did the effect depend upon the intended audience of the message? Is it necessary to have both ingroup and outgroup members in the audience to replicate the effect, or is the presence of either an ingroup or outgroup audience alone sufficient? My overall strategy therefore was to attempt to replicate the archival effect with an outgroup and an ingroup audience and then to establish whether self-categorical or strategic mechanisms were responsible.

In order to do so, it was necessary to conduct two experiments. The first experiment examined the effects of identifiability of sources and targets on stereotypical language use when communicators are identifiable to an ingroup audience. The second experiment investigated the same issue in the presence of an outgroup audience. Both Studies 2 and 3 are presented in Chapter 7.
Chapter 7

Studies 2 and 3 - Experimental examinations of the effects of identifiability on stereotypical language use in CMC:

The impact of identifiability to ingroup and outgroup audiences

Introduction

Study 1 indicates that a simple main effects model is not adequate to explain the effects of Internet identifiability on stereotypical language use in CMC. It is not simply that identifiable communicators use higher levels of stereotypical language for whatever reason, nor is it the case that anonymous communicators are subject to higher levels of stereotypical language when they are described. Instead, Study 1 revealed a more complex relationship between identifiability and stereotypical language use. Partially in line with the aspect of the model drawn from the strategic SIDE and research on self-presentation, results revealed that when outgroup targets were anonymous, identifiable sources used higher levels of stereotypical language to describe the targets than did anonymous sources. Explaining why this might be the case was the purpose of Studies 2 and 3.

As explained in Chapter 6, newsgroup audiences always contain a mix of ingroup and outgroup members at any given time. The model of Internet identifiability proposes that different processes come into play when communicators are identifiable to ingroup audiences than when they are identifiable to outgroup audiences, even though the behavioural outcome may be the same. As such, the
effects of identifiability on stereotypical language use may be due to the presence of an ingroup audience, or an outgroup audience. This chapter examines both of these possibilities, focusing firstly on the effects of an ingroup audience.

If the effect of identifiability on language abstraction observed in Study 1 is replicated with an ingroup audience, it could be due to three possible factors. Firstly, the effect could be due to an increased salience of the social categorization resulting from increased differentiation between ingroup and outgroup, or increased involvement of the sources in the issue (i.e., a self-categorical effect). Secondly, it could also be a strategic effect due to a desire on the part of identifiable sources to present themselves positively to other ingroup members (see Barreto & Ellemers, in press; Noel et al., 1995). Thirdly, it may be related to the social support provided by being co-present with an ingroup audience (see Reicher et al., 1998; Spears & Lea, 1994), although this is less plausible under condition of Internet identifiability.

Evidence for the effect with an ingroup audience would provide evidence for self-categorical factors (i.e., increased salience of social category), provided that increased differentiation between the ingroup and the outgroup mediates the effect. This would be evidence for the aspect of the Internet identifiability model derived from the cognitive SIDE, indicating that increased group-normative behaviour results from enhanced intergroup differentiation produced by the fact that the target was anonymous while the source was identifiable. If this is not the case, the effect may be related to strategic attempts on the part of the participants, to seek positive evaluation from the ingroup audience or because the ingroup audience provides social support to resist the outgroup.

There are also two possible mechanisms whereby identifiability to an outgroup audience might bring about higher levels of stereotypical language for
identifiable participants. Firstly, identifiability to an outgroup audience could increase stereotypical language use by increasing the salience of the social categorization as a result of increased involvement of the communicator in the issue. In this case, stereotypical language may increase for identifiable communicators because the importance of being an ingroup member increases for them as a result of being identifiable. This may lead to the expression of stereotypical depictions of outgroup members due to the salience of the intergroup context. This would be a self-categorical phenomenon.

The second possibility is that the effect may be brought about due to communicators’ strategic motivations. That is, it could also be a strategic effect due to a desire on the part of identifiable sources to assert their ingroup identity to the outgroup as clearly as possible in order to distance themselves from the outgroup (see also Reicher & Levine, 1994a,b). However, if this is the case then it also provides evidence that language use, often believed not to be under conscious control, may be affected by strategic motivations.

Studies 2 and 3 attempted to reproduce the conditions observed in the field in a laboratory setting in order to make causal inferences about the effects of identifiability on behaviour. In these experiments, participants were asked to respond via computer to an outgroup member’s Internet message. They were either anonymous or identifiable to an audience comprised of ingroup members (Study 2) or outgroup members (Study 3). Although it was not practicable to set up permanent e-mail addresses for the participants, they were required to supply their name and country of residence. This was so in order to reproduce the Internet situation as closely as possible. A similar amount of biographical information is available in a person’s name and country of residence as is available in an e-mail address. It was
therefore anticipated that the cognitive and strategic effects of these manipulations would provide as close a situation as possible to the archival study, where users who chose to be identifiable supplied their name and e-mail address.

If identifiability to an exclusively ingroup or exclusively outgroup audience is responsible for the effect of identifiability on language abstraction, Studies 2 and 3 should yield different results. If identifiability to an ingroup audience is responsible for the effect, then the interaction observed in Study 1 should only be replicated in Study 2. If identifiability to an outgroup audience is responsible for the effect, then the interaction should only be replicated in Study 3. In each case, if the effect is mediated by measures related to the salience of the social categories (e.g., intergroup differentiation measures), that would be evidence for the cognitive aspect of the SIDE model. If this is not the case, then strategic or self-presentational mechanisms are the likely cause of the effect.

As mentioned in Chapter 6, the explicit measure of hostility was retained in Studies 2 and 3. In case variation in hostility was low in the archival study, hostility was measured again in a controlled setting. Again, this allowed for a comparison of the effects of identifiability on language use and explicit hostility.

Study 2: Method

Participants

Participants were undergraduate psychology students at the Australian National University, who participated for course credit. There were 44 students (10 male and 34 female) with a mean age of 23.9.
Design

This study consisted of a 2 (ingroup: anonymous/identifiable) x 2 (outgroup: anonymous/identifiable) between-subjects design. The main dependent variable was the level of language abstraction measured using the LCM.

Procedure

The questionnaire materials used in Study 2 and for all other studies are presented in Appendix II. The experiment consisted of three phases. In phase one, participants, in sessions of two to five people, were asked to complete a questionnaire. Participants were first informed that they were going to be asked to read a message that had been placed on the Internet and that the message had been printed out for them. Participants were firstly asked to indicate how familiar they were with the Internet and e-mail. A scale of one 'totally unfamiliar' to nine 'extremely familiar' was provided. Participants were informed that the message had been written by a member of an extreme, white-power group and were also informed that many Internet messages were written by members of such groups and that there were also groups opposed to white-power views on white superiority. Participants were then asked to indicate, by circling the appropriate number, which group they felt they belonged to. Participants were to choose between groups one (not opposed to white-power groups), or two (opposed to white-power groups). They were also asked how much they identified with their chosen group and how strongly they were opposed to white-power groups. Participants recorded their responses on scales of one ‘not at all’ to nine ‘extremely’. These particular questions were designed to
produce a pre-test measure of group salience or identification. There were no variations between conditions in any of these pre-test variables (which were included as potential covariates and to make the intergroup context salient) and they have therefore not been reported in the results.

After participants completed this initial questionnaire, they began phase two. The software package ‘Teachtext’, a basic word-processing programme, was loaded onto a Macintosh computer so that the computer screen was blank and ready for typing. Participants were then given instructions and a copy of the message that had actually been written and placed on the Internet by a member of a white-power group. The message was very hostile towards racial groups other than whites. The author wrote that white people were the main victims of racism in today’s society and that ‘blacks’ are responsible for this due to Affirmative Action and other means for equalising racial discrepancies in society. The writer asked his/her readers to stand up for themselves and not let blacks take over; to fight for the same treatment as blacks and fight to preserve what their forefathers have created. He/she asked them not to feel guilty for the past actions of whites because whites are the superior race. Participants were informed that the white-power group member had either (a) chosen to remain anonymous by not supplying his/her name and country (these participants were therefore unaware of the target’s gender or nationality), or (b) chosen to identify himself by supplying his name and country. The name ‘Kevin Jackson’ and country ‘United States of America’ were chosen to induce the belief that the person who composed the message was an American male. These categories were chosen because Internet users are more commonly male and American than alternative categories. Also, the message contained American spellings. I am not arguing that American males are the communicators who are most likely to be hostile
in CMC situations. It is simply the case that more Internet users are male and American and to choose alternative categories would have made those categories unduly salient. A copy of the message appears in figure 7.1.

http://www.white-power.com

From: Anonymous [Kevin Jackson]
Location: Unknown [United States of America]

Although there is no denying the economic and political stranglehold on our once-great nations, my site is to inform you that we are all responsible for our own circumstances. I am sick and tired of the usual paranoia-ridden finger pointing! We must stop dwelling on the problems and instead focus on solutions. We must educate ourselves and work harder to prosper because we are not going to receive any hand-outs or breaks! Racial discrimination and prejudice are indeed a fact of life, but unfortunately the white people are the main victims! We are at the bottom end of laws aiding the non-whites with preferential treatments! Affirmative action, quota systems and other unfair hiring practices have to go! Why is it that there can be a National Association for the Advancement of Colored People (NAACP) but none for white people? Why is it acceptable for there to be a Black Education Television (BET) but if whites want to air a show it must be on public access channel and considered racist? Is this my imagination, or is this discrimination? Why is it that when a black person commits a crime against a white it is a normal crime, but if a white does something to a minority it is labeled a "bias crime?" If the other races truly want equality, then why does it take handicaps to obtain this? We will not rest until our people are given the same treatment as minorities? Why must the white male be oppressed in order for others to gain their freedoms? You sit back and watch our possessions, homes, and cities sink into the greedy hands of the enemy. Isn't it time you did something? You cannot sit around watching television and praying that things will change on their own, YOU must help change them. The current system is anti-white and attempts to force our race into feeling guilty for our past actions, but enough about the lies of the past... we must work towards securing our future! It is an uphill battle, but one we are more than capable of winning! Get up off your ass and motivate yourself! Everything starts at the home, so building a strong family structure containing morals and values must become our top priority! Unless we fix things quickly, our future will be tragic! I believe the outrageous drug problem and crime rate can easily be minimized simply by correcting the lack of family support and values. Before we can begin regaining any political power or strength in our nations we must learn to fix our families and this can be done only through strict self-determination and dedication. Only then will we make any progress towards our goals. Whining and yelling has gotten us nowhere... the time for action has arisen! Most people involved in the racist or skinhead movement have faced great opposition from family members, relationships, and especially their employers for voicing their beliefs. Only strong-willed individuals with true intentions can expect to last, the rest shall quickly fade away. Our freedoms are being taken away and it has been made a crime to stand up and voice opposition! We are now condemned and shunned for what our forefathers were praised and heralded for doing. What were once called patriots are now called radicals and extremists! We are now under attack for wanting to save our once great countries! If you would like to remain ignorant and ignore the fact that there are ANTI-WHITE FORCES working against us - Go ahead... but they are there! If you think that there are no reasons for us to worry... simply look around us. Take a glance at the malicious television and look at the confused youth. They have all but lost their racial identities. This is frightening and sickening. If our forefathers didn't protect what they thought was right... where would we all be right now? We are irreversibly destroying our cultures and bloodlines.

Figure 7.1. White-power Internet message.
Participants were informed that they would be writing a response to the message they were about to read and that their response would be seen only by a mailing list of people who are opposed to white-power groups. That is, their audience was comprised of ingroup members. Participants were randomly allocated to one of four possible conditions: (a) participants were asked to supply their name and country and were shown that the white-power group member had also chosen to do so (identifiable/identifiable condition), (b) participants were asked to supply their name and country but were shown that the white-power group member had chosen not to do so (identifiable/anonymous condition), (c) participants were told that they did not have to supply their name and country but were shown that the white-power group member had chosen to do so (anonymous/identifiable condition) and (d) participants were told that they did not have to supply their name and country and were shown that the white-power group member had also chosen not to do so (anonymous/anonymous condition). All participants adhered to the instructions and supplied details where asked by typing them into the computer.

Participants were then asked to read the message and await further instructions. After doing so, they were given further instructions to comment only on the behaviour and opinions of the white-power group member and to place any quotes from the message in quotation marks. They were informed that they would have 10 minutes to complete their responses. All participants began at the same time. They were timed and were asked to cease typing after 10 minutes had elapsed. An excerpt of a typical message written by a participant is as follows:

Is is no wonder that he hasn’t the guts to sign his name as he seems piteously insecure about who he is!! If he really thought that he was
part of the ‘best’ race then why is he so threatened by the others? His so-called ‘forefathers’ may perhaps been bigoted fools too. He is just too slow to realise this!

After completing their responses to the message participants were asked to complete a final questionnaire (phase three). Participants were asked to indicate if they would like to send their messages to the mailing list. They were asked to indicate this choice by explicitly stating either ‘yes’ or ‘no’. They were also given the following instructions:

Also, I would like you to think of the type of person who wrote the message to which you replied. Could you please list 3 adjectives which (in your opinion) would best describe such a person:

Could you also list 3 adjectives that are characteristic of you, but not of the person who wrote the Internet message:

The adjectives were rated by an independent rater on a scale of one ‘very positive adjective’ through five ‘neutral’ to nine ‘very negative adjective’. These ratings were then averaged across the three items by dividing the total amount by three. This was done to obtain one value of adjective positivity/negativity for outgroup members and one for ingroup members (the participants themselves). A differentiation score was obtained for each participant by subtracting the average positivity of self adjectives from the average positivity of outgroup adjectives. Obtaining this differentiation score made it possible to examine if anonymous and identifiable participants differed in their views about the ingroup and outgroup. That
is, it was possible to examine whether the manipulation of identifiability changed participants' views about the intergroup context, indicating a change in salience due to identifiability.

Participants were then asked to rate how consistent the message was with what they expected from a member of a white-power group. A scale of one 'not expected at all' to nine 'exactly as I expected' was presented. It should be noted that the mean consistency rating was well above the midpoint ($M=6.35$). However, there was no variation across conditions on this variable, and so it will not be discussed in the results. Finally, participants were then debriefed and thanked for their participation in the research.

Results

Language abstraction

Results for language abstraction are presented in Figure 7.2. As hypothesised, the interaction between source and target was significant, $F(1,40)=5.22, p<.05$. Also, the pairwise comparison in the outgroup anonymous condition was significant, $t(20)=2.47, p<.05$. As in Study 1, language abstraction was higher in the identifiable source condition ($M=2.83$) than the anonymous source ($M=2.25$) condition. No other pairwise contrasts were statistically significant.
There was no main effect for source, $F(1,40)=3.47$, $p=.06$ and although this effect was approaching significance ($M_s=2.44$ in the anonymous condition versus $2.71$ for the identifiable condition), it was substantially qualified by the significant interaction. Also, no main effect for target was found, $F(1,40)<1$, ns. That is, there was no difference in language abstraction between the anonymous ($M=2.54$) and identifiable ($M=2.61$) target conditions.

**Willingness to send messages**

A chi-square analysis revealed that participants were no more or less likely to wish to send their message in any of the four source/target combinations, $\chi^2(1, N=44)= 0.38$, ns. That is, the willingness to send the message was not affected by the anonymity of either source or target.
Hostility

There was no difference in perceived hostility between the anonymous source (M=27.50), and identifiable source (M=30.80) conditions, F(1,40)<1, ns. The effect for target approached significance, F(1,40)=3.59, p=.07 with a trend for there to be greater hostility when the outgroup target is identifiable (M=33.75), than when the target is anonymous (M=24.55). The correlation between language abstraction and perceived hostility was not significant, r(43)=.20, ns.

Intergroup differentiation

The positivity and negativity of self and outgroup adjectives were combined to provide a measure of post-test intergroup differentiation. If differentiation acted as a mediator of the language abstraction differences, this would provide support for the cognitive aspect of the SIDE model. For mediation to hold there should be a significant path between identifiability and intergroup differentiation and between differentiation and language abstraction, and the significant path between identifiability and abstraction should be non-significant when differentiation is included in the analysis (Baron & Kenny, 1986). In fact, only one of these conditions held. There was a significant relationship between differentiation and language abstraction, β=0.21, p<.05 but a non significant relationship between identifiability and differentiation, β=0.07, ns. and the path between identifiability and abstraction was unaffected by the inclusion of differentiation. In other words, intergroup differentiation and identifiability appeared to have independent effects on
language abstraction. A similar pattern was found for the outgroup negativity measure alone.

**Discussion**

The results of Study 2 indicate that an ingroup audience is important in producing the effect of identifiability on language abstraction as observed in Study 1. As in the archival study, identifiable communicators described anonymous outgroup targets more stereotypically than did anonymous communicators. This supports the research of Barreto and Ellemers (in press) and Noel et al. (1995) who observed increases in group-normative behaviour when participants were identifiable to an ingroup audience. Moreover, the attempt to manipulate variables and replicate their effects in the laboratory was successful.

Stereotypical language was highest when the ingroup sources were identifiable to the ingroup audience and when the target outgroup member was anonymous. There was thus an immediate difference in the anonymity of the target and sources. The target was anonymous and therefore his or her personal identity was concealed, and yet the sources were identifiable. It was possible that differentiation between the groups based on different identifiability status might be responsible for the effect. However, a mediational analysis revealed that intergroup differentiation did not mediate the relationship between identifiability and language abstraction. It therefore seems less possible that stereotypical language in the anonymous target condition was due to increased intergroup differentiation or heightened negative feelings towards the outgroup. Clearly, intergroup
differentiation is related to language abstraction but this effect is independent of the manipulation of identifiability.

However, as explained in the Introduction, it is also important to investigate the possibility that an exclusively outgroup audience may be important in eliciting strategic behaviour. This possibility is examined in Study 3.

**Study 3: Method**

**Participants**

A total of 46 undergraduate psychology students from the Australian National University participated in this study for course credit. Their mean age was 20.1. There were 10 males and 36 females. The only selection criterion applied was that all of the participants identified themselves as ‘opposed to white-power groups’ in the first phase of the study. One participant was excluded on the basis of this criterion.

**Design**

This study consisted of a 2 (ingroup: anonymous/identifiable) x 2 (outgroup: anonymous/identifiable) between-subjects design. The primary dependent variable was the level of language abstraction measured using the LCM.
Procedure

Phase one of this experiment was exactly as in Study 2. In phase two however, participants were asked to respond to the white-power message and were informed that their response would only be read by a mailing list of people who are not opposed to white-power groups. This group may include people who support white-power groups, and those who are not committed one way or the other. That is, participants were told that the outgroup would be reading the message. The remainder of phase two was identical to that of Study 2. Again, all participants adhered to the instructions and supplied name/location where asked by typing the details into the computer. An excerpt from a typical message is as follows:

Oh, what is the world coming to!? In that stupid, paranoid radicals are allowed to freely voice their prejudiced opinions and spread their propaganda plaguing their minds! Fool.

In phase three, all questions were the same as in Study 2 but instead of asking participants if they wanted to send their messages (yes/no), participants were asked to respond to this question on a scale of one ‘I don’t want to send my message’ to nine ‘I really want to send my message’. Although binary variables provide require a clear decision on the part of the participant, this supplies less information than the nine-point scale. As in Study 2 there were no variations between conditions on the pre-test measures of group identification or the perceived consistency (with typical expectancies) of the white-power group member’s message and so the results have not been reported here. However, it should be noted again that perceived consistency
of the white-power group message with expectations was again above the midpoint (M=6.38). Participants were again debriefed and thanked for their participation in the research.

Results

Language abstraction

Results were coded using the LCM and measures of abstraction were obtained for each individual communication. Contrary to predictions, there was no interaction between source and target, F(1,42)<1, ns. There was also no main effect for source, F(1,42)<1, ns. That is, there was no difference in language abstraction between the anonymous (M=2.34) and identifiable source (M=2.37) conditions. Also, there was no main effect for target, F(1,42)<1, ns. There was therefore no significant difference in abstraction between the anonymous (M=2.38) and identifiable target (M=2.33) conditions.

Willingness to send messages

It was found that there was no difference in willingness to send the messages between the participants who were anonymous and those who were identifiable (Ms=5.25 vs. 5.27), F(1,42)<1, ns. Also, there was no difference in participants’ willingness to send the message depending on whether the target was anonymous (M=5.25) or identifiable (M=5.27), F(1,42)<1, ns. The interaction between source and target however, approached significance, F(1,42)=3.58, p=.07 but no pairwise
comparisons were statistically significant. Including willingness to send the message as a covariate in the language abstraction analysis did not suggest that willingness was concealing any effects on the main measures of interest.

Hostility

There was no main effect for source on perceived hostility, $F(1,42)<1$, ns. There was no difference in perceived hostility between the anonymous (M=32.40) and identifiable source (M=30.45) conditions. Also, there was no main effect for target, $F(1,42)<1$, ns. There was no interaction between source and target, $F(1,42)<1$, ns. However, there was a significant positive correlation between perceived hostility and language abstraction, $r(45)=.42$, $p<.01$.

Intergroup differentiation

Including post-test group differentiation as a covariate had no bearing on the language abstraction results. There were also no significant relationships between post-test differentiation and hostility, $r(45)=.10$, ns, or between differentiation and language abstraction, $r(45)=.02$, ns.

There was, however, a significant interaction between source and target for the positivity of adjectives used to describe the ingroup, $F(1,42)=6.82$, $p<.05$. Participants used more positive adjectives to describe the ingroup when they were identifiable to the outgroup (M=1.86) than when they were anonymous (M=2.79), $t(21)=2.76$, $p<.01$. This may indicate that identifiable participants were motivated to heighten the positivity of the ingroup in the presence of the outgroup.
Discussion

There was no evidence in this study to suggest that stereotypical language was affected by the presence of an audience comprised of outgroup members. The results of this study therefore cast doubt on the role of identifiability to an outgroup audience as a cause of increased language abstraction. If either cognitive or strategic factors related to being identifiable to an outgroup audience were responsible for driving the effect, then the effect should have been replicated in this study. Instead, no variation in language abstraction was observed across conditions.

This result is not consistent with the findings of Reicher and Levine (1994, a,b) in so far that stereotypical language use was not increased by making communicators identifiable to an outgroup audience. Reicher and Levine found that people were more likely to express attitudes that were congruent with the ingroup position in the presence of an outgroup audience, as long as they could not be punished for it. Given that perceived threat appeared to be low here, this result is interestingly contrary to prior research of a similar nature. However, it is important to note that the setting and dependent variables were different for each study, so no direct comparison can be made. Nevertheless, the present study casts doubt on the importance of an outgroup audience in driving the effect observed in Study 1.

In contrast to Study 1 however, perceived hostility of the flames varied positively with language abstraction indicating that increasing levels of language abstraction were associated with increasing hostility of the flames. This correlation may have been apparent here because the overall levels of abstraction were lower in this study implying again that range may have been restricted in Study 1, but interestingly, also by Study 2.
General Discussion

The results of Study 2 indicate that an ingroup audience is important in producing the effect of identifiability on language abstraction as observed in Study 1. The results of Study 3 however, cast doubt on the role of identifiability to an outgroup audience as a cause of increased language abstraction. When the audience was composed of ingroup members only, language was most abstract when the ingroup sources were identifiable and when the target outgroup member was anonymous. From now on, I will call this the identifiability/language abstraction effect.

From these results, it is possible to revise the model of Internet identifiability originally proposed in Chapter 5. It is clear that Internet identifiability does not impact upon behaviour in the case of an outgroup audience. Only in the case of an ingroup audience does identifiability lead to increased stereotypical descriptions of anonymous outgroup targets. Furthermore, it was possible to eliminate self-categorical factors from the model. There was no evidence from Studies 2 and 3 that intergroup differentiation was implicated in the effect of identifiability on language abstraction. Isolating the social psychological processes responsible for this effect was thus the focus of the remainder of the research programme.

As previously mentioned, people who are identifiable to other ingroup members may act in a more group-normative manner for strategic reasons such as a desire to be positively evaluated by the ingroup (e.g., Noel et al., 1995), because they do not identify with the group (e.g., Barreto & Ellemers, in press), or because they feel supported by the ingroup to assert their identity (e.g., Reicher et al., 1998). Further, participants who are identifiable may feel more ‘pressured’ to adhere to the
norms of the group because they are accountable for what they say (e.g., Spears & Lea, 1994). Whether or not accountability comes into play when responses are identifiable to an ingroup audience, however, remains to be tested. Both SIDE and SCT assume that accountability is a process reserved for powerful outgroups, yet the possibility remains that the ingroup does also have the power to hold ingroup members accountable for their actions. It has been found that group members do react differently according to the context in which they are placed. For example, it has been found that ostracised individuals comply more with group norms than individuals who are not ostracised (see Choi & Williams, 1999; Williams & Sommer, 1999). Perhaps being identifiable to an ingroup audience sensitizes communicators to possibilities like ostracism and rejection, and therefore makes them feel accountable for their behaviour. More will be said of this later. However, the common feature of these explanations is that they pose strategic or self-presentational motivations for communicators to use group-normative language.

It is interesting to note that Study 3 provided the first evidence in this research programme that hostility was significantly related to language abstraction. This is important because it indicates that a clearly explicit variable (hostility) correlates with language abstraction, often thought to be an implicit variable. This again raises the question of whether language use is under intentional control, and can be influenced by strategic motivations. The results of the research up to this point do not answer this question, but indicate that language use may be related to explicit hostility, suggesting that language use is possibly influenced by strategic or conscious processes. Investigation of this interesting issue was thus carried out in subsequent studies.
Study 4 took the first step in uncovering the social psychological processes involved in increased stereotypical language use, under conditions of identifiability to an ingroup audience. One minor limitation that must be placed on the scope of these results so far is that there is no real explanation of why the effects obtained are only found with anonymous targets. However, it is possible that an identifiable outgroup member might be individuated and thus be perceived as less prototypical of the group. As such, individuation of the target might make conditions interpersonal rather than intergroup conditions, thus making intergroup effects less probable. In Study 4, the identifiable target condition was therefore omitted.
Chapter 8

Study 4 - Identifiability to an ingroup audience: An examination of stereotypical language use in relation to feelings of accountability towards an ingroup audience

Introduction

Studies 1 to 3 tell us that identifiable communicators describe anonymous outgroup targets in more stereotypical terms than do anonymous communicators. This, it appears, relates in some way to being identifiable to an ingroup (but not an outgroup) audience. Study 4 attempted to uncover the social psychological processes underlying this effect. This study is outlined in the present chapter.

As previously stated, there may be explicit motivations for communicators to act group-normatively and to stereotype the outgroup, when their audience is comprised of ingroup members. Firstly, they may feel that their ingroup audience is supportive and enables them to express views that they may not express in the presence of an outgroup audience (e.g., Spears & Lea, 1994). Further, they may wish to be positively evaluated by the ingroup, especially if they feel they are on the periphery of the group (e.g., Barreto & Ellemers, in press; Noel et al., 1995). In relation to the present research, one way to achieve positive evaluation by the ingroup audience may be to derogate the outgroup (see Noel, et al., 1995). This is possible through the use of stereotypical language to describe the outgroup.
Therefore, it is possible that communicators describe the outgroup stereotypically because in doing so, positive evaluation by the audience may be achieved.

However, the strategic dimension of the SIDE model also proposes that there is little pressure on anonymous communicators to conform to the norms and expectations of the group who constitutes their audience. Anonymity makes people 'free' to express their own identity without worrying how they will be seen by their audience. Spears and Lea (1994) argue however, that this is the case only when the audience consists of outgroup members. This follows on from self-categorization theory, where the outgroup is assumed to have coercive power under certain circumstances but the expression of ingroup identity will always reflect the expression of 'true' identity. What the present study also investigates is whether the ingroup also has the power to make communicators feel accountable for their behaviour. Further, this study investigates whether accountability and similar self-presentational concerns influence behaviour. That is, do explicit motivations affect language use?

As stated in Chapter 4, it is plausible to assume that strategic motivations can influence behaviour of an implicit or unconscious nature, such as language use, based on past research. For example, when people are driven by threat to the ingroup, they use more abstract language to describe the outgroup (see Maass et al., 1996). Also, people with high need-for-closure are affected by this motivation to use higher levels of stereotypical language (e.g., Webster et al., 1997). So, language use can be influenced by goals and motivations. Evidence suggesting that strategic, self-presentational motivations can affect language use would provide further evidence that explicit or conscious processes can affect this implicit or unconscious behaviour.
Study 4 was designed to test the idea that strategic self-presentation is important to identifiable participants. This study therefore aimed to extend the current model of Internet identifiability by uncovering the social psychological processes whereby identifiability leads to increased stereotypical language use. If ideas derived from research on self-presentation, and also the strategic SIDE with relation to outgroup audiences are supported in the case of ingroup audiences, then identifiable participants should feel more accountable to their ingroup audience than should anonymous participants. This is because their responses are going to be read by an important and desirable ingroup (in this case anti-racists). This should lead identifiable participants to use more abstract stereotypical language than anonymous participants in expressing stereotypical views of the outgroup, thus replicating the effect observed in Studies 1 and 3. In other words, it was predicted that feelings of accountability to the audience would mediate the identifiability/language abstraction effect.

In addition to writing their messages, participants in Study 4 were given the option to add further points to their descriptions. The rationale was that if identifiable participants are more concerned about their personal evaluation, they will wish to clarify their position as clearly as possible to their audience, meaning that they may add to their original message.

Finally, additional measures of stereotyping were employed to examine the relationship between the use of linguistic strategies of stereotyping and traditional measures of stereotyping. The purpose of these measures was to help examine the relationship between the LCM, measured before an audience, and explicit measures of stereotyping taken in the absence of an audience.
Method

Participants

A total of 34 undergraduate psychology students from the Australian National University participated in this study, again for course credit. There were eight males and 26 females, and the mean age of participants was 19.1.

Design

The study consisted of a two group (ingroup source: anonymous/identifiable) between-subjects design. In contrast to the previous studies, outgroup target anonymity was not manipulated for reasons outlined in the discussion of Chapter 7. The outgroup target was always perceived to be anonymous, having supplied no personal information. Again, the primary dependent variable was the level of language abstraction as measured by the LCM.

Procedure

Phase one of this experiment was exactly as in Studies 2 and 3 except that participants were not asked about their familiarity with the Internet and e-mail because these variables did not vary across conditions. In phase two, however, all participants were informed that the white-power group member had chosen to remain anonymous and had supplied no personal information. Also, as in Study 3, participants were asked to respond to the white-power message and were told that it
was going to be read only by a mailing list of people who were opposed to white-power groups. That is, the participants’ audience was their ingroup. Again, all participants supplied details where asked and all adhered to the instructions. An excerpt from a message is presented below:

This person is a racist jerk and shouldn’t be allowed to say things like this. A paranoid-ridden, finger-pointing asshole who hasn’t got anything better to do than try to mess up the world with his racism and bigotry.

From this point, Study 4 differed from the previous studies. After participants had composed their messages (they were again given 10 minutes to complete the task), they were asked to stop and await further instructions. At this point, the experimenter went to each cubicle individually and gave each participant a printed copy of the response they had just written. When each participant had received a copy of their own response they were given the following verbal instructions:

Thank you for writing your message. As you know, it will be sent to a mailing list consisting of people who oppose white-power, racist groups. Before it is sent however, I would like to give you a few minutes to add any further points to your message. You may have some additional comments to make. I would like you to read what you have already written and please make any additions to your message on the blank screen in front of you. However, do not type anything until I ask you. Please re-read your messages now.
After one minute had elapsed, participants were then told that they would have a few minutes to type their additional comments. If they had no further comments to make they were asked to indicate this by typing 'no additional comments' on the screen. Participants with additional comments were asked to stop typing after three minutes had elapsed. This measure allowed for a comparison of the number of additional comments (measured on the number of unique additional points) made across conditions.

Participants were then asked to return to their places in the main experimental room where they were asked to complete a final questionnaire that was not to be seen by their audience. The following questions were designed to assess participants’ accountability and other possible related effects. The measures included a direct measure of accountability: ‘How personally accountable did you feel for what you had written in your response to the message?’ There were also a variety of other measures as follows:

How accurately does your message reflect your own views regarding the issue of racism?

How much did you expect the other people on the mailing list (other people who oppose racism) to agree with your views?

How important is it to you, that the other people on the mailing list (other people who oppose racism) agree with your views?

How important did you view the task of composing a response to be?

How seriously do you think you performed the task compared to others who might perform the same task?
Each participant was asked to respond by indicating on a nine point scale (one being ‘not at all’ and nine being ‘extremely’). The aim of these measures was to attempt to explore different aspects of participants’ feelings related to the task and how identifiability might impact upon them.

The next series of questions were stereotyping questions, specifically designed to assess the correlation between the strategic use of language to stereotype in front of an audience and more traditional measures of stereotyping in the absence of audience evaluation. The questions were as follows:

Focusing now on the person who wrote the racist message, how typical do you think this person would be of white-power groups? (i.e., How much do you think he/she might be like other white-power group members?).

To what degree was the white-power group member's message in line with your expectations about such groups?

How positively do you feel about the person who wrote the racist message?

How much do you think the other people on the mailing list (who are opposed to racist groups), would agree with your perceptions about the white-power group member?

How much do you think that your knowledge of this white-power group member help you to understand white-power groups overall?

How unique or distinct do you think white-power groups are, from other groups in society?
How much do you think that the white-power group member's message was a 'one-off' or atypical statement, as opposed to typical behaviour for that person?

How much do you think the white-power group's message was indicative of his/her own personal feelings, and inherent personality characteristics?

Could you also please rate how much you think the white-power group member displayed each of the following traits.

Was he/she:

(a) insecure?
(b) narrow-minded?
(c) tolerant?
(d) selfish?
(e) realistic?
(f) afraid?
(g) extreme?

The final list of traits were taken from frequently used adjectives to describe the target in Studies 1, 2 and 3. The scales were from one to nine. Participants were also asked ‘when you were composing your message, how strongly involved did you feel regarding the issue of racism?’, to assess their strength of feeling about the issue they were discussing. Participants were also asked again how much they identified with people who are opposed to white-power groups and how strongly they were opposed to white-power groups (again, on nine point scales).

In contrast to the previous studies, intergroup differentiation or perceived levels of hostility were not examined in this study. As there was no evidence that either of these dependent variables mediated the identifiability/language abstraction
effect, they were eliminated. Again, participants were debriefed and thanked for their participation in the research.

Results

Language abstraction

As expected, there was a significant difference in language abstraction such that abstraction was higher in the identifiable condition (M=2.76) than in the anonymous condition (M=2.45), t(32)=2.14, p<.05 thus replicating the effect observed in Study 3.

Accountability and strength of feeling about the issue

Identifiable communicators felt more personally accountable (M=7.65) than anonymous communicators (M=6.41), t(32)=2.40, p<.05 on the item ‘how personally accountable did you feel for what you had written in your response to the message?’.

None of the other items differed between the two conditions.

Anonymous communicators felt more strongly about the racism issue (M=7.29) than those who were identifiable (M=6.29), t(32)=2.51, p<.05 according to measures on the item ‘when you were composing your message, how strongly involved did you feel regarding the issue of racism?’ Thus, identifiability increased language abstraction and accountability but there was a decrease in participants’ strength of feeling about the issue.
However, it is important to note that neither factor mediated the identifiability/language abstraction effect. That is, the differences across conditions in accountability and strength of feeling about the issue were not independently driving the effect of identifiability on language abstraction. I therefore explored the possibility that the effect of identifiability on language abstraction was mediated by the interaction of feelings of accountability (high) and strength of feeling about the issue (low). The interaction term was constructed by dividing scores on the accountability item by scores on the strength of feeling item, which is equivalent to multiplying scores on the accountability item by the reciprocal of scores on the strength of feeling item.

There was a significant relationship between identifiability and the proposed mediator, $\beta=0.58$, $p<.01$. There were also significant relationships between identifiability and language abstraction, $\beta=0.35$, $p<.05$, and between the proposed mediator and language abstraction, $\beta=0.36$, $p<.05$. When the proposed mediator was added to the equation with identifiability the relationship between identifiability and language abstraction was reduced, $\beta=0.22$, $p=.28$. Therefore, an interaction between accountability and lack of strength of feeling about the issue mediated the relationship between identifiability and language abstraction. That is, identifiable participants felt less strongly about the issue but more accountable and this produced more abstract language use.

**Number of additional points made to messages**

In relation to how many additional points participants made after they had completed their messages, it was found that twice as many additional points were
made in the identifiable condition \( (M=1.18 \text{ additional points per person, and 20 additional points overall}) \) than in the anonymous condition \( (M=0.59 \text{ additions per person, and 10 additional points made overall}) \). However, this mean difference was not statistically significant, \( t(32)=1.56, p=.13 \) by \( t \)-test or a range of non-parametric tests.

Explicit stereotyping measures

None of the responses to the explicit stereotyping questions, taken separately, correlated significantly with language abstraction and they did not constitute a reliable scale. All correlation coefficients were less than .16. Also, none of the responses to the stereotyping items differed across identifiability conditions.

Discussion

The results revealed a significant difference in language abstraction such that, as expected, identifiable communicators used more abstract language than anonymous communicators to describe an outgroup target. Overall, identifiable communicators felt more accountable about performing the task but less strongly about the issue under discussion. A mediational analysis revealed that the interaction between these two variables was responsible for variations in language use. That is, identifiable communicators who felt accountable but not strongly about the issue, used the highest levels of stereotypical language to describe the outgroup. It should be noted here that none of the other measures differed across conditions. I acknowledge that these may have been rather indirect measures.
These findings are therefore in line with research on self-presentation to an ingroup audience (e.g., Barreto & Ellemers, in press; Noel et al., 1995). Based on the findings of the current research, it is clear that there are self-presentational concerns for communicators if they are identifiable to the ingroup. Identifiability increases the level of accountability experienced by participants and this is related to the expression of stereotypical impressions of the outgroup. Thus, the factor responsible for the identifiability/language abstraction effect observed in Studies 1 and 3 may have been isolated. Differential language use appears to be a result of explicit, strategic motivations related to the presence of an ingroup audience.

The results are also consistent with research by Noel et al. (1995), indicating that self-presentation motivations are affected by the group membership status of participants. There is evidence here to suggest that behaviour of a group-normative nature was increased when participants were identifiable to an ingroup audience and they felt accountable but did not feel strongly aligned to the norms of the group. Perhaps as in Noel and colleagues' study the participants here felt on the periphery of the group and were most concerned about being accepted by the group.

Further, this research extends the SIDE model in showing the importance of mere identifiability to an ingroup audience in the expression of stereotypical views. The results also show that identifiability to an ingroup audience affects accountability to that audience to express the ingroup view. This is a process thought to be reserved for powerful outgroups (see Reicher & Levine, 1994, a,b; Spears & Lea, 1994; Turner et al., 1987). The intriguing question we are left with is: are the effects of identifiability on accountability and language abstraction related? It appears that they are not directly related, but that they may be related through the interaction of accountability and a lack of strength of feeling about the issue.
The particular combination of acting in line with group norms without strong commitment or pressure to comply needs some attention. This particular combination of factors requires some new designation. One way of understanding these conditions is to think of them as involving obligation or duty, reflecting accountability without strong commitment or obvious pressure from the group. Feeling obligated to act in line with the norms of an ingroup (a) must be distinguished from (b) acting in line with those norms because one feels committed to the norms (which is not the case here because those acting more in line with group norms came to feel strongly about the issue of racism), and (c) acting in line with the group norms because one feels compelled to obey the dictates of the group (Turner et al., 1987, argue however that this kind of pressure to comply emerges from a powerful outgroup). The mediational analyses suggest that the first of these possibilities is most likely to be responsible for the identifiability/language abstraction effect. People have feelings about the way they should act, not how they necessarily want to act or are forced to act, and feelings of accountability increase this obligation to the group. They are sensitive to how their audience will evaluate them, and act according to their feelings of ‘duty’ to their audience.

Therefore, under conditions where obligation was high, identifiable communicators used higher levels of stereotypical language to describe the outgroup target than did anonymous communicators. Under conditions where obligation was low, the use of stereotypical language did not increase. Further, obligation did not have an effect on levels of language abstraction used by anonymous communicators because in being anonymous these participants generally felt low accountability to the ingroup.
It is also interesting to note that language abstraction was not related to any of the explicit measures of stereotyping taken in this study. This could be viewed in one of three ways. Firstly, it might be concluded that the LCM is not a good measure of stereotypical language use. However, it may be premature to assume this since language abstraction is strongly linked to stereotypical expectations, both theoretically and empirically (e.g., Arcuri et al., 1993; Maass et al., 1995, 1996; see also Wigboldus et al., in press). Through the use of abstract language, communicators are describing outgroup members stereotypically, and in doing so, they transmit stereotypes to others. It is impossible to refute this based on the present research. Secondly, it is important to note that in Study 4 the participants' responses on the explicit stereotyping measures were not seen by the ingroup audience. It may have been that the public presentation of the message attenuated any correlation between language abstraction and traditional stereotyping measures.

However, another explanation relates to the findings of Franco and Maass (1996, 1999). This research indicates that the LIB is dissociable from traditional stereotyping measures. Instead, the LIB may be a more subtle way of maintaining stereotypes about groups. Perhaps this is the reason why language abstraction was unrelated to other measures of stereotyping in the present study. That is, participants could attenuate their level of stereotyping on the explicit measures, but could not attenuate stereotypical descriptions of the outgroup in the implicit LCM measure.

However, this is not to say that explicit motivations cannot affect language use. In this study, there is clear evidence that a motivation of which participants were aware (i.e., obligation) influenced their language use for describing the outgroup target. The fact that language abstraction was not related to other explicit stereotyping measures, and yet was affected by an explicit motivational process
raises a very interesting point. From this study, it appears that while language use is not under intentional control, and communicators can attenuate more outward indicators of prejudice and stereotypical, language use is nevertheless affected by people’s motivations. Perhaps they are simply unaware that their extrinsic motivations are affecting the way they describe others. This is consistent with the findings of Webster et al. (1997) and more will be said regarding this finding shortly.

However at this point it is useful to briefly overview the studies so far before moving on to describe the remaining three studies, their objectives and findings. So, what does this research tell us so far? It tells us firstly that the main effects model initially proposed cannot account for the effects of identifiability on flaming behaviour in CMC. There is no evidence that (a) anonymous targets are described more stereotypically than identifiable targets. There is evidence that (b) identifiable sources describe outgroup targets more stereotypically than anonymous sources, but only when the targets are anonymous. So, the effects of identifiability on stereotypical language use in CMC are not as simple as initially predicted. A revised model needs to be developed on the basis of the facts we know from my research outlined up to this point. I have found the following:

1. That hostile flaming communication on the Internet contains higher levels of stereotypical language than normal, everyday communication between groups on the Internet.

2. Identifiability impacts upon language use in the form of an interaction between source and target identifiability such that when outgroup targets are anonymous, communicators use higher levels of stereotypical language to describe targets when they themselves are identifiable, rather
than when they are anonymous. I have called this the identifiability/language abstraction effect.

3. This effect occurs with an ingroup audience but not an outgroup audience.

4. Identifiability to an ingroup audience also impacts upon feelings of accountability and strength of feeling about the issue. That is, there are multiple effects of identifiability on outcomes (language abstraction) and motivations (accountability, strength of feeling) in this communicative context.

5. The identifiability/language abstraction effect has been found to be mediated by an interaction between accountability and a lack of strength of feeling about the issue under discussion. That is, the identifiability/language abstraction effect appears to be driven by obligation felt by the communicators, to adhere to ingroup norms.

6. The implicit expression of views about the outgroup can be affected by strategic, explicit motivations.

So the research to this point indicates that identifiable communicators behave strategically in describing anonymous outgroup targets more stereotypically than do anonymous communicators. This may be due to obligation to the ingroup to express views more strongly than they normally might because they are obligated to express the views that are appropriate for their ingroup audience. This path is presented in Figure 8.1.
Figure 8.1. A revised model of the effects of Internet identifiability on communicative behaviour.

The research eliminates the possibility of a main effects model relating to the effects of identifiability on stereotypical language, and instead suggests that identifiability encourages strategic behaviour in the presence of an ingroup audience.

However, Sigall and Mills (1998) note that using Baron and Kenny's (1986) mediational analyses recommendations cannot rule out the possibility that another correlated variable is responsible for the effects of the independent variable on the dependent variable. Sigall and Mills suggest that the best way to eliminate any ambiguity is to manipulate the proposed mediator in an additional experiment. Thus, Study 5 was conducted to manipulate strength of feeling about the issue in order to replicate the effect of obligation on stereotypical language.
Chapter 9

Study 5 - Strength of feeling about opposing racism and its effects on stereotypical language use

Introduction

Study 5 manipulated participants' levels of strength of feeling about the issue of racism in order to replicate the mediational effect of obligation (accountability/strength of feeling) on stereotypical language, as observed in Study 4. As stated earlier, the best way to eliminate any ambiguity regarding the validity of the mediator is to manipulate it directly (Sigall & Mills, 1998). Since accountability is known to be directly manipulated by identifiability, it was most important to manipulate strength of feeling to opposing racism directly. This was done by varying levels of commitment. The rationale was that manipulating commitment to opposing racism was the most direct way to make participants feel strongly about the issue.

It was predicted that under conditions of high commitment, there should be no differences in levels of stereotypical language use between anonymous and identifiable communicators. Under conditions where all communicators are equally and highly committed to an issue, there is less reason to behave strategically towards their ingroup audience.

On the other hand, under conditions of low commitment, identifiable communicators will have a strategic motivation to describe the outgroup stereotypically in the presence of an ingroup audience. Their accountability brought
about by identifiability, teamed with low commitment should increase their feelings of obligation to the ingroup, and this should increase their propensity to describe the outgroup stereotypically because it is normative and desirable for them to do so. Participants who are anonymous should not be motivated by obligation to the ingroup because they are not accountable to them.

So, Study 5 attempts to replicate the mediation of the identifiability/language abstraction effect by obligation to the ingroup as observed in Study 4. Commitment to the issue was manipulated by issuing high commitment participants with a questionnaire designed to engage them to think about issues of opposing racism in society. Participants whose commitment was not manipulated were not given this questionnaire. After completing the questionnaire, false feedback was given to participants in this condition and they were informed that they were high in commitment to opposing racism in society. It was predicted that there would be an interaction between identifiability and commitment such that higher levels of language abstraction would occur under conditions of low commitment and identifiability than under any other conditions.

Method

Participants

A total of 43 undergraduate psychology students from the Australian National University participated in this study in exchange for course credit. There were 18 males and 25 females. The mean age of participants was 22.7. One participant was
excluded from the analysis (from an original total of 44 participants) for indicating that they were not opposed to white-power groups.

Design

The study consisted of a 2 (ingroup source: anonymous/identifiable) x 2 (commitment: control/high) between-subjects design. Again, the primary dependent variable was language abstraction measured using the LCM.

Procedure

Participants were tested in groups of two to four. In phase one of this experiment, participants were informed that they would be reading a message that had been placed on the Internet by a member of a white-power group. Exactly as in Studies 2, 3 and 4, participants were informed that white-power group members wrote many such messages, and that there were also groups opposed to white-power views on white superiority. After reading this information, participants were asked to wait for further instructions (control condition) or told that they were to next complete a questionnaire (high commitment condition).

In phase two, participants in the high commitment condition completed a questionnaire. The questionnaire contained a series of questions related to the issue of opposing racism in society. Examples of questions were: ‘If you were walking past a peaceful “stop racism” rally on campus, how likely would you be to stop and listen?’ and ‘How likely would you be to object to racist material being circulated on campus?’. Each question contained a scale from one to nine, where one indicated a
response of 'very unlikely' and nine a response of 'very likely'. There were 13 questions overall, and each question was designed to engage participants in thinking about their levels of commitment to the issue of opposing racism.

After all participants had completed the questionnaire, the experimenter collected them and gave participants a filler (sentence completion) task. Whilst participants were completing this task, they were led to believe that the experimenter was coding their questionnaire responses and preparing feedback related to their levels of commitment to opposing racism. After 10 minutes had elapsed, the experimenter went around to collect the responses to the filler task, and to give participants their feedback.

The feedback sheet briefly described that they had just completed a 'commitment to opposing racism' scale (CORS), which assesses students' levels of commitment to the issue of opposing racism in society. All participants were informed that their standardised score out of ten was 7.5. Further, the score of 7.5 was marked with an 'X' on a 10 point scale, indicating scores of 0-3 to reflect LOW levels of commitment, 3.1-7.0 to be MODERATE, and scores from 7.1-10 to reflect HIGH commitment to the issue. Therefore, all participants in this condition were given feedback to suggest that they were HIGH in commitment to opposing racism. Finally, all participants were explicitly informed that their score put them in the category of being HIGH in commitment to opposing racism. Note that the score, the indicator on the commitment scale and the statement about the participants' levels of commitment were always hand-written in blue ink to indicate that their feedback was indeed personal. Participants in the control commitment condition did not complete any of the activities in phase two. The feedback given to participants in the high commitment condition is presented in Figure 9.1.
Feedback

The questionnaire you completed earlier is an extract from the Commitment to Opposing Racism Scale (CORS), that has been designed to assess students’ levels of commitment to the issue of racism in our society.

YOUR responses to the CORS have been scored and your “commitment to opposing racism” level (a standardized score out of 10) is: _____.

This is where your commitment to opposing racism score fits on the scale:

<table>
<thead>
<tr>
<th>_______</th>
<th>_______</th>
<th>_______</th>
<th>_______</th>
<th>_______</th>
<th>_______</th>
<th>_______</th>
<th>_______</th>
<th>_______</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>low</td>
<td>moderate</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.0-3.0</td>
<td>3.1-7.0</td>
<td>7.1-10.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As you can see, your response puts you in the category of being __________
In commitment to opposing racism.

Figure 9.1. Commitment feedback in high commitment condition.

In phase three, all participants, were asked to complete some questions. They were asked to indicate which group they felt they belonged to (either opposed or not opposed to white-power groups), by circling the appropriate number. Participants were also asked how much they identified with the group of their choice, and how opposed they were to white-power, extremist groups. Both of these items were on a nine point scale from 1 ‘not at all’ to 9 ‘extremely’. In addition to these pre-test salience measures, participants were also asked to indicate how likely it would be for them to speak out or do something to oppose racism. This question was on a nine
point scale from 1 ‘not at all’ to 9 ‘extremely likely’ and was designed to provide a preliminary test that the manipulation of commitment was effective. After completing these items, participants were then asked to await further instructions.

In phase four participants were informed again that the message they were to read had been written by a member of a white-power group. As in Study 4, they were also informed that this person had chosen to be anonymous and had not supplied any personal details. Participants were informed that they would be writing a response to the message they were about to read, and that their responses would only be sent to a mailing list of people who have indicated that they are opposed to white-power groups. That is, the participants’ audience was again their own ingroup. As in previous studies, identifiable participants were asked to enter their full name (first and last names) and their country of residence. Anonymous participants were asked to type ‘anonymous’ at the top of the message.

Participants were then asked to read the white-power message and await further instructions. After all participants had read the message, they were given further instructions to comment on the behaviour and opinions of the white-power group member. They were informed that they would have 10 minutes to complete this task. All participants began the task at the same time. They were timed and asked to cease typing after 10 minutes. An excerpt from a message is given below:

I must say I was dismayed, though not surprised to read this post. I must say that the writer struck me as something of a child! Incapable of grasping the world in its true form, and so runs off to find simply things to hide in. A moronic creature of fear and he disgusts me.
After completing this task, participants were asked to complete a final questionnaire. In this questionnaire, participants were asked questions related to their feelings of commitment, feelings of accountability, and their explicit motivations whilst completing the task. The following questions were asked to assess how committed to the issue of opposing racism the participants felt when they were completing the task. Each participant was asked to respond by indicating on a nine point scale (one being ‘not at all’ and nine being ‘extremely important’). Four such questions were asked. These were as follows:

When you were composing your message, how strongly committed did you feel to opposing racism?

How important is it to oppose racism?

How important is it to express anti-racist views?

How important is the issue of opposing racism to you personally?

The next question was designed to assess participants’ feelings of accountability to the ingroup for what they had written. Again, a nine point scale was used. The question read as follows:

How personally accountable did you feel for what you had written in your response to the message?

Then, three questions were asked pertaining to participants’ beliefs about their motivations for their responses. These three questions were designed to assess participants’ levels of commitment (i.e., whether their message reflected their own
views), obligation (i.e., whether their message reflected what they thought was right) and compliance (i.e., whether their message reflected what they thought their audience wanted to read) respectively. In measuring these three variables separately, it was possible to examine how identifiability impacts upon these processes, which are proposed here to be unique, separate processes. These questions asked:

How well does each of the following describe your response to the white-power message?

a) My response to the message reflected my own beliefs on the issue.

b) My response to the message reflected what I thought was the right thing to say, rather than what I wanted to say.

c) My response to the message reflected what I thought the people reading the message would like to read.

Finally, participants were also asked again how much they identified with people who are opposed to white-power groups and how strongly they were opposed to white-power groups. They were then debriefed and thanked for their participation in the research.

**Results**

**Manipulation check**

Participants in the high commitment condition felt more committed to the issue of opposing racism ($M=8.09$) than those in the control condition ($M=7.29$)
according to the item: 'when you were composing your message, how strongly committed did you feel to opposing racism?'. However, this failed to reach significance $t(41)=1.96, p=.06$. Also, results on the pre-test and other post-test manipulation checks did not yield significant differences across the high commitment and control conditions. Therefore, the manipulation of commitment was at best only marginally effective in producing higher levels of commitment.

**Language abstraction**

As hypothesised, there was a significant difference in language abstraction such than abstraction was higher in the identifiable condition ($M=2.73$), than in the anonymous condition ($M=2.41$), $t(41)=2.34, p<.05$, thus replicating the effect observed in Studies 1, 3 and 4.

However, there was no difference in language abstraction between high committed participants ($M=2.60$) and control participants ($M=2.53$), $t(41)=.52, ns$. Further, the predicted interaction between identifiability and commitment was not significant, $F(1,42)<1, ns$. So, although it is difficult to draw conclusions regarding the effects of commitment on language abstraction due to the ineffective manipulation, it is unlikely that commitment was having any effect on the dependent variable.

**Obligation, accountability, commitment and compliance**

Contrary to Study 4, obligation did not mediate the identifiability/language abstraction effect. The correlation between the interaction term (as created in Study
and language abstraction was not significant, \( r(42) = .02, \text{ ns} \). However, it is likely that the manipulation of commitment affected responses on the accountability and commitment measures in this study. In contrast to Study 4, there was no variation across identifiability conditions on either of these two variables. It is also important to note that there was no variation across conditions in any other accountability or commitment variables, and these were not significantly correlated with the dependent variable.

However, there was a significant negative correlation between responses to the item: ‘My response to the message reflected what I thought the people reading the message would like to read’ and language abstraction, \( r(42) = -.40, p < .01 \). That is, the reverse of compliance was related to increased language abstraction. This variable was entered as a possible mediator. There was a significant relationship between identifiability and the prospective mediator, \( \beta = -0.40, p < .01 \). There were also significant relationships between identifiability and language abstraction, \( \beta = 0.34, p < .05 \), and between the prospective mediator and language abstraction, \( \beta = -0.48, p < .01 \). When the prospective mediator was added to the equation with identifiability, the relationship between identifiability and language abstraction was reduced, \( \beta = 0.18, \text{ ns} \). Therefore, a reversed compliance effect mediated the relationship between identifiability and language abstraction. That is, communicators who denied that their messages reflected what others would like to read, used higher levels of stereotypical language than those who did not deny compliance, and this mediated the effect of identifiability on language abstraction.
Discussion

The results of Study 5 revealed a significant difference in language abstraction between anonymous and identifiable communicators such that, as hypothesised, identifiable communicators used more abstract language than anonymous communicators to describe the outgroup target. Again, the identifiability/language abstraction effect observed in Studies 1, 3 and 4 was replicated.

However, this effect was not driven by variations in levels of commitment to opposing racism as was originally expected. Moreover, the study did not replicate the mediation of the identifiability/language abstraction effect by obligation, which was the objective of this study. This study therefore casts doubt on the validity of obligation as a mediator for the identifiability/language abstraction effect. It also casts doubts of the revised model of the effects of Internet identifiability on communicative behaviour.

Instead, a rejection of compliance was found to mediate the identifiability/language abstraction effect in the present study. Communicators who denied that they were simply complying with ingroup norms in their descriptions of the outgroup used higher levels of stereotypical language to describe the target, and this mediated the effect of identifiability on stereotypical language use. Therefore, this study uncovered another mechanism by which the identifiability/language abstraction effect occurs.

Thus, under similar conditions in two separate experimental studies, the same identifiability/language abstraction effect has been found. However, there appears to be no single social psychological process underlying the identifiability/language
abstraction effect. At this stage, there appear to be two processes involved in driving the relationship between identifiability and heightened stereotypical language use. On the one hand, identifiable communicators seem to be strategically motivated to describe the outgroup stereotypically because they feel obligated to do so. On the other hand, however, identifiable participants use abstract language when they deny compliance as a reason for expressing themselves in that way.

So, what do these two processes have in common, and how is it possible to reconcile the fact that they are both capable of mediating differences in stereotypical language use? The linking factor between these two mediators may be related to general sensitivity to the communicative context and the consequences of being identifiable to an ingroup audience. That is, obligation and rejection of compliance (or autonomy) may be different examples of sensitivity to being identifiable to an ingroup audience. Through being identifiable to an audience of valued ingroup members, communicators may perhaps become more explicitly aware of their own motivations for expressing their views to their audience. They may become explicitly aware of the consequences of expressing the ‘right’ and ‘wrong’ views for that audience and this general awareness could be responsible for the differences in stereotypical language observed in the previous studies. For example, research on ostracism (e.g., Choi & Williams, 1999; Williams & Sommer, 1999) suggests that group members are more likely to adhere to group norms if they are ostracised by other members of the group. Perhaps therefore communicators who are identifiable to an ingroup audience use more stereotypical language to describe the outgroup because they are sensitive to the severe (like ostracism and rejection) or more subtle effects of being identifiable to an ingroup audience. This idea is explored in more detail in Chapter 10.
Chapter 10

Studies 6 and 7 - Studies of sensitivity to communicative context with an ingroup audience

Introduction

In previous chapters, it has been observed that being identifiable to an ingroup audience increases communicators' use of stereotypical language to describe anonymous outgroup targets. In Study 4, obligation to the ingroup audience appeared to be driving this effect. Identifiable participants felt obligated to act according to the norms of the ingroup, and in doing so they described the outgroup more stereotypically than did anonymous participants.

However, in Study 5 a different pattern emerged such that a reversed compliance or effect of autonomy mediated the identifiability/language abstraction effect. No evidence for obligation was present in Study 5, yet the identifiability/language abstraction effect was replicated and a different social psychological phenomenon seemed to be responsible for its existence. This chapter explores the possibility that more general processes related to explicit sensitivity to the ingroup audience and communicative context are factors involved in producing the identifiability/language abstraction effect and that under different circumstances, they will emerge separately as mediators of the effect.

However, having said this, it again must be noted that language abstraction is not necessarily a process that is under intentional control (see Franco & Maass, 1996, 1999). The use of abstract language is not related to more explicit measures of
stereotyping and prejudice that are under conscious control. However, other studies have shown that even though stereotypical language use is not under volitional control, that it nevertheless is affected by people’s goals and motivations in a situation, such as motivations to overcome threat from an outgroup (e.g., Maass et al., 1996), and need for closure (e.g., Webster et al., 1997). Kunda (1990) also argues that people’s motivations can affect reasoning by influencing the strategies people use to access, construct and organise beliefs. In other words, external motivations drive the strategy used to organise beliefs and attitudes. Kunda argues that this leads to a greater likelihood of cognitively searching for ‘hypothesis-consistent’ rather than inconsistent evidence. The above literature suggests that although language abstraction is a process unlikely to be under volitional control, it is nevertheless plausible to assume that language use can be affected, although indirectly, by other motivations. In other words, sensitivity to the consequences of communicating with an ingroup audience can subtly affect the way people access and express information about outgroup members. The results of Studies 4 and 5 here also suggest that language use can be indirectly affected by explicit motivational processes related to communicative sensitivity.

Thus, language abstraction is itself a subtle concept and the way in which identifiability impacts upon it may also be subtle. Identifiability may not make people aware of issues such as surveillance, sanctions, resistance and conflict, but instead alert them to less obtrusive or confronting features of the communicative context.

For example, being identifiable creates the possibility of maintaining ongoing communication (as also do pseudonyms or nicknames on the Internet). For practical reasons, a communication between genuinely anonymous persons will rarely be an
ongoing dialogue or series of conversations. It must be closed and whatever is left unsaid must remain unsaid. Identifiable communicators, however, are open to further queries, potentially at least they can be asked to explain or amplify their views or to present them to a wider audience.

Such an ongoing interaction need not involve fear of punishment (as the identifiable participants in Study 5 strongly expressed) but it would be strange if the consequences of identifiability for the features of the communicative context (such as its ongoing nature) had no effect on language use. This might be the sort of subtle effect that is being observed here.

Studies 6 and 7 were therefore designed to test the idea that identifiability increases explicit sensitivity to the consequences of communicating with an ingroup audience and that factors related to this sensitivity are responsible for the identifiability/language abstraction effect. In Study 6, participants were asked to respond to the same white-power message as in previous studies. However, before doing so they were asked to respond to a series of questions designed to examine their explicit sensitivity to communicating with an ingroup audience. This change from previous studies is justified as follows. In Studies 4 and 5, explicit motivations were measured after participants had composed their responses to the white-power group member’s Internet message. As such, participants were in a position to explicitly reflect upon their motivations rather than comment on their motivations at the time they completed the task. This raised the question of whether or not the salient motivations were actually responsible for changes in language use. To test true mediation (that is, identifiability affects explicit motivation, which affects language abstraction), it was desirable to measure communicators’ motivations after
they were informed that they were going to be anonymous or identifiable, but before
they had completed the task.

Also, the study was a non-CMC questionnaire experiment. Therefore, in
addition to its primary goal, this study also attempted to replicate the
identifiability/language abstraction effect in a non-CMC environment. Study 7 was
similar to Study 6, but instead of responding to the white-power message,
participants responded to a supposed staff member’s message concerning students’
attitudes to work and leisure.

Study 6: Method

Participants

A total of 65 undergraduate students from the Department of Botany and
Zoology at the Australian National University participated voluntarily in the study.
There were 40 females and 25 males, and the mean age of participants was 20.75.
There were 34 anonymous and 31 identifiable participants. One participant was
omitted from the analysis because he or she did not express disagreement with the
white-power group member’s message.

Design

The study consisted of a 2 group (ingroup source: anonymous/identifiable)
between-subjects design. The primary dependent variable was language abstraction
as in previous studies.
Procedure

Questionnaire materials consisted of a cover page, questionnaire and a separate blank page with spaces for ‘name’ and ‘course’ and lines on which to write a response to the white-power group member’s message. The entire study was conducted at the end of an introductory cell biology lecture in a large lecture theatre. Participants were separated from each other around the lecture theatre and completed the questionnaire quietly. They were each offered a small sweet whilst completing the questionnaire.

The cover page informed participants that the experimenter was in the process of setting up a database of responses to an Internet message that had been posted by a member of a white-power group. Participants were informed that their response to the message would be added to the database, and that the database would be available to people who are opposed to white-power groups. The cover page further informed participants that the experimenter was also interested in the psychological processes involved in the expression of opinions, and that they would be completing an anonymous questionnaire examining these processes. They were informed that the questionnaire and their response to the message were to be handed in SEPARATELY. They were also informed that their responses to the questionnaire would not be linked to their message, or to them personally. Only the experimenter was to read the questionnaire. They were informed that the study would take approximately 10 minutes to complete. If they wished to participate, they were to turn over the page and begin.

As in Studies 2, 3, 4 and 5, participants were informed that members of white-power groups believed that the white race was superior to other races but that
people opposed to white power groups were opposed to such views regarding white superiority. Participants were then asked to indicate which group they felt they belonged to (either opposed or not opposed to white-power groups), by circling the appropriate number. Participants were also asked how much they identified with the group of their choice, on a nine point scale from one ‘not at all’ to nine ‘extremely’. They were also asked how opposed they were to white-power groups on the same nine point scale. Participants were asked to turn the page and continue and if they had any questions, to raise their hand and consult the experimenter.

As in Studies 4 and 5, participants were informed on the next page of the questionnaire that the author of the message had chosen to be anonymous by not attaching any personal details to his or her message. To strengthen this statement, participants were also informed:

That is, the group member has chosen specifically not to supply any personal details and what he/she said CANNOT BE LINKED TO HIM/HER PERSONALLY.

Participants were then asked to read the white-power message and continue the study by turning the page after they had finished reading. In this study, the white-power message was shortened from the version used in Studies 2, 3, 4 and 5. This is because the study was conducted at the end of a lecture and time was restricted. However, the overall essence of the message was not changed, nor was the strength of the views expressed. The abridged version of the questionnaire is contained in the questionnaire materials for Study 6 in Appendix II.

On the next page, participants were informed that they would be writing a response to the message and that their response would be placed on a database that
would be available to people who are opposed to white-power groups. They were informed that no member of a white-power groups would be able to read their responses. At this point, identifiable participants were told that they were going to be identifiable in completing the task. They were asked to write their full name and course (e.g., PSYCA01), instead of name and country of residence, on the response sheet attached to the questionnaire. This change from previous studies was made because it is more believable that students in a lecture could be personally identified by name and course rather than name and country, which would seem somewhat artificial in a non-CMC situation. Anonymous participants were not asked to supply any personal details. They were simply asked to write ‘anonymous’ in both the ‘name’ and ‘course’ spaces on the response sheet. At this point, participants were also asked to detach the response sheet so that it would be separate from the questionnaire to assure that their responses to the questionnaire items were anonymous. In order to strengthen the manipulation of identifiability, participants were further informed:

Remember that because you provide your details, your response CAN be LINKED TO YOU PERSONALLY by other people who are opposed to white-power groups. You are IDENTIFIABLE to these people.

Participants in the anonymous condition were informed:

Remember that because you provide no details, your response CANNOT be LINKED TO YOU PERSONALLY by other people who are opposed to white-power groups. You are ANONYMOUS to these people.
This aim to strengthen the identifiability manipulation was attempted because in a pilot study (unreported here), a weaker manipulation of identifiability was ineffective. Finally, participants were told that their responses to the questionnaire items in the study would be anonymous and would not be linked to their response to the message.

At this stage, the procedure of Study 6 departed from that of previous studies. Rather than writing their responses to the white-power group message at this stage, participants were first asked to think about what they would like to say about the white-power group member’s message. They were asked to consider how they would describe his or her views. They were also asked consider if they agreed with what he or she said. Participants were asked to spend a couple of minutes thinking about what they would say in their response, but that before they actually wrote their responses, the experimenter would like them to answer some questions. The instructions informed participants that when they had had time to think about what they would say, to turn over the page and complete the questions.

Participants firstly completed a manipulation check for identifiability as follows: ‘Do you think that your response will be able to be linked to you personally by viewers of the database who are opposed to white-power groups?’ They were asked to respond on the scale of one ‘not at all’ to five ‘somewhat’ to nine ‘very much’. After this, 12 questions followed, each relating to aspects of sensitivity of participants to presenting their views to the ingroup audience. These questions were all answered on a nine point scale from one ‘not at all’ to five ‘somewhat’ to nine ‘very much’ and are as follows:

How comfortable are you that others will be reading your response?
How strongly will you express your views about the white-power group member to your audience?

Do you feel accountable to the audience who will be reading your message?

Are you thinking about how your audience will perceive your response?

How much are you concerned about making a positive impression on your audience?

Do you think that writing this message will enable you to show that you are someone who is opposed to white-power groups?

How answerable do you feel for the response you are about to write?

Do you feel accountable for the views you will express?

How much will you say to your audience about your views on white-power groups?

How important is it to take your audience into account when considering how strongly you will express your opinions?

How important is it to express a clear response for the benefit of other people in your group?

How seriously will you take the task of writing a response?

The next page informed participants that it was time to write their response. They were again asked to think carefully about what they want to say to their audience about the white-power group member's message. They were asked to concentrate specifically on the behaviours and opinions of the white-power group member and to spend 5 minutes on their response. As in previous studies, participants were asked to place any quotations from the message in quotation marks. They were asked to turn to the response sheet and make sure that their name and course (or 'anonymous') was written on the top of the response sheet. After
completion of the task, participants were debriefed and thanked for their participation. An excerpt from a typical message is presented below:

The ignorance of this pathetic and unempowered youth is truly a sorry state of affairs. Not only are his facts incorrect but his arguments are weak and unconvincing! White-power is a dated and illfounded movement which is holding back the general progression of humanity. This person makes me sick and makes me want to paint my skin purple!

Results

Manipulation check

The manipulation check for identifiability (‘do you think that your response can be linked to you personally by viewers of the database who are opposed to white-power groups?’) was successful. Identifiable participants believed that their responses could be linked to them personally by the audience more ($M=5.81$) than did anonymous participants ($M=1.85$), $t(63)=7.36$, $p<.001$.

Language abstraction

The identifiability/language abstraction effect was statistically significant, $t(63)=2.02$, $p<.05$. Mean language abstraction measured by the LCM was again higher for identifiable ($M=2.58$) than for anonymous ($M=2.02$) participants. It is
worth noting that these values are lower than those obtained in previous studies reported in this volume.

**Sensitivity to audience**

Identifiable participants felt more accountable ($M=4.48$) than anonymous participants ($M=3.18$), $t(63)=2.23$, $p<.05$ according to the item: ‘do you feel accountable to the audience who will be reading your message?’. Identifiable participants also believed that writing their message would enable them to show that they are someone who is opposed to white power groups more ($M=6.42$) than did anonymous participants ($M=5.32$), $t(63)=2.04$, $p<.05$. Identifiability did not affect any other sensitivity variables.

**Mediation of language abstraction**

Feelings of accountability and the perceived ability of the message to ‘show’ ingroup identity were tested as mediators of the significant relationship between identifiability and language abstraction.

For accountability, the relationship between identifiability and accountability was significant, $\beta=0.249$, $p<.05$, taking accountability into account, the relationship between identifiability and language abstraction was not significant, $\beta=0.211$, ns, however, the relationship between accountability and language abstraction was not significant, $\beta=0.135$, ns. This does not satisfy the requirements for mediation.

The relationship between identifiability and ability to show ingroup identity was significant, $\beta=0.249$, $p<.05$, the relationship between identifiability and language
abstraction taking ability to show identity into account failed to reach significance, but the relationship between perceived ability to show ingroup identity and language abstraction was not significant, $b=0.193$, ns. This does not satisfy the requirements for mediation. So, neither of the two sensitivity variables affected by identifiability mediated the identifiability/language abstraction effect.

**Discussion**

In this study, the identifiability/language abstraction effect was observed again. Again, identifiable participants used higher levels of stereotypical language to describe the outgroup than did anonymous participants. Further, the identifiability/language abstraction effect was replicated in another setting. In this study, participants completed the message-writing task without computer mediation and instead wrote their responses in a similar way to writing a letter. Thus, the identifiability/language abstraction effect is not unique to CMC, and this finding sheds more doubt on the idea that CMC is somehow different to other modes of communication. This study shows that the effect of identifiability on stereotypical language use is constant across asynchronous CMC environments (in both archival and experimental studies) and also in this non-CMC study.

The prediction that sensitivity to the communicative context would be affected by identifiability was also partially supported by this study. Identifiable participants felt more accountable to their audience than did anonymous participants. Further, identifiable participants believed that writing their message would enable them to show that they are opposed to white-power groups more than did anonymous
participants. Both of these variables reflect sensitivity to the consequences of communicating with their ingroup audience.

However, contrary to predictions, neither of these sensitivity variables mediated the identifiability/language abstraction effect. Each variable was affected by identifiability, but neither was related to stereotypical language use. That is, differential language use was not related to communicators’ explicit concerns about expressing themselves to their ingroup audience, and so language abstraction was not influenced by communicators’ explicit sensitivity to the communicative context. Instead, language abstraction was affected by identifiability independently of other conscious factors which were also affected by identifiability. This finding is consistent with research showing that language abstraction is not under intentional control (Franco & Maass, 1996).

Study 6 therefore suggests that the identifiability/language abstraction effect is unrelated to factors under intentional control. This contradicts Studies 4 and 5 where obligation and autonomy were mediators of the identifiability/language abstraction effect. Both of these factors are arguably explicit motivations to express stereotypical views about the outgroup to the audience and do affect the expression of views about the outgroup. It is likely that the relationships previously shown are actually quite weak. The identifiability/language abstraction effect can be driven by explicit motivational concerns (see Maass et al., 1996; Webster, 1997), but this will not always be the case. However, another possibility is that the identifiability/language abstraction effect is driven by implicit, rather than explicit processes. This was further investigated in Study 7.

In Study 7, participants were asked to complete a similar task to that of Study 6 in the form of a questionnaire, but this study investigated responses to a different
issue. On this occasion, student participants were asked to respond to a message that had supposedly been written by a member of the academic staff at an Australian university, related to students’ opinions about work and leisure. The remainder of the task was the same as Study 6. By varying the issue, it was (a) possible to replicate the effect in yet another setting where groups are perhaps more ‘real’ or directly relevant to student participants completing the experiment. Indeed, the issue of students’ attitudes to work and leisure was also investigated by Reicher and Levine (1994b), making the study directly comparable to other SIDE research. It was also possible to (b) examine the issue of mediation of the identifiability/language abstraction effect further to establish with more clarity whether the effect is driven by explicit or implicit processes.

Study 7: Method

Participants

A total of 64 undergraduate psychology students at the Australian National University participated voluntarily in the study during scheduled laboratory classes. Of these, 33 were anonymous and 31 were identifiable. Two participants were omitted from the analysis because they did not discuss the designated issue in their messages.
Design

The study consisted of a 2 group (ingroup source: anonymous/identifiable) between-subjects design. The primary dependent variable was the level of language abstraction as measured using the LCM.

Procedure

As in Study 6, the questionnaire materials consisted of a cover page, questionnaire and a separate blank response sheet. Each participant was offered a small sweet whilst completing the questionnaire.

The cover page explained that the experimenter was interested in how different groups of people think and feel about the issues of work and leisure. It was further explained that the experimenter was interested in the differences between academic staff and students regarding these issues. Participants were informed that they would be asked to read a memo written by a member of the academic staff at an Australian university and that most academic staff share the conservative, work-focused views expressed in the message. This is in contrast to students, who were explained to be more liberal and carefree, and who disagree with most academics on issues related to work and leisure. After reading this, participants were asked to turn the page and continue.

Participants were then asked to read the anonymous message. The message itself expressed concern about the lazy nature of students at university. Statements taken from Reicher and Levine’s study of PE student attitudes to work and leisure (1994b) were utilized to construct the message. The message mentioned issues such
as missing lectures and tutorials, plagiarism and students’ drinking and partying.

The message was strongly worded such that the opinions expressed would constitute
outgroup opinions for most undergraduate students. The message is presented in
Figure 10.1. After reading the message, participants were asked to turn the page.

<table>
<thead>
<tr>
<th>TO:</th>
<th>All staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>FROM:</td>
<td>XXXXXXXXXX</td>
</tr>
<tr>
<td>RE:</td>
<td>Students’ attitudes and behaviours.</td>
</tr>
</tbody>
</table>

**MESSAGE:**

In my view, there are a number of problems concerning students’ attitudes and behaviours that we must address.

It seems to me that undergraduate students are happy to miss lectures and tutorials if they think they can get away with it. Further, students will generally copy from others’ work if they think they won’t be caught. They seem to aim to get through their studies with the minimum effort possible.

Students don’t realise that the only way to gain satisfaction from a course is to explore the subject fully. In doing so, they will get as much as possible out of the course. If they work hard, they will do as well as they possibly can, and only by a complete attendance record will this be achieved. Full attendance of the elements will allow students to gain the most from the course.

Student partying is a major impediment to good attendance of lectures and tutorials and is a general impediment to good learning practice. Students shouldn’t do anything in the evening which might mean they are not at their best the following day. University students’ childish drinking sessions are a good example of this. One must remain in control at all times - even in one’s leisure activities.

We as staff members need to address these issues strongly.

**Figure 10.1.** Message from university staff member concerning students’ attitudes to work and leisure.
Participants were reminded that the experimenter was asking a group of students for their views concerning the memo, in order to study how the views of students differ from those of staff regarding the issues of work and leisure. Participants were informed that they would be asked to write a response to the message from their position as a student. Participants were also told that the experimenter was interested in how their experience as students affects their views, and that they would be asked to write another message in their final lecture. These responses were supposedly going to be given to members of the student union so they could assess how students' views on work and leisure are affected by studying at university. As such, it was explained that there needed to be a way of linking the two responses. At this point, the identifiability manipulation was introduced. For anonymous participants, this took the following form:

The easiest way to do this is for you to think up a nickname or code and write it ON THE TOP OF THE RESPONSE SHEET. This should be memorable so that you will be able to recall it when you write an additional response in your final lecture. Don't write your name because this is an anonymous task. Please write your nickname or code on the response sheet NOW and continue reading.

For identifiable participants, the identifiability manipulation was worded as follows:

The easiest way to do this is for you to write your full name ON THE TOP OF THE RESPONSE SHEET. This is so we can match your responses when
you complete another response in your final lecture. Please write your full
name (first and last names) on the response sheet NOW and continue reading.

Participants were then asked, as in previous studies, to focus on the behaviour
and opinions of the author of the message. As in Study 6, participants were asked to
spend a couple of minutes thinking about what they would say, but before they wrote
their messages, they were to answer some questions. The instructions informed
participants that when they had had time to think about what they would say, to turn
over the page and complete the questions.

The questions were the same as those utilized in Study 6, modified for the
student/staff issue and the audience of student union members. However, in
addition, participants were asked to complete some questions relating to group
salience. These were adapted from Brown, Condor, Mathew, Wade and Williams
(1986) as used by Reicher and Levine (1994b). They were each measured on a five
point scale, and are presented below:

I identify with other university students.
I am a worthy member of the university student community.
In general, being a university student has little to do with the way I see
myself.
The fact that I am a university student is an important part of who I am.
In general, I am pleased that I am a university student.

However, there were no differences in salience across conditions, so these
will not be discussed in the results. As in Study 6, the next page informed
participants that it was time to write their response. They were asked to think
carefully about what they wanted to say to their audience about the staff member’s message. They were asked to concentrate specifically on the behaviours and opinions of the staff member and to spend 5 minutes on their response. As in previous studies, participants were asked to place any quotations from the message in quotation marks. They were asked to turn to the response sheet and make sure that their name (or nickname) was written on the top of the response sheet. After completion of the task, participants were debriefed and thanked for their participation. An excerpt from a typical message is presented below:

After reading this letter I will assume two things about the author. Firstly, this individual is a boring, unsociable twit (!) and secondly, that he/she is anal-retentive and a bad teacher!!

Results

Manipulation check

The manipulation check for identifiability (‘do you think that your response can be linked to you personally by members of the student union?’) was successful. Identifiable participants believed that their responses could be linked to them personally more (M=4.91) than did anonymous participants (M=1.70), t(62)=7.03, p<.001.
Language abstraction

The identifiability/language abstraction effect was statistically significant, \(t(62)=2.40, p<.05\). Mean language abstraction measured by the LCM was again higher for identifiable \((M=3.10)\) than for anonymous \((M=2.62)\) participants. These values are higher than those obtained in previous studies reported in this volume.

Sensitivity to audience

Identifiable participants felt more accountable \((M=5.06)\) than anonymous participants \((M=3.64)\), \(t(62)=2.90, p<.05\) according to the item: ‘do you feel accountable to the audience who will be reading your message?’. Identifiable participants also believed that writing their message would enable them to show that they are someone who is opposed to white power groups more \((M=5.48)\) than did anonymous participants \((M=4.58)\), \(t(62)=2.15, p<.05\). In addition to these findings replicated from Study 6, identifiable participants also felt less comfortable about their responses being read by others \((M=5.64)\) than anonymous participants \((M=7.15), t(62)=3.40, p<.01\). Finally, identifiable participants stated that they were thinking more about how the audience would perceive their response \((M=4.88)\) than did anonymous participants \((M=3.73), t(62)=2.21, p<.05\).

Mediation of language abstraction

The above variables were tested as mediators of the relationship between identifiability and language abstraction. For accountability, the relationship between
identifiability and accountability was significant, $\beta = 0.346$, $p < .01$. However, taking accountability into account, the relationship between identifiability and language abstraction was still significant, $\beta = 0.337$, $p < .05$, and the relationship between accountability and language abstraction was not significant, $\beta = -0.017$, ns. This does not satisfy the requirements for mediation.

The relationship between identifiability and perceived ability to show identity was significant, $\beta = 0.263$, $p < .05$. However, the relationship between identifiability and language abstraction taking perceived ability to show identity into account was still significant, $\beta = 0.333$, $p < .05$ and the relationship with language abstraction was not significant, $\beta = -0.070$, ns. This does not satisfy the requirements for mediation.

For the level of comfort felt by participants, the relationship between identifiability and comfort was significant, $\beta = -0.397$, $p < .01$. Also, the relationship between identifiability and language abstraction taking comfort into account was no longer significant, $\beta = 0.233$, $p = .083$. However, the relationship between comfort and language abstraction failed to reach significance, $\beta = -0.239$, $p = .057$. At best, this is weak mediation.

The relationship between identifiability and thinking about the audience was significant, $\beta = 0.271$, $p < .05$. However, the relationship between identifiability and language abstraction with thinking about the audience taken into account was still significant, $\beta = 0.313$, ns, and the relationship between thinking about the audience and language abstraction was not significant, $\beta = 0.003$, ns. This does not satisfy the requirements for mediation. Therefore, none of the variables affected by the manipulation of identifiability mediated the effect of identifiability on language abstraction.
Discussion

Study 7 again shows the identifiability/language abstraction effect. Identifiable participants described outgroup members more stereotypically than did anonymous participants. This effect has now been demonstrated in an archival CMC setting, asynchronous CMC experiments, and questionnaire studies where participants were asked to respond to two different issues (racism and attitudes to work and leisure).

In addition to this, Study 7 indicates that there are several variables related to audience sensitivity that are affected by making participants anonymous or identifiable. Identifiable participants felt more accountable to their audience than did anonymous participants. Identifiable participants also felt that writing their messages would allow them to show that they are opposed to the staff member’s views more than did anonymous participants. This replicates the relationships obtained in Study 6. In addition to these measures, Study 7 also revealed that participants’ levels of comfort were affected by identifiability such that identifiable participants felt less comfortable that their messages would be read by members of the ingroup audience. Also, identifiable participants stated that they were thinking more about how the audience would perceive their responses, than did anonymous participants. Identifiability to the ingroup audience therefore had an effect on a range of variables related to audience sensitivity.

However, as in Study 6, none of these variables mediated the identifiability/language abstraction effect. Again, identifiability had an independent effect on language use. That is, identifiability affected language use, but these differences in language use were not affected by participants’ explicit concerns about
being identifiable to an audience. This is consistent with the findings of Study 6, where explicit motivations were also measured before completion of the task, but not with Studies 4 and 5 where explicit motivations were measured after completion of the task.

**General Discussion**

The results of Studies 6 and 7 indicate that when potential mediators of the identifiability/language abstraction effect are measured before communicators complete their messages, these explicit motivations do not mediate the effect. That is, when true mediation is examined, none of the variables related to audience sensitivity are genuine mediators of the identifiability/language abstraction effect. This finding suggests that the effects of identifiability on language abstraction are not related to any explicit, motivational processes related to the presentation of identity to an ingroup audience. Instead, the effect of identifiability on language abstraction appears to be driven by more automatic, implicit processes.

Overall therefore, the results of this research indicate that identifiability to an ingroup audience increases stereotypical language use to describe outgroup targets. Further, it is clear that identifiability increases sensitivity to the communicative context. However, this research also indicates that it is doubtful that the effect of identifiability on these explicit variables is related to the effect of identifiability on language abstraction.

In terms of their importance for social psychological knowledge about the effects of anonymity and identifiability, both effects are interesting. The identifiability/language abstraction effect is robust and novel, but given that it has
been demonstrated to be unrelated to the explicit effects it is reduced somewhat in importance (though the theoretical implications are discussed in Chapter 11). Language abstraction must be viewed with some reservation as a measure of group-normative behaviour as it is clearly unrelated to factors that are highly relevant to inter-and intragroup relations. Thus, despite the effort that has been invested here into finding the cause of the identifiability/language abstraction effect, the evidence that it is unrelated to the other identifiability effects means that its cause is relatively less important. What is most important then is that identifiability has consistent and strong effects on variables related to sensitivity to the communicative context and to accountability, and that we have clear evidence of these effects for the first time with ingroup audiences.

From this research, it is therefore possible to draw some conclusions about the effects of identifiability on communicative behaviour. It also possible to provide a final model of the effects of identifiability on communicative behaviour. Chapter 11 outlines this final model, and discusses the theoretical and empirical implications of this research for social psychology.
Chapter 11
The effects of identifiability on communicative behaviour and sensitivity to the communicative context: Summary and conclusions

Introduction

This research has examined the effects of identifiability on communicative behaviour, particularly in computer-mediated communication. It has also examined the social psychological processes that are influenced by being anonymous or identifiable in a communicative context and how these are related to language use.

In this concluding chapter, the theoretical rationale and important findings of this research programme will be reviewed, and the theoretical and empirical implications of this research will be discussed. A final model of the effects of identifiability on communicative behaviour will be outlined. Also, the unique contributions that this research makes to social psychological knowledge will be examined.

Theoretical background

The central issue addressed in this research has been the effects of identifiability on communicative behaviour. Issues related to identifiability in CMC were reviewed in Chapter 2, where particular attention was given to the idea that the anonymity of CMC changes people, so that they behave differently than they normally might. This, it is said, results in behaviour such as flaming where
communicators become less inhibited, become more likely to act on impulses and therefore behave inappropriately (e.g., Kiesler et al., 1984; Sproull & Kiesler, 1986).

In Chapter 3, an alternative perspective was proposed based on the SIDE model, which suggests that behaviour in CMC is not necessarily anti-normative or inappropriate, and instead depends on the salience of particular social categories or group memberships for the people who are communicating (e.g., Postmes et al., 1998; Reicher et al., 1995, Spears & Lea, 1994). Particularly, the strategic element of the SIDE model proposes that people may behave group-normatively under conditions of identifiability to an outgroup audience when it is strategically positive for them to do so. However, SIDE does not make predictions about the effects of mere identifiability to an ingroup audience on the expression of group-normative attitudes. SIDE theorises that co-presence with ingroup members is supportive and enables ingroup members to resist outgroups (Reicher et al., 1998). However, the effects of mere identifiability to an ingroup audience are not touched upon by SIDE. Also, SIDE does not state whether the social psychological processes brought about by identifiability will be explicit (under conscious control) or implicit (not under conscious control), but it makes sense that strategic considerations would tend to produce explicit responses. Further, the role of accountability in the presence of ingroup audiences is not a key SIDE issue. Prior to this research, we did not know whether ingroup audiences, as well as outgroup audiences can make people feel answerable for what they say. My research therefore aimed to clarify these issues by examining the effects of identifiability on a range of variables and by proposing a model of the effects of identifiability on communicative behaviour.

The linguistic category model (e.g., Semin & Fiedler, 1988) was selected in order to measure stereotypical language use and this model was outlined in Chapter
4. Research shows that abstract language performs a stereotype-perpetuating function (e.g., Karpinski & von Hippel, 1996; Maass et al., 1995, 1996; Wigboldus et al., in press) and the biased descriptions of behaviour by ingroup and outgroup members systematically favours the ingroup (e.g., Maass et al., 1989, 1995, 1996). The LIB is heightened under conditions of salient outgroup threat (Maass et al., 1996). While some research suggests that the LIB is not under intentional control (e.g., Franco & Maass, 1996, 1999) and cannot be attenuated by explicit motivations, other research suggests that explicit motivations can influence the way in which people describe others (e.g., Maass et al., 1996; Webster et al., 1997). In the present research, language use was therefore compared with, and examined as a function of, more explicit measures such as hostility and feelings of accountability. The aim was to assess whether the effects of identifiability on language abstraction are under explicit or implicit control. Neither the idea that behaviour arising from identifiability nor the more general idea that language abstraction may be affected by identifiability, had been previously tested.

Based on the pre-existing SIDE model and research on self-presentation, a model of Internet identifiability was proposed in Chapter 5. The model made predictions about (a) the difference in language use between flaming and 'everyday' communication, (b) the effects of identifiability of sources and targets on language use and (c) the effects of identifiability on the hostility of flaming communication (refer to page 112 for this model). This model was tested in a series of seven studies, and the important findings of these studies are examined in the following section.
Overview of findings

The results of Study 1 revealed that the original model of Internet identifiability was not adequate to explain the effects of identifiability on communicative behaviour in CMC. Contrary to predictions derived from the cognitive SIDE (see Reicher et al., 1995; Spears & Lea, 1994) identifiable sources did not use higher levels of stereotypical language than anonymous sources. However, results were also inconsistent with the main effect prediction derived from the strategic SIDE relating to identifiability to an outgroup audience (Reicher & Levine, 1994a,b) and the support of an ingroup audience (Reicher et al., 1998), and also research related to identifiability to an ingroup audience (Barreto & Ellemers, in press; Noel et al., 1995). Identifiable sources did not use higher levels of stereotypical language than anonymous sources. Furthermore, identifiability was not related to the hostility of the messages. This explicit variable was not affected by identifiability in the same way that language abstraction was affected by identifiability.

However, although the full version of the model of Internet identifiability was not upheld, a qualified strategic/self-presentational version of the model was still plausible. The results of this study revealed a significant interaction between source and target which indicated that under conditions where outgroup targets were anonymous, identifiable sources used higher levels of stereotypical language to describe them than did anonymous sources. This is consistent with predictions outlined by the model. No evidence for self-categorical factors was obtained.

Therefore, it was necessary to test the strategic/self-presentational aspect of the model further. The interaction between source and target identifiability could have been due to either increased self-presentational concerns about the ingroup
members of the audience (see Barreto & Ellemers, in press; Noel et al., 1995) or due to identifiability to a strategic motivation to distance the self from the undesirable outgroup audience (see Reicher & Levine, 1994a,b). Both of these possibilities were tested in Studies 2 and 3.

Results of Study 2 supported predictions based on the revised model of Internet identifiability for the case of ingroup audiences. As in Study 1 there was a significant interaction between identifiability of source and target, and in the anonymous target condition identifiable sources used higher levels of stereotypical language to describe the outgroup target than did anonymous sources. This replicated the effect observed in the archival setting and indicates that identifiability to an ingroup audience is indeed an important factor in the effect of Internet identifiability on stereotypical language use. From this point on, the effect was referred to as the identifiability/language abstraction effect. This effect was not found to be related to self-categorical factors, leaving a self-presentational account as the most plausible explanation.

Results of Study 3 reinforced the importance of ingroup audiences by revealing that the interaction between source and target identifiability observed in Study 1 was not replicated for an exclusively outgroup audience. This implies that the qualified strategic explanation based on the results of Reicher and Levine (1994a,b) and outlined in the 1995 formulation of the SIDE model (Reicher et al., 1995) was not responsible for the interaction observed in the archival setting. It was unlikely that the archival effect was influenced by communicators’ strategic motivations to assert their ingroup identity in the presence of an opposing outgroup audience. Instead, the presence of an ingroup audience was important.
Therefore, having found support for the importance of an ingroup audience in producing increases in language abstraction, and eliminating identifiability to outgroup audiences as an explanation of the effect, it was next necessary to identify the social psychological mechanisms by which the identifiability/language abstraction effect occurs.

As acknowledged in the introduction, these processes could be either explicit or implicit. That is, identifiability may impact upon language abstraction through the activation of explicit, self-presentational processes which affect behaviour. Indeed, this is the argument advocated by Noel et al. (1995) and Barreto and Ellemers (in press). Alternatively, identifiability may drive behaviour through a more implicit path. That is, identifiability may impact upon language use independent of explicit motivations via more automatic processes.

In line with previous research, Study 4 therefore began with the idea that communicators who are identifiable to an ingroup audience may harbour self-presentational concerns to be positively evaluated by that audience and that these self-presentational concerns influence their communicative behaviour (Spears & Lea, 1994). Describing outgroup members stereotypically might be a way for ingroup members to be positively evaluated by other ingroup members. More generally, concerns about positive self-presentation may mean that communicators become sensitized to the communicative context (i.e., being evaluated by a desirable ingroup) and the possibility of having an on-going interaction with the audience, and this too could influence behaviour.

Also, the strategic SIDE states that feelings of accountability come into play when people are identifiable to an outgroup audience (see Reicher et al., 1995; Spears & Lea, 1994). Being identifiable to an outgroup increases the pressure to
conform to the norms of the audience rather than one’s own norms because one is accountable for one’s actions when identifiable to the outgroup, who may have the power to punish deviant behaviour. However, it was possible that communicators also felt accountable to the ingroup to adhere to ingroup norms. Even though being co-present with other ingroup members is thought to encourage the enactment of people’s true identity (Reicher et al., 1995; Spears & Lea, 1994), and only the outgroup is said to have power to coerce ingroup members to express a certain view (see Turner et al., 1987), the idea that mere identifiability to the ingroup could nevertheless increase feelings of accountability to express ingroup-normative views was tested here.

Results revealed that the identifiability/language abstraction effect was again replicated. Identifiable participants described the behaviour of anonymous outgroup targets more stereotypically than did anonymous participants. However, this was not related to feelings of accountability alone, or to other sensitivity measures independently. Instead, an interaction between accountability and lack of strength of feeling about the issue mediated the identifiability/language abstraction effect. Communicators who were high in accountability but low in strength of feeling about the issue of racism used the highest levels of stereotypical language to describe the outgroup target. This was thought to be due to a process related to feelings of obligation.

This study therefore demonstrated that self-presentational concerns for communicators who are identifiable to an ingroup audience affect their language use. This replicates the results of Noel et al. (1995) and Barreto and Ellemers (in press) who also demonstrated that ingroup members could behave strategically in the presence of an exclusively ingroup audience. However, what is interesting about the
present results is that identifiability seemed to create marginal levels of commitment to or identification with the issue, whereas in previous research commitment was an independent variable. These results also added to the findings of Reicher and Levine (1994a,b) in that feelings of accountability are not only related to the presence of outgroup audiences; identifiability to ingroup audiences can also make communicators feel accountable for their actions. The importance of this finding is dealt with in a later section where the theoretical implications of the results are discussed. However, at this stage it is important to note that ingroup audiences can make communicators feel accountable for their actions.

The results provided some evidence that language use was influenced by explicit motivational factors created by the manipulation of identifiability. That is, an explicit process was responsible for differences in language use across conditions. However, because the mediating construct was measured post-hoc, this required further testing to examine the validity of the relationship between the explicit factors and language use. The best way to eliminate any ambiguity regarding the validity of a mediating variable is to manipulate the mediator directly (Sigall & Mills, 1998). Thus Study 5 involved testing accountability/strength of feeling as a mediator of the identifiability/language abstraction effect. Furthermore, commitment about the issue of racism was manipulated in order to make people feel strongly about the issue.

Results of Study 5 revealed that the predicted interaction between identifiability and commitment was not replicated, casting doubt on the validity of the interaction between accountability and a lack of strength of feeling about the issue (or obligation taken together) as a mediator of the identifiability/language abstraction effect. Instead, an effect related to ‘reversed’ feelings of compliance mediated the identifiability/language abstraction effect. In other words, feelings of
autonomy mediated the effect. Communicators who rejected the idea that they were simply complying with ingroup norms in their descriptions of the outgroup used higher levels of stereotypical language to describe the target, and this mediated the effect of identifiability on stereotypical language use. Another alternative mediator of the identifiability/language abstraction effect was thus uncovered.

Nevertheless, both results supported the notion that increased sensitivity to the communicative context drives the differences between anonymous and identifiable stereotypical language use. That is, they suggested that explicit motivations influence language use. It seems that through being identifiable to an audience of valued ingroup members, communicators become more aware of their own motivations for expressing their views to their audience.

In Studies 4 and 5 however, explicit motivations were measured after participants had composed their responses to the white-power group member’s message. As such, participants were in a position to explicitly reflect upon their motivations rather than comment on their motivations at the time they completed the task. This raised the question of whether or not the salient motivations were actually responsible for the changes in language use. To test true mediation (that is, that identifiability affects explicit motivation, which in turn affects stereotypical language use), it was desirable to measure communicator’s motivations after they were informed that they were going to be anonymous or identifiable, but before they had completed their response.

In Study 6, the task involved responding to the same white-power message used in previous studies, but in Study 7 a different issue was addressed where participants were asked to respond to a message that had been written (supposedly)
by a member of staff concerning students’ attitudes to work and leisure. Both studies also departed from the CMC paradigm in that responses were written on paper.

Results in both studies replicated the identifiability/language abstraction effect. Again, identifiable participants used higher levels of stereotypical language to describe the anonymous outgroup target than did identifiable participants. Further and as predicted, Studies 6 and 7 revealed again that feelings of accountability were higher for identifiable participants than for anonymous participants. In addition to this, identifiable participants in Studies 6 and 7 also revealed that they felt that being identifiable enabled them to show that they share the ingroup view, more than did anonymous participants. Study 7 also revealed that identifiable participants were less comfortable about their response being read by others, but were thinking more about how the audience would perceive their response than were anonymous participants. That is, as hypothesised, identifiable participants showed more general sensitivity to communicating with an ingroup audience than did anonymous participants. This was demonstrated in both studies.

However, although many of the sensitivity factors predicted to be influenced by identifiability were in fact influenced by identifiability, none of these factors mediated the identifiability/language abstraction effect. The effect of identifiability on language use was independent of other factors related to communicative sensitivity. That is, high levels of language abstraction were brought about by identifiability, but this was independent of explicit motivational factors, suggesting that the changes in language use were an unintentional response. Table 11.1 below depicts the key relationships observed in this programme of research.
Table 11.1. Overview of results.

<table>
<thead>
<tr>
<th>Study number</th>
<th>Effects of identifiability</th>
<th>Correlates with language abstraction</th>
<th>Causes of the identifiability/language abstraction effect discounted</th>
<th>Residual probable cause of the identifiability/language abstraction effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>language abstraction</td>
<td>–</td>
<td>–</td>
<td>various</td>
</tr>
<tr>
<td>2</td>
<td>language abstraction</td>
<td>intergroup differentiation</td>
<td>intergroup differentiation</td>
<td>self-presentation to ingroup audience</td>
</tr>
<tr>
<td>3</td>
<td>language abstraction</td>
<td>hostility</td>
<td>strategic SIDE</td>
<td>self-presentation to ingroup audience</td>
</tr>
<tr>
<td>4</td>
<td>language abstraction</td>
<td>accountability*</td>
<td>accountability</td>
<td>obligation, communicative sensitivity</td>
</tr>
<tr>
<td></td>
<td>accountability</td>
<td>strength of feeling</td>
<td>interaction (obligation)</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>language abstraction</td>
<td>autonomy</td>
<td>obligation</td>
<td>communicative sensitivity</td>
</tr>
<tr>
<td></td>
<td>autonomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>language abstraction</td>
<td>communicative sensitivity:</td>
<td>communicative sensitivity</td>
<td>unintentional linguistic changes independent of explicit identifiability effects</td>
</tr>
<tr>
<td></td>
<td>1. accountability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. ability to show opposition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>language abstraction</td>
<td>communicative sensitivity:</td>
<td>communicative sensitivity</td>
<td>unintentional linguistic changes independent of explicit identifiability effects</td>
</tr>
<tr>
<td></td>
<td>1. accountability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. ability to show opposition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. comfort</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. thinking about how the audience will perceive the response</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Results of this programme of research therefore show that identifiability to an ingroup audience influences the way in which people communicate their opinions of others' behaviour. Without being co-present with other ingroup members, mere identifiability to an ingroup audience influences the expression of stereotypical views. Just as importantly, identifiability to an ingroup audience also increases
participants’ self-presentational concerns, making identifiable communicators more sensitive to the communicative context and audience evaluation. Identifiable communicators feel more accountable for what they say: a process often thought to be reserved for powerful outgroup audiences (Reicher & Levine, 1994a,b; Turner et al., 1987). Importantly therefore, this research demonstrates that identifiability has two key effects on communicative behaviour. These effects are increased communicative sensitivity and increased stereotypical language use, but these responses are causally independent of each other.

Studies 6 and 7 show that when communicative sensitivity was measured before communicators composed their messages this was clearly the case. These factors were influenced by identifiability, but did not themselves affect how people expressed their opinions about an outgroup member’s behaviours. Language use was influenced by identifiability, but was influenced independently of the explicit factors that were also affected by identifiability. The evidence presented in this research therefore implies that identifiability to an ingroup audience influences stereotypical language use implicitly. Identifiability brings about unintentional linguistic changes that are independent of explicit identifiability effects.

From these results, it is possible to construct a final model of the effects of identifiability on communicative behaviour, and thus extend the original SIDE model (Reicher et al., 1995; Spears & Lea, 1994) to account for these effects. We now know how the effects of identifiability in a communicative context are similar to, and different from the effects of identifiability in other contexts proposed by the SIDE model. This research, in illuminating these similarities and differences therefore both complements and extends the original SIDE model. At this point, it is useful to illuminate the unique contributions made in this research, in relation to the existing
SIDE model. Figure 11.1 therefore incorporates what we know from research on the
SIDE model with the new knowledge gained from this research.

Firstly, the cognitive SIDE proposes that visual identifiability of ingroup
members will decrease social category salience and lead to decreased group
normative behaviour (see Figure 11.1). This idea was tested in this research under
conditions of Internet identifiability, and was found not to hold under these
conditions. This is not to say that SIDE is incorrect, but it does indicate that this
effect does not generalise from visual identifiability to Internet identifiability.
However, this research did show that anonymity to ingroup members produces less
group normative behaviour that identifiability (at least for language abstraction).

The strategic SIDE proposes that identifiability to a powerful outgroup will
increase the expression of behaviours that are not punishable by the outgroup and
that this is related to a desire to resist the outgroup (see Figure 11.1). However, no
evidence was found for this idea in the present research. Again, these effects may
not apply to communicative behaviour of the nature examined in this research.

It is also important to note that the SIDE model does not address the concept
of mere identifiability to (in the absence of physical co-presence with) an ingroup
audience, where communicative behaviour seems to be the most intriguing in this
research. Identifiability under these conditions has both implicit and explicit effects
that are unique and go further than the original SIDE model. The SIDE model can
easily be extended to include these findings. If we include the knowledge gained
from this research into SIDE, it can now predict behaviour when (a) ingroup
members are identifiable, (b) when people are isolated from ingroup members, (c)
when people are identifiable to outgroup members, (d) when people are co-present
with ingroup members, and (e) when people are identifiable to ingroup members.
Figure 11.1. SIDE model and additional findings.
Theoretical implications of the model

This research has integrated three facets of the social psychological literature: the literature on the social psychology of computer-mediated communication, the social identity model of deindividuation effects, and literature on stereotypical language use. In doing so, this programme of research has formulated a model of the effects of identifiability on communicative behaviour, which explains phenomena not examined until now.

This model of identifiability goes further than, and therefore extends the SIDE model and its description of the effects of identifiability on behaviour (e.g., Postmes et al., 1998; Reicher et al., 1995; Spears & Lea, 1994). The present model demonstrates the importance of mere identifiability to an ingroup audience for the expression of stereotypes about anonymous outgroup members. This is not related to ingroup support in overcoming the outgroup. It has been shown that identifiability to the ingroup in the absence of such factors increases the propensity for communicators to act in what appears to be a group-normative manner. Furthermore, this effect is clearly not due to changes in group-based judgements about the target. Indeed, this research shows that there is no evidence that Internet identifiability affects private, traditionally measured stereotypical judgements about the target. If identifiability affected self-categorical processes, privately held stereotypes about the outgroup should change due to the manipulation. However, this was not the case, indicating that behaviour was indeed related less to self-categorical factors and more to strategic factors.

One major theoretical implication of this research therefore relates to the importance of the ingroup as a regulator of behaviour. The findings imply that ingroup members perhaps vary in the degree to which they are motivated to act in
line with the shared norms and values of their group, however committed they may be to those norms. That is, group-normative behaviour is not an all-or-nothing phenomenon, but is instead a continuum, in the same way that identification with the ingroup is continuous. It is clear from this research that identifiability to an ingroup audience changes behaviour, implying that group norms will be attended to and adhered to differently depending on the context of the communication and will therefore not always follow a predictable ingroup-normative pattern regardless of the situation.

Further, this research suggests that the ingroup can perhaps hold communicators accountable for their behaviour. Accountability is often thought to be a process only elicited by powerful outgroups (see Reicher & Levine, 1994, a,b; Spears & Lea, 1994; Turner et al., 1987), although the present research indicates that identifiable communicators feel more accountable to their ingroup audience than do anonymous communicators, in quite a subtle way. This suggests that ingroups perhaps also have the power to hold their members accountable for their behaviour. Perhaps this is in order to maintain the necessary norms and standards of the group, and also to maintain the position of the group in relation to relevant outgroups. In future research it therefore may be important to consider the power of the ingroup in holding its members responsible for their actions.

Another major theoretical contribution made by this research relates to the processes whereby identifiability to an ingroup audience influences behaviour. Based on SIDE, the original model of Internet identifiability proposed in this volume asserted that strategic and/or self-presentational factors should be responsible for increased group-normative language use (e.g., Barreto & Ellemers, in press; Noel et al., 1995; Reicher & Levine, 1994a,b; Spears & Lea, 1994). However, the present
research shows that identifiability does indeed influence explicit processes such as accountability. People are sensitive to the communicative context. However, these explicit processes do not appear to influence language use, which appears to be implicitly motivated and regulated.

The ramifications of this are twofold. Firstly, this finding shows that identifiability can have both implicit and explicit effects on communicators, which has not been demonstrated before now. It has been assumed that identifiability to an audience will always affect either strategic or self-presentational motivations. It has also been assumed that these explicit processes will be responsible for changes in behaviour (e.g., Noel et al., 1995; Reicher & Levine, 1994a,b; Spears & Lea, 1994). However, what the present research makes clear is that not only explicit effects arise from identifiability. When communicators are identifiable to an ingroup audience, their language use is influenced implicitly or independently of explicit motivations. As this research also shows, explicit motivations do not necessarily carry through to linguistic behaviour.

Secondly, this finding points to the importance of automatic behaviour in a rich communicative context. It seems that communicators are not monitoring the ways that their language use is adapted according to their audience and the context in which they are communicating with that audience (either anonymous or identifiable). This may be due mostly to the demanding nature of the communicative process. That is, in a situation where one is required to respond quickly to a message, communicators cannot always be expected to be aware of how they are adapting their responses to their audience. For example, consider a group of people conversing on the Internet. Communication is instantaneous, fast and continuous. It is unrealistic to assume that communicators will have the time and resources to think carefully
about what they want to say, and it is even more implausible to assume that they will be aware of their explicit motivations whilst doing so.

This research also has important implications for the subtle transmission of stereotypes and prejudices. It has been noted that because language abstraction is not always under intentional control, that it may be a subtle way for stereotypes to be perpetuated or maintained (e.g., Arcuri et al., 1993; Karpinski & von Hippel, 1996; Maass et al., 1989, 1995, 1996). The present research provides support for this analysis since identifiability produces differences in stereotypical language use, but these differences are driven implicitly rather than by explicit, motivational processes. If people are unaware that they are stereotyping a group, it is clearly a subtle mechanism whereby stereotypes can be transmitted to others, and perpetuated through time. It also may be the case that people cannot attenuate this process in the same manner that explicit stereotyping can be attenuated (see also Banaji & Greenwald, 1994; Greenwald & Banaji, 1995).

This research therefore provides a unique insight into some important social psychological questions. Overall, the research does the following:

1. It demonstrates a unique effect of identifiability on language use. The identifiability/language abstraction effect has not been demonstrated in previous research.

2. The research demonstrates the identifiability/language abstraction effect in an archival CMC study, asynchronous CMC experiments and questionnaire studies involving two different issues. Thus, the identifiability/language abstraction effect is a robust finding and is widely applicable in different communicative contexts.
3. The research demonstrates that mere identifiability to a positively regarded ingroup audience creates explicit responses of accountability and sensitivity to the communicative context.

4. The research proposes a new model pertaining to the effects of identifiability on communicative behaviour. The model sustained by this research suggests that language abstraction is increased by making communicators identifiable to an ingroup audience. This does not relate to co-presence with other ingroup members or resistance of an opposing outgroup, but is a process elicited by mere identifiability to an ingroup audience. The research and emergent model also indicate that identifiability increases self-presentational concerns including increased feelings of accountability to the ingroup audience.

5. Finally, this research shows that identifiability affects language use independently of explicit, self-presentational factors. That is, language use is influenced implicitly by identifiability.

**Final comments**

How our behaviour is influenced by our identifiability to others is an important issue that we face often. Whether a person sends a critical letter to a newspaper editor with his/her name on it, fills in a market research form anonymously, or sends a message to another person on the Internet with a pseudonym attached, will reflect what they think the consequences of that choice are for them personally.
This research indicates that being identifiable to an ingroup audience makes people sensitive to the communicative consequences produced by the context. People become aware of the consequences of communicating their opinions to their audience, feel accountable to this audience to express an appropriate view, and perceive that the context will allow them to express their identity. But do these explicit motivations affect actual communicative behaviours? In particular, do people’s descriptions of others change because something inside the communicator’s mind also changes to motivate them to do so? The present research indicates that they need not do so. Stereotypical descriptions of others increase due to identifiability, but this is independent of motivational factors that communicators report. That is, identifiability affects stereotypical language use, independent of intention, or through an implicit path. The surprising independence of explicit and implicit responses underscores the importance of the extension of the SIDE model to Internet identifiability as developed here.
References


Appendix I: Statistical Appendix

Note that SPSS 4.0 for Macintosh was used for analyses up to and including Study 4, and SPSS 8.0 for Windows was used for subsequent analyses. Hence, the statistical tables contain slightly different details. Unless otherwise indicated, all analyses conducted are two-tailed, with a significance level of \( \alpha = .05 \).

Study 1

Pilot Study

Table A1. t-test table for pilot study: Comparison of language abstraction between flaming and non-flaming communication.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.20</td>
<td>.371</td>
<td>-4.01</td>
</tr>
</tbody>
</table>

Main Study

Language abstraction

Table A2. ANOVA table for Study 1: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on language abstraction.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>.11</td>
<td>1</td>
<td>.11</td>
<td>.24</td>
<td>.626</td>
</tr>
<tr>
<td>TARGET</td>
<td>.04</td>
<td>1</td>
<td>.04</td>
<td>.08</td>
<td>.776</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>2.54</td>
<td>1</td>
<td>2.54</td>
<td>5.63</td>
<td>.019</td>
</tr>
</tbody>
</table>
Table A3. *t*-test table for Study 1: Pairwise comparison of language abstraction between identifiable and anonymous sources, in anonymous target condition.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.02</td>
<td>943</td>
<td>2.02</td>
</tr>
</tbody>
</table>

**Hostility**

Table A4. ANOVA table for Study 1: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on hostility of flames.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>68171.25</td>
<td>196</td>
<td>347.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>820.12</td>
<td>1</td>
<td>820.12</td>
<td>2.36</td>
<td>.126</td>
</tr>
<tr>
<td>TARGET</td>
<td>450.00</td>
<td>1</td>
<td>450.00</td>
<td>1.29</td>
<td>.257</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>180.50</td>
<td>1</td>
<td>180.50</td>
<td>.52</td>
<td>.472</td>
</tr>
</tbody>
</table>

**Permissibility**

Table A5. *t*-test table for Study 1: Comparison of language abstraction between high and low ‘flaming permissible’ groups.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.13</td>
<td>.528</td>
<td>.80</td>
</tr>
</tbody>
</table>

**Normative context**

Table A6. *t*-test table for Study 1: Comparison of language abstraction between ‘flaming appropriate’ and ‘flaming inappropriate’ newsgroups.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.35</td>
<td>.217</td>
<td>1.28</td>
</tr>
</tbody>
</table>
Study 2

Language abstraction

Table A7. ANOVA table for Study 2: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on language abstraction.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>7.53</td>
<td>40</td>
<td>.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>.78</td>
<td>1</td>
<td>.78</td>
<td>3.72</td>
<td>.062</td>
</tr>
<tr>
<td>TARGET</td>
<td>.15</td>
<td>1</td>
<td>.15</td>
<td>.72</td>
<td>.402</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>1.09</td>
<td>1</td>
<td>1.09</td>
<td>5.22</td>
<td>.028</td>
</tr>
</tbody>
</table>

Table A8. t-test table for Study 2: Comparison of language abstraction between identifiable and anonymous sources, for anonymous target condition.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.34</td>
<td>.650</td>
<td>-2.47</td>
</tr>
</tbody>
</table>

Willingness to send messages

Table A9. Chi Square observed and expected values for willingness to send messages.

<table>
<thead>
<tr>
<th>Anonymous</th>
<th>Identifiable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>10 (9) A</td>
</tr>
<tr>
<td>No</td>
<td>12 (13) C</td>
</tr>
</tbody>
</table>

\[
\chi^2 = \frac{N(AD-BC)^2}{(A+B)(C+D)(A+C)(B+D)}
\]
\[
44(140-96)^2
\]
\[
= 18 \times 26 \times 22 \times 22
\]
\[
= .376
\]

Critical value (\(\alpha=.05\)) = 3.84, ns.

**Hostility**

Table A10. ANOVA table for Study 2: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on hostility.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>10371.59</td>
<td>40</td>
<td>259.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>119.46</td>
<td>1</td>
<td>119.46</td>
<td>.46</td>
<td>.501</td>
</tr>
<tr>
<td>TARGET</td>
<td>931.96</td>
<td>1</td>
<td>931.96</td>
<td>3.59</td>
<td>.065</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>563.78</td>
<td>1</td>
<td>563.48</td>
<td>2.17</td>
<td>.148</td>
</tr>
</tbody>
</table>

**Intergroup differentiation (mediational analysis)**

Table A11. Regression of SOURCE identifiability (independent variable) on DIFFERENTIATION (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.652</td>
<td>.993</td>
<td>4.686</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>-.758</td>
<td>.628</td>
<td>-.270</td>
<td>-.121</td>
</tr>
</tbody>
</table>

Dependent variable: DIFFERENTIATION

Table A12. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.656</td>
<td>.378</td>
<td>4.378</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.591</td>
<td>.239</td>
<td>.483</td>
<td>2.468</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION
Table A13. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with DIFFERENTIATION (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.720</td>
<td>.478</td>
<td>1.509</td>
<td>.148</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.605</td>
<td>.209</td>
<td>.496</td>
<td>2.904</td>
</tr>
<tr>
<td>DIFFERENT</td>
<td>.201</td>
<td>.074</td>
<td>.462</td>
<td>2.709</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Study 3

Language abstraction

Table A14. ANOVA table for Study 3: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on language abstraction.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>16.70</td>
<td>42</td>
<td>.41</td>
<td>.880</td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.02</td>
<td>.880</td>
</tr>
<tr>
<td>TARGET</td>
<td>.03</td>
<td>1</td>
<td>.03</td>
<td>.07</td>
<td>.786</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.02</td>
<td>.902</td>
</tr>
</tbody>
</table>

Willingness to send messages

Table A15. ANOVA table for Study 3: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on participants’ willingness to send their messages.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>293.73</td>
<td>42</td>
<td>6.99</td>
<td>.977</td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.00</td>
<td>.977</td>
</tr>
<tr>
<td>TARGET</td>
<td>.01</td>
<td>1</td>
<td>.01</td>
<td>.00</td>
<td>.977</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>25.05</td>
<td>1</td>
<td>25.05</td>
<td>3.58</td>
<td>.065</td>
</tr>
</tbody>
</table>
Hostility

Table A16. ANOVA table for Study 3: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on perceived hostility of flames.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>17757.62</td>
<td>42</td>
<td>422.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>43.26</td>
<td>1</td>
<td>43.26</td>
<td>.10</td>
<td>.751</td>
</tr>
<tr>
<td>TARGET</td>
<td>.75</td>
<td>1</td>
<td>.75</td>
<td>.00</td>
<td>.967</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>131.19</td>
<td>1</td>
<td>131.19</td>
<td>.31</td>
<td>.580</td>
</tr>
</tbody>
</table>

Intergroup differentiation

Table A17. ANOVA table for Study 3: Assessment of the effects of identifiability of source (SOURCE) and target (TARGET) on the positivity of descriptions of the ingroup.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within cells</td>
<td>27.10</td>
<td>42</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>1.09</td>
<td>1</td>
<td>1.09</td>
<td>1.70</td>
<td>.200</td>
</tr>
<tr>
<td>TARGET</td>
<td>.09</td>
<td>1</td>
<td>.09</td>
<td>.14</td>
<td>.709</td>
</tr>
<tr>
<td>SOURCE*TARGET</td>
<td>4.40</td>
<td>1</td>
<td>4.40</td>
<td>6.82</td>
<td>.012</td>
</tr>
</tbody>
</table>

Difference between positivity of adjectives to describe ingroup (between anonymous and identifiable sources in anonymous target condition).

$t(21) = 2.792 - 1.864$

$\sqrt{.65} \times \sqrt{1/12+1/11}$

$= 2.757$, p<.01.
Study 4

Language abstraction

Table A18. t-test table for Study 4: Comparison of language abstraction between identifiable and anonymous conditions (INGROUP AUDIENCE).

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.22</td>
<td>.701</td>
<td>-2.14</td>
</tr>
</tbody>
</table>

Accountability

Table A19. t-test table for Study 4: Comparison of feelings of accountability between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>2.29</td>
<td>.107</td>
<td>-2.40</td>
</tr>
</tbody>
</table>

Strength of feeling about the issue

Table A20. t-test result for Study 4: Comparison of strength of feeling between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>1.00</td>
<td>1.000</td>
<td>2.51</td>
</tr>
</tbody>
</table>
Accountability/strength of feeling about the issue (mediational analysis)

Table A21. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.146</td>
<td>.227</td>
<td>9.459</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.307</td>
<td>.144</td>
<td>.354</td>
<td>2.142</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A22. Regression of SOURCE identifiability (independent variable) on the interaction between accountability and strength of feeling (ACCSTRONG – prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.524</td>
<td>.141</td>
<td>3.723</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.363</td>
<td>.089</td>
<td>.585</td>
<td>4.075</td>
</tr>
</tbody>
</table>

Dependent variable: ACCSTRONG

Table A23. Regression of ACCSTRONG (proposed mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.076</td>
<td>.257</td>
<td>8.077</td>
<td>.000</td>
</tr>
<tr>
<td>ACCSTRONG</td>
<td>.497</td>
<td>.231</td>
<td>.356</td>
<td>2.153</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION
Table A24. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with ACCSTRONG (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.981</td>
<td>.271</td>
<td>7.319</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.193</td>
<td>.176</td>
<td>.222</td>
<td>1.094</td>
</tr>
<tr>
<td>ACCSTRONG</td>
<td>.316</td>
<td>.284</td>
<td>.226</td>
<td>1.113</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Number of additional points made to messages

Table A25. t-test table for Study 4: Comparison of number of additions made to messages between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th>F-Value</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2-tailed p.</td>
<td>t-value</td>
</tr>
<tr>
<td>2.18</td>
<td>.129</td>
<td>-1.56</td>
</tr>
</tbody>
</table>

Explicit stereotyping measures

Table A26. t-test table for Study 4: Comparison of explicit stereotyping measures between identifiable and anonymous conditions. See Appendix II for variable labels.

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>Pooled variance estimate</th>
<th>Separate variance estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>p</td>
<td>t df</td>
<td>p t df</td>
</tr>
<tr>
<td>TYPICAL</td>
<td>2.03</td>
<td>.166 .00 32 .00</td>
<td>28.67 1.00</td>
</tr>
<tr>
<td>EXPECTED</td>
<td>1.66</td>
<td>.323 -.43 32 .667</td>
<td>30.16 .667</td>
</tr>
<tr>
<td>POSITIVE</td>
<td>2.12</td>
<td>.143 -.153 32 .135</td>
<td>28.34 .136</td>
</tr>
<tr>
<td>AGREE</td>
<td>2.86</td>
<td>.043 1.72 32 .095</td>
<td>25.98 .097</td>
</tr>
<tr>
<td>UNDERST</td>
<td>1.63</td>
<td>.336 -.48 32 .632</td>
<td>30.25 .632</td>
</tr>
<tr>
<td>UNI</td>
<td>1.12</td>
<td>.827 -.47 32 .641</td>
<td>31.90 .641</td>
</tr>
<tr>
<td>TYPWPG</td>
<td>2.16</td>
<td>.133 1.24 32 .225</td>
<td>28.18 .227</td>
</tr>
<tr>
<td>PERSONAL</td>
<td>1.07</td>
<td>.887 .11 32 .917</td>
<td>31.96 .917</td>
</tr>
<tr>
<td>INSECURE</td>
<td>1.11</td>
<td>.841 .58 32 .568</td>
<td>31.92 .568</td>
</tr>
<tr>
<td>NARROW</td>
<td>1.79</td>
<td>.253 -.16 32 .871</td>
<td>29.61 .871</td>
</tr>
<tr>
<td>TOLER</td>
<td>1.58</td>
<td>.367 -.13 32 .894</td>
<td>30.44 .894</td>
</tr>
<tr>
<td>SELFISH</td>
<td>1.13</td>
<td>.807 -.08 32 .935</td>
<td>31.88 .935</td>
</tr>
<tr>
<td>REALIS</td>
<td>1.19</td>
<td>.727 -.18 32 .857</td>
<td>31.75 .857</td>
</tr>
<tr>
<td>AFRAID</td>
<td>1.27</td>
<td>.642 .95 32 .351</td>
<td>31.56 .351</td>
</tr>
<tr>
<td>EXTREM</td>
<td>1.03</td>
<td>.995 .64 32 .526</td>
<td>31.99 .526</td>
</tr>
</tbody>
</table>
Study 5

Language abstraction

Table A27. t-test table for Study 5: Comparison of language abstraction between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>2.341</td>
<td>41</td>
<td>.024</td>
<td>.3191</td>
<td>.1363</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>2.348</td>
<td>40.797</td>
<td>.024</td>
<td>.3191</td>
<td>.1359</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Manipulation checks

Table A28. t-test table for Study 5: Comparison of commitment to opposing racism between high and control commitment conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>1.963</td>
<td>41</td>
<td>.056</td>
<td>.8052</td>
<td>.4101</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>1.948</td>
<td>36.059</td>
<td>.059</td>
<td>.8052</td>
<td>.4153</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table A29. t-test table for Study 5: Comparison of language abstraction between high and control commitment conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>.516</td>
<td>41</td>
<td>.608</td>
<td>.0747</td>
<td>.1466</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>.516</td>
<td>40.941</td>
<td>.608</td>
<td>.0747</td>
<td>.1466</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table A30. ANOVA table for Study 5: Assessment of the effects of identifiability (STATUS) and commitment (COMMIT) on language abstraction.

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1.188</td>
<td>3</td>
<td>.396</td>
<td>1.910</td>
<td>.144</td>
</tr>
<tr>
<td>Intercept</td>
<td>282.862</td>
<td>1</td>
<td>282.862</td>
<td>1363.840</td>
<td>.000</td>
</tr>
<tr>
<td>STATUS</td>
<td>1.071</td>
<td>1</td>
<td>1.071</td>
<td>5.165</td>
<td>.029</td>
</tr>
<tr>
<td>COMMIT</td>
<td>.051</td>
<td>1</td>
<td>.051</td>
<td>.244</td>
<td>.624</td>
</tr>
<tr>
<td>STATUS*COMMIT</td>
<td>.046</td>
<td>1</td>
<td>.046</td>
<td>.220</td>
<td>.641</td>
</tr>
<tr>
<td>Error</td>
<td>8.089</td>
<td>39</td>
<td>.207</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>292.154</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>9.277</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Autonomy or ‘rejected compliance’ (mediational analysis)

Table A31. Regression of STATUS (independent variable) on ABSTRACT (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. E.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.090</td>
<td>.214</td>
</tr>
<tr>
<td>STATUS</td>
<td>.319</td>
<td>.136</td>
</tr>
</tbody>
</table>
| Dependent variable: ABSTRACT (abstraction)

Table A32. Regression of STATUS (independent variable) on COMPLY (proposed mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. E.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.411</td>
<td>.975</td>
</tr>
<tr>
<td>STATUS</td>
<td>-1.729</td>
<td>.621</td>
</tr>
</tbody>
</table>
| Dependent variable: COMPLY (compliance)
Table A33. Regression of COMPLY (proposed mediator) on ABSTRACT (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.854 .105</td>
<td>-3.462</td>
</tr>
<tr>
<td>COMPLY</td>
<td>-.102 .029</td>
<td>-.476</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACT (abstraction)

Table A34. Regression of STATUS (independent variable) on ABSTRACT (dependent variable) with COMPLY (proposed mediator)

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.557 .264</td>
<td>9.698</td>
</tr>
<tr>
<td>STATUS</td>
<td>.170 .138</td>
<td>.183 1.227</td>
</tr>
<tr>
<td>COMPLY</td>
<td>-.086 .032</td>
<td>-.403 -2.704</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACT (abstraction)

Study 6

Manipulation Check

Table A35. t-test table for Study 6: Comparison of responses to the question ‘do you think that your response can be linked to you personally?’ between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal Var. Assumed</td>
<td>-7.356</td>
<td>63</td>
<td>.000</td>
<td>-3.9535</td>
<td>.5375</td>
</tr>
<tr>
<td>Unequal Var. Assumed</td>
<td>-7.179</td>
<td>46.321</td>
<td>.000</td>
<td>-3.9535</td>
<td>.5507</td>
</tr>
</tbody>
</table>
### Language abstraction

Table A36. t-test table for Study 6. Comparison of language abstraction between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>-2.017</td>
<td>63</td>
<td>.048</td>
<td>-.5581</td>
<td>.2767</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>-2.022</td>
<td>62.916</td>
<td>.047</td>
<td>-.5581</td>
<td>.2760</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Sensitivity to audience

Table A37. t-test table for Study 6: Comparison of feelings of accountability to the audience between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>-2.231</td>
<td>63</td>
<td>.029</td>
<td>-1.3074</td>
<td>.5859</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>-2.230</td>
<td>62.253</td>
<td>.029</td>
<td>-1.3074</td>
<td>.5963</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table A38. t-test table for Study 6: Comparison between identifiable and anonymous conditions in the perceived ability of the task for showing that one is opposed to white-power groups.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>-2.039</td>
<td>63</td>
<td>.046</td>
<td>-1.0958</td>
<td>.5370</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>-2.064</td>
<td>61.373</td>
<td>.043</td>
<td>-1.0958</td>
<td>.5310</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Accountability (mediational analysis)

Table A39. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.465</td>
<td>.431</td>
<td>3.395</td>
<td>.001</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.558</td>
<td>.277</td>
<td>.246</td>
<td>2.017</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A40. Regression of SOURCE identifiability (independent variable) on ACCOUNTABILITY (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.869</td>
<td>.913</td>
<td>2.046</td>
<td>.045</td>
</tr>
<tr>
<td>SOURCE</td>
<td>1.307</td>
<td>.586</td>
<td>.271</td>
<td>2.231</td>
</tr>
</tbody>
</table>

Dependent variable: ACCOUNTABILITY

Table A41. Regression of ACCOUNTABILITY (prospective mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.049</td>
<td>.264</td>
<td>7.771</td>
<td>.000</td>
</tr>
<tr>
<td>ACCOUNT</td>
<td>.063</td>
<td>.059</td>
<td>.135</td>
<td>1.080</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION
Table A42. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with ACCOUNTABILITY (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.400</td>
<td>.408</td>
<td>3.126</td>
<td>.003</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.513</td>
<td>.289</td>
<td>.226</td>
<td>1.775</td>
</tr>
<tr>
<td>ACCOUNT</td>
<td>.035</td>
<td>.060</td>
<td>.074</td>
<td>.577</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

**Ability to show identity (mediational analysis)**

Table A43. Regression of SOURCE identifiability (independent variable) on SHOW (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.228</td>
<td>.838</td>
<td>5.046</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>1.096</td>
<td>.537</td>
<td>.249</td>
<td>2.039</td>
</tr>
</tbody>
</table>

Dependent variable: SHOW

Table A44. Regression of SHOW (proposed mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.707</td>
<td>.397</td>
<td>4.297</td>
<td>.000</td>
</tr>
<tr>
<td>SHOW</td>
<td>.099</td>
<td>.064</td>
<td>.193</td>
<td>1.565</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION
Table A45. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with SHOW (proposed mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.158</td>
<td>.510</td>
<td>2.270</td>
<td>.027</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.479</td>
<td>.285</td>
<td>1.679</td>
<td>.098</td>
</tr>
<tr>
<td>SHOW</td>
<td>.072</td>
<td>.065</td>
<td>1.120</td>
<td>.267</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Study 7

Manipulation Check

Table A46. t-test table for Study 7. Comparison of responses to the question ‘do you think that your response can be linked to you personally?’ between identifiable and anonymous conditions (INGROUP AUDIENCE).

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal Var. Assumed</td>
<td>-7.027</td>
<td>62</td>
<td>.000</td>
<td>-3.3030</td>
<td>.4701</td>
</tr>
<tr>
<td>Unequal Var. Assumed</td>
<td>-6.955</td>
<td>53.952</td>
<td>.000</td>
<td>-3.3030</td>
<td>.4749</td>
</tr>
</tbody>
</table>

Language abstraction

Table A47. t-test table for Study 7. Comparison of language abstraction between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unequal Var. Assumed</td>
<td>-2.387</td>
<td>60.373</td>
<td>.020</td>
<td>-.4751</td>
<td>.1990</td>
</tr>
</tbody>
</table>
### Sensitivity to audience

**Table A48.** t-test table for Study 7. Comparison of feelings of accountability between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>-2.903</td>
<td>62</td>
<td>.005</td>
<td>-1.5894</td>
<td>.5475</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>-2.910</td>
<td>61.998</td>
<td>.005</td>
<td>-1.5894</td>
<td>.5463</td>
</tr>
</tbody>
</table>

**Table A49.** t-test table for Study 7. Comparison between identifiable and anonymous conditions in the perceived ability of the task for showing that one is opposed to white-power groups.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>-2.150</td>
<td>62</td>
<td>.035</td>
<td>-1.0694</td>
<td>.4974</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>-2.173</td>
<td>57.907</td>
<td>.034</td>
<td>-1.0694</td>
<td>.4922</td>
</tr>
</tbody>
</table>

**Table A50.** t-test table for Study 7. Comparison of level of comfort with the fact that others are reading the message between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>3.403</td>
<td>62</td>
<td>.001</td>
<td>1.6031</td>
<td>.4711</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>3.420</td>
<td>61.499</td>
<td>.001</td>
<td>1.6031</td>
<td>.4688</td>
</tr>
</tbody>
</table>
Table A51. t-test table for Study 7. Comparison of how much people are thinking about how their responses will be perceived by the audience between identifiable and anonymous conditions.

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>sig (2-tailed)</th>
<th>Mean Difference</th>
<th>SE Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal</td>
<td>-2.214</td>
<td>62</td>
<td>.030</td>
<td>-1.0792</td>
<td>.4874</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unequal</td>
<td>-2.223</td>
<td>61.735</td>
<td>.030</td>
<td>-1.0792</td>
<td>.4854</td>
</tr>
<tr>
<td>Var. Assumed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accountability (mediational analysis)

Table A52. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. E.</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.147</td>
<td>.311</td>
<td>6.909</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.475</td>
<td>.198</td>
<td>.291</td>
<td>.020</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A53. Regression of SOURCE identifiability (independent variable) on ACCOUNTABILITY (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Std. E.</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.047</td>
<td>.858</td>
<td>2.387</td>
<td>.020</td>
</tr>
<tr>
<td>SOURCE</td>
<td>1.589</td>
<td>.547</td>
<td>.346</td>
<td>.005</td>
</tr>
</tbody>
</table>

Dependent variable: ACCOUNTABILITY
Table A54. Regression of ACCOUNTABILITY (prospective mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.878</td>
<td>.224</td>
<td>.017</td>
<td>12.836</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.006</td>
<td>.045</td>
<td>-1.30</td>
<td>.897</td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A55. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with ACCOUNTABILITY (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.244</td>
<td>.325</td>
<td>.497</td>
<td>6.913</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.550</td>
<td>.211</td>
<td>.337</td>
<td>2.604</td>
<td>.012</td>
</tr>
<tr>
<td>ACCOUNT</td>
<td>.047</td>
<td>.046</td>
<td>-.133</td>
<td>1.028</td>
<td>.308</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Ability to show identity (mediational analysis)

Table A56. Regression of SOURCE identifiability on SHOW (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.506</td>
<td>.779</td>
<td>.263</td>
<td>4.501</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>1.069</td>
<td>.497</td>
<td>2.150</td>
<td>.035</td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: SHOW
Table A57. Regression of SHOW (prospective mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. E.</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.996</td>
<td>.279</td>
<td>.051</td>
<td></td>
</tr>
<tr>
<td>SHOW</td>
<td>.028</td>
<td>.051</td>
<td>-.070</td>
<td>-.556</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A58. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with SHOW (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. E.</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.370</td>
<td>.356</td>
<td>.356</td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>.543</td>
<td>.205</td>
<td>.333</td>
<td>2.654</td>
</tr>
<tr>
<td>SHOW</td>
<td>.064</td>
<td>.050</td>
<td>-.158</td>
<td>-1.261</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

**Comfort (mediational analysis)**

Table A59. Regression of SOURCE identifiability (independent variable) on COMFORT (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. E.</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>8.755</td>
<td>.738</td>
<td>.397</td>
<td></td>
</tr>
<tr>
<td>SOURCE</td>
<td>-1.603</td>
<td>.471</td>
<td>-.397</td>
<td>-3.403</td>
</tr>
</tbody>
</table>

Dependent variable: COMFORT
Table A60. Regression of COMFORT (prospective mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>3.468</td>
<td>.333</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMFORT</td>
<td>.097</td>
<td>.050</td>
<td>-239</td>
<td>10.409</td>
<td>.000</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A61. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with COMFORT (prospective).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.666</td>
<td>.561</td>
<td>-</td>
<td>4.754</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.380</td>
<td>.216</td>
<td>.233</td>
<td>1.762</td>
<td>.083</td>
</tr>
<tr>
<td>COMFORT</td>
<td>.059</td>
<td>.053</td>
<td>-.147</td>
<td>-1.112</td>
<td>.271</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Thinking how the audience will perceive the response (mediational analysis)

Table A62. Regression of SOURCE identifiability (independent variable) on THINK (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.648</td>
<td>.763</td>
<td>-</td>
<td>3.469</td>
<td>.001</td>
</tr>
<tr>
<td>SOURCE</td>
<td>1.079</td>
<td>.487</td>
<td>.271</td>
<td>2.214</td>
<td>.030</td>
</tr>
</tbody>
</table>

Dependent variable: THINK
Table A63. Regression of THINK (prospective mediator) on ABSTRACTION (dependent variable).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.847</td>
<td>.244</td>
<td></td>
<td>11.660</td>
<td>.000</td>
</tr>
<tr>
<td>THINK</td>
<td>.001</td>
<td>.052</td>
<td>.003</td>
<td>.023</td>
<td>.982</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION

Table A64. Regression of SOURCE identifiability (independent variable) on ABSTRACTION (dependent variable) with THINK (prospective mediator).

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficient B</th>
<th>Std. E.</th>
<th>Standardized Coefficient Beta</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.235</td>
<td>.341</td>
<td></td>
<td>6.553</td>
<td>.000</td>
</tr>
<tr>
<td>SOURCE</td>
<td>.511</td>
<td>.207</td>
<td>.313</td>
<td>2.470</td>
<td>.016</td>
</tr>
<tr>
<td>THINK</td>
<td>.034</td>
<td>.052</td>
<td>-.082</td>
<td>-.646</td>
<td>.521</td>
</tr>
</tbody>
</table>

Dependent variable: ABSTRACTION
Appendix II: Questionnaire Materials

Note that the wording for different versions/conditions appear in square brackets.
Also note that each section of text within a box is a new page of the questionnaire.

Internet Questionnaire (Study 1)

Hello everyone,

I am a researcher at the Australian National University, looking at intergroup relations via Computer-Mediated Communication. I would very much appreciate it if you could take a few moments to help me in my research.

It is clear that there are a LOT of negative/undesirable comments made about specific groups on the Internet/Usenet. What I am trying to obtain, is a general overview of what people see as acceptable or accepted Internet behaviour; that is, what YOU think the Internet community (generally) feels about these specific groups. This might not necessarily be what YOU agree with, but what you think OTHERS’ opinions are. Specifically, I want to know how people might feel about the groups outlined below. Please respond in the following manner:

A) It is generally accepted to speak negatively of this group
B) It is accepted that this group is sometimes spoken of in a negative manner
C) Neutral
D) It is seldom accepted that this group is spoken of negatively
E) It is never accepted that this group is spoken of negatively
1. Americans
2. Australians
3. Blacks
4. Whites
5. Asians
6. Racists
7. "White-power" groups
8. Homosexuals
9. Brazilians
10. Jews
11. English
12. "Rednecks"
13. Anti-racists
14. Christians
15. Non-Christians
16. Pornographers
17. Adulterers
18. The IRA (Irish Republican Army)
19. Neo-nazis (like skinheads)
20. Communists
21. Computer "nerds"
22. Mormons
23. Cowards
24. Politics students and teachers
25. "Politically correct" people
26. Vietnamese
27. Members of university fraternities
28. Victims of racism
29. Dallas Cowboys fans
30. "Newbies" (new users of the Internet)
31. Women
32. Men
33. Conservative governments
34. Malaysians
35. Homophobes
36. White women in relationships with black men
In this experiment, you will be asked to read a message that has been placed on the Internet. I have printed it out for your convenience.

Could you please indicate below, how familiar you are with the Internet, and sending e-mail (please circle the appropriate number on the scale):

<table>
<thead>
<tr>
<th>Totally Unfamiliar</th>
<th>Extremely Familiar</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

The particular person who wrote this message is a member of an extreme, white-power group. There are many Internet messages placed by members and supporters of such groups, and there are also many people opposed to white-power views on white superiority.

On this sheet now, could you please indicate (by circling the appropriate number), which group you feel you belong to:

Group 1 (not opposed to white-power groups) Group 2 (opposed to white-power groups)

Could you also indicate how much you identify with the group of your choice:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

Also, how strongly opposed are you to white-power groups? (again, please circle a number on the scale below):

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>
As I said before, the particular message that you will read has been written by a member of a white-power, extreme group, and this person has chosen to remain anonymous [chosen to be identifiable by supplying his name and country of residence].

You are asked to write a response to this message, which will be seen only by people who are not [are] opposed to white-power groups. This group may include people who support white-power groups, and those who are not committed one way or the other. [These people strongly disagree with white-power group members, and their views on white superiority]. You do not have to enter your name, and no-one will know who has written your message [You are asked to enter your full name (first name and last name) and country of residence. Please enter these details on the computer now].

Please now read the message and wait for further instructions.

I would like you to respond freely to what you have read, but specifically comment on the behaviour and opinions of the group member who has written the message. Write as much as you can in about 10 minutes, and put any quotes from the message itself in quotation marks.

Please do not begin typing until I ask you to do so.
Now that you have written your message, you can decide whether or not you want to send it. Please indicate below, how much you would like to send your reply to the mailing list (please circle the appropriate number):

<table>
<thead>
<tr>
<th>I don't want to send my message</th>
<th>I really want to send my message</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

[Please indicate below, if you would like to send your reply to the mailing list (please circle 'yes' or 'no').]

- yes
- no

Also, I would like you to think of the type of person who wrote the message to which you replied. Could you please list 3 adjectives which (in your opinion) would best describe such a person:

1. ____________________________________________________
2. ____________________________________________________
3. ____________________________________________________

Could you also list 3 adjectives that are characteristic of you, but not of the person who wrote the Internet message:

1. ____________________________________________________
2. ____________________________________________________
3. ____________________________________________________

How much was the message consistent with what you might expect from a member of a white-power organisation (please circle the appropriate number on the scale below):

not expected at all 1 2 3 4 5 6 7 8 9 as I expected exactly

Thank you very much for your participation in this research.
Questionnaire Materials (Study 4)

| Age? | Male/Female (please circle) |

In this experiment, you will be asked to read a message that has been placed on the Internet. I have printed it out for your convenience.

The particular person who wrote this message is a member of an extreme, white-power group. There are many Internet messages, e-mail mailing lists and websites written by members and supporters of such groups, who believe that the white race is superior to other races. Also, however, there are people who do not agree with white-power views about white superiority.

On this sheet now, could you please indicate (by circling the appropriate number), which group you feel you belong to:

| Group 1 (not opposed white-power groups) | Group 2 (opposed to white-power groups) |

Could you also indicate on the scale below, (again, by circling the appropriate number), how much you identify with this group:

| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | extremely |

Also, how strongly opposed are you to white-power groups? (again, please circle a number on the scale below):

| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | extremely |
As I said before, the particular message that you will read has been written by a member of a white-power, extreme group, and this person has chosen to remain anonymous. That is, the group member has chosen specifically not to supply any personal details.

You are asked to write a response to this message, which will be seen only by a mailing list of people who are opposed to white-power groups. These people strongly disagree with white-power group members, and their views on white superiority. For this task, you are asked to enter your name, and the country of your current location (i.e., Australia). That is, your response will be sent to the mailing list with your name and location written at the top of the text you have written. Please type your details on the computer now. [For this task, you are not asked to enter any details about yourself, and so no-one will know who has written your message].

Please now read the message and wait for further instructions.

I would like you to respond freely to what you have read, but specifically comment on the behaviour and opinions of the white-power group member who has written the message. Type as much as you can in about 10 minutes, and put any quotes from the message itself in quotation marks. I will ask you to stop when 10 minutes has elapsed.

Please do not type until I ask you to do so.
Thank you. Now, I would like you to answer just a few more short questions before we finish. Please circle the response you feel most applies to you.

1. When you were composing your message, how strongly involved did you feel regarding the issue of racism?

<table>
<thead>
<tr>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
</table>

2. How accurately does your message reflect your own views regarding the issue of racism?

<table>
<thead>
<tr>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
</table>

3. How much did you expect the other people on the mailing list (other people who oppose racism) to agree with your views?

<table>
<thead>
<tr>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
</table>

4. How important is it to you, that the other people on the mailing list (other people who oppose racism) agree with your views?

<table>
<thead>
<tr>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
</table>

5. How personally accountable did you feel for what you had written in your response to the message?

<table>
<thead>
<tr>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
</table>

6. How important did you view the task of composing a response to be?

<table>
<thead>
<tr>
<th>not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
</table>
7. How seriously do you think you performed the task compared to others who might perform the same task?

| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | extremely seriously |

8. Focusing now on the person who wrote the racist message, how typical do you think this person would be of white-power groups? (i.e., How much do you think he/she might be like other white-power group members?).

| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | extremely |

9. To what degree was the white-power group member’s message in line with your expectations about such groups?

| not very much | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | extremely |

10. How positively do you feel about the person who wrote the racist message?

| extremely negative | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | extremely positive |

11. How much do you think the other people on the mailing list (who are opposed to racist groups), would agree with your perceptions about the white-power group member?

| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | totally |

12. How much do you think that your knowledge of this white-power group member help you to understand white-power groups overall?

| not at all | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | very much |
13. How unique or distinct do you think white-power groups are, from other groups in society?

not at all 1 2 3 4 5 6 7 8 9 extremely

14. How much do you think that the white-power group member's message was a "one-off" or atypical statement, as opposed to typical behaviour for that person?

atypical 1 2 3 4 5 6 7 8 9 typical

15. How much do you think the white-power group's message was indicative of his/her own personal feelings, and inherent personality characteristics?

not very much 1 2 3 4 5 6 7 8 9 extremely

16. How much do you identify with people who are opposed to white-power groups?

not very much 1 2 3 4 5 6 7 8 9 extremely

17. How strongly are you opposed to white-power groups?

not very much 1 2 3 4 5 6 7 8 9 extremely

18. Could you also please rate how much you think the white-power group member displayed each of the following traits.

Was he/she:

(a) insecure?

not at all 1 2 3 4 5 6 7 8 9 extremely

(b) narrow-minded?

not at all 1 2 3 4 5 6 7 8 9 extremely
<table>
<thead>
<tr>
<th>(c) tolerant?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(d) selfish?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(e) realistic?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(f) afraid?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(g) extreme?</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you very much for your participation in this study. Please wait for the experimenter to explain the experiment to you.
Questionnaire Materials (Study 5)

Age? ________
Male/Female (please circle)

In this experiment, you will be asked to read a message from the Internet. I have printed it out for your convenience.

The particular person who wrote the Internet message is a member of an extreme, white-power, racially driven group. There are many Internet messages, e-mail mailing lists and websites written by members and supporters of such groups, who believe that the white race is superior to other races. Also, however, there people who do not agree with white-power views about white superiority.

Please wait for further instructions.  
[Firstly, I have a questionnaire for you to complete.]
Questionnaire

Please respond to the following questions by circling the number (between 1 and 9), which best represents your feelings or views.

1. If you were walking past a peaceful “stop racism” rally on campus, how likely would you be to stop and listen?
   - 1  2  3  4  5  6  7  8  9
   - very unlikely                very likely

2. How likely would you be to object to racist material being circulated on campus?
   - 1  2  3  4  5  6  7  8  9
   - very unlikely                very likely

3. How likely would you be object to racist material in a student newspaper or magazine?
   - 1  2  3  4  5  6  7  8  9
   - very unlikely                very likely

4. How likely would you be to think: “I personally can’t do anything to stop racism. The problem is too big”?
   - 1  2  3  4  5  6  7  8  9
   - very unlikely                very likely

5. How likely would you be to vote for a political party you saw as racist?
   - 1  2  3  4  5  6  7  8  9
   - very unlikely                very likely

6. How likely would you be to encourage friends and colleagues to be anti-racist?
   - 1  2  3  4  5  6  7  8  9
   - very unlikely                very likely
7. If you saw a racially based crime, how likely would you be to report it to the police?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. How likely would you be to express anti-racist views?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. How likely is it that you would support an anti-racist campaign on campus?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. How likely would you be to give monetary donations to charities dedicated to opposing racism?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How likely is it that you would leave it to others to publicly oppose racism?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. How likely would you be to point out the problems with racist views to a young child in your care?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How likely would you be to support government programs to help victims of racism?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>very unlikely</td>
<td>very likely</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I will now come and collect your responses to the questionnaire. I will take a little while to code your responses and return with your feedback sheet, so in the meantime, I have another task for you to complete. Please wait a moment while I come around.
Each equation below contains the initials of words that will make it correct. Finish the missing words.

For example:

<table>
<thead>
<tr>
<th>Equation</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 = M in an H</td>
<td>60 = Minutes in an Hour</td>
</tr>
<tr>
<td>1. 26 = L of the A</td>
<td></td>
</tr>
</tbody>
</table>
Below are some more questions I would like you to answer.

On this sheet now, could you please indicate (by circling the appropriate number), which group you feel you belong to:

1. OPPOSED to white-power groups
2. NOT OPPOSED to white-power groups

Could you also indicate (by circling the appropriate number) how much you identify with the group of your choice.

1. not at all
2. 3
3. 4
4. 5
5. 6
6. 7
7. 8
8. 9
9. extremely

How strongly opposed are you to white-power, extremist groups?

1. not at all
2. 3
3. 4
4. 5
5. 6
6. 7
7. 8
8. 9
9. extremely opposed

How likely is it that you would speak out or do something to oppose racism?

1. not at all
2. 3
3. 4
4. 5
5. 6
6. 7
7. 8
8. 9
9. extremely likely

When you have completed this sheet, please turn it over on your desk. Please wait for further instructions.
As I said before, the particular message that you will read has been written by a member of a white-power, extreme group. This person has CHOSEN to remain ANONYMOUS. That is, the group member has chosen specifically not to supply any personal details about him/herself.

Your task is to write a response to the message. Your response will be sent to a mailing list of people who are OPPOSED to white-power groups. These people strongly disagree with white-power group members and their views on white superiority. Remember that AT NO TIME will your response be available to anyone who is NOT OPPOSED to white-power groups.

For this task, you will be ANONYMOUS [IDENTIFIABLE] to the mailing list of people who are OPPOSED to white-power groups. You are therefore not asked to enter any details about yourself [You are therefore asked to supply your full name (first and last names) and your country of residence]. That is, your response will be sent to the mailing list with none of your details attached [with your personal details attached]. Below is an example of what will appear above your message:

Name: Anonymous [Jo Bloggs]
Location: Not supplied [Australia]

PLEASE TYPE THESE [YOUR] DETAILS ON THE COMPUTER NOW.

Please now read the white-power message, then wait for further instructions. Do not begin typing your response until I ask you to do so.

Now, here are some more instructions to help you in writing your response to the white-power message.

I would like you to respond freely to what you have read, but specifically to comment on the BEHAVIOUR and OPINIONS of the white-power group member who has written the message. Type as much as you can in 10 minutes (you will be timed), and please place any quotes from the message itself in quotation marks. I will ask you to stop typing when your 10 minutes have elapsed.

Please now wait for the instruction to begin typing your message. Do not begin typing until I ask you to do so.
Thank you. Now, I would like you to answer a few more short questions before we finish. These responses will NOT be seen by the people on the mailing list. For each question below, please circle the appropriate number.

When you were composing your message, how strongly committed did you feel to opposing racism?

1 2 3 4 5 6 7 8 9
not at all extremely committed

How important is it to oppose racism?

1 2 3 4 5 6 7 8 9
not at all extremely important

How important is it to express anti-racist views?

1 2 3 4 5 6 7 8 9
not at all extremely important

How important is the issue of opposing racism to you personally?

1 2 3 4 5 6 7 8 9
not at all extremely important

How personally accountable did you feel for what you had written in your response to the message?

1 2 3 4 5 6 7 8 9
not at all extremely accountable
How accurately do you think the feedback from the Commitment to Opposing Racism Scale (CORS) described you?

1 2 3 4 5 6 7 8 9
not at all extremely accurately

How well does each of the following describe your response to the white-power message?

d) My response to the message reflected my own beliefs on the issue.

1 2 3 4 5 6 7 8 9
not at all extremely well

e) My response to the message reflected what I thought was the right thing to say, rather than what I wanted to say.

1 2 3 4 5 6 7 8 9
not at all extremely well

f) My response to the message reflected what I thought the people reading the message would like to read.

1 2 3 4 5 6 7 8 9
not at all extremely well

How much do you identify with people who are opposed to white-power, extremist groups?

1 2 3 4 5 6 7 8 9
not at all extremely

How strongly opposed are you to white-power, extremist groups?

1 2 3 4 5 6 7 8 9
not at all extremely opposed

Thank you very much for your participation in this study. The experimenter will now give you some information about the study, its aims, the variables manipulated and measured, and the hypotheses tested.
Internet Questionnaire

I am collecting a database of responses to an Internet message posted by a member of a white-power group. Your response to this message will be added to the database. People who are opposed to white-power groups will have access to your response.

I am also examining the psychological processes involved in the expression of opinions, so you will be completing an anonymous questionnaire regarding these processes. You will hand in the questionnaire and your response to the message SEPARATELY. Your questionnaire can not be linked to your message, or to you personally. Only I will read your questionnaire.

This study will take approximately 10 minutes to complete. If you would like to participate, please turn over the page and begin. Thank you.

Karen Douglas
PhD Student
Division of Psychology
Australian National University
Please complete the following before you begin:

Are you: Male  Female (please circle)
What is your age? _______

White-power groups believe that the white race is superior to other races. People opposed to white-power groups do not agree with these views on white-superiority.

On this sheet now, could you please indicate (by circling the appropriate number), which group you feel you belong to:

1  OPPOSED to white-power groups  2  NOT OPPOSED to white-power groups

Could you also indicate how much you identify with the group of your choice.

1  2  3  4  5  6  7  8  9
not at all  very much

How strongly opposed are you to white-power groups?

1  2  3  4  5  6  7  8  9
not at all  very much

When you have completed this sheet, please TURN OVER THE PAGE AND CONTINUE. If you have questions at any time, please raise your hand and I will assist you.

The person who wrote the Internet message has CHOSEN to remain ANONYMOUS. That is, the group member has chosen specifically not to supply any personal details and what he/she said CANNOT BE LINKED TO HIM/HER PERSONALLY. Please read the message NOW (below).
When you have finished reading the message, please TURN OVER THE PAGE AND CONTINUE.
Although there is no denying the economic and political stranglehold on our once-great nations, my site is to inform you that we are all responsible for our own circumstances. I am sick and tired of the usual paranoia-ridden finger pointing! We must stop dwelling on the problems and instead focus on solutions. We must educate ourselves and work harder to prosper because we sure as hell are not going to receive any hand-outs or breaks!

Racial discrimination and prejudice are indeed a fact of life, but unfortunately the white people are the main victims! We are at the bottom end of laws aiding the non-whites with preferential treatments! Affirmative action, quota systems and other unfair hiring practices have to go! Why is it that there can be a National Association for the Advancement of Colored People (NAACP) but none for white people? Why is it acceptable for there to be a Black Education Television (BET) but if whites want to air a show it must be on public access channel and considered racist? Is this my imagination, or is this discrimination? Why is it that when a black person commits a crime against a white it is a normal crime, but if a white does something to a minority it is labeled a “bias crime?”

If the other races truly want equality, then why does it take handicaps to obtain this? We will not rest until our people are given the same treatment as minorities! Why must the white male be oppressed in order for others to gain their freedoms? You sit back and watch our possessions, homes, and cities sink into the greedy hands of the enemy. Isn’t it time you did something? You cannot sit around watching television and praying that things will change on their own, YOU must help change them. The current system is anti-white and attempts to force our race into feeling guilty for our past actions, but enough about the lies of the past... we must work towards securing our future! It is an uphill battle, but one we are more than capable of winning! Get up off your ass and motivate yourself!
You are going to WRITE A RESPONSE to this message. Your response will be placed on a database and will be available to people who are OPPOSED to white-power groups.

No member of a white-power group will ever be able to read your response.

Your response to the message will be IDENTIFIABLE [ANONYMOUS]. Please write your FULL name and the name of your course (e.g., PSYC A01) in the spaces provided ["ANONYMOUS" next to “name” and course"] on the top of the response sheet NOW and continue reading below. The response sheet is the final page of this handout.

Remember that because you provide your [no] details, your response CAN [CANNOT] be LINKED TO YOU PERSONALLY by other people who are opposed to white-power groups. You are IDENTIFIABLE [ANONYMOUS] to these people.

However, [Also] your answers to the questionnaire items are completely anonymous. These answers cannot be linked to your response to the message.

Think about what you would like to say about the white-power group member’s message. How would you describe his/her views? Do you agree/disagree with what he/she says? Spend a couple of minutes thinking about what you will say, but before you write your response, I’d like you to answer some questions.

When you have had time to think about what you will say, please TURN OVER THE PAGE and complete these questions.
For each question, please circle a number between one and nine, which best reflects your views.

1. Do you think that your response will be able to be linked to you personally by viewers of the database who are opposed to white-power groups?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How comfortable are you that others will be reading your response?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. How strongly will you express your views about the white-power group member to your audience?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Do you feel accountable to the audience who will be reading your message?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Are you thinking about how your audience will perceive your response?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. How much are you concerned about making a positive impression on your audience?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Do you think that writing this message will enable you to show that you are someone who is opposed to white-power groups?

1 2 3 4 5 6 7 8 9
not at all somewhat very much

8. How answerable do you feel for the response you are about to write?

1 2 3 4 5 6 7 8 9
not at all somewhat very much

9. How much will you say to your audience about your views on white-power groups?

1 2 3 4 5 6 7 8 9
not much very much

10. Do you feel accountable for the views you will express?

1 2 3 4 5 6 7 8 9
not at all somewhat very much

11. How important is it to take your audience into account when considering how strongly you will express your opinions?

1 2 3 4 5 6 7 8 9
not at all somewhat very much

12. How important is it for you to express a clear response for the benefit of other people in your audience?

1 2 3 4 5 6 7 8 9
not at all somewhat very much

13. How seriously will you take the task of writing a response?

1 2 3 4 5 6 7 8 9
not at all somewhat very much
Thank you. It's now time to write your message. Please think carefully about what you want to say to your audience about the white-power group member. Concentrate specifically on the behaviours and opinions of the white-power group member, and spend approximately 5 minutes on your response.

Feel free to go back to the message whilst you are writing your response, but place any quotes from the message in quotation marks. Please now turn to the response sheet and begin writing your response. Make sure that your name and course are ["anonymous" is] written on the top of your response sheet.
Response Sheet

PLEASE DETACH THIS PAGE FROM THE QUESTIONNAIRE NOW.

Name: ____________________________
Course: __________________________

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

After you have written your response to the white-power group member's message, please hand both your questionnaire and your response sheets SEPARATELY to me. Thank you very much for your participation in this research.
Attitudes to work and leisure questionnaire

This study examines the ways in which different groups of people think about work and leisure. In this study, I am particularly interested in how STUDENTS in contrast to academic staff, think, feel and act around issues connected to work and leisure.

In this study, you will be asked to read a memo written by a member of the academic staff at an Australian university. Research has shown that the majority of academic staff are conservative and work-focused. In contrast, the majority of university students are more liberal and carefree and disagree with most academics on issues related to work and leisure.

Please turn the page and continue.

Please read the ANONYMOUS message below. When you have finished reading the message, please TURN OVER THE PAGE AND CONTINUE.
In this research, I am asking a group of students for their views on the memo, in order to study how the views of university students differ from those of staff members regarding the issues of work and leisure. You will be asked to write a response to the staff member’s message FROM YOUR POSITION AS A STUDENT.

I am also interested in how your experience affects your views, and so I would like you to complete another response to the message in your final lecture. I am going to give your responses to the staff member’s message to MEMBERS OF THE STUDENT UNION so that they can see how individual students’ views on work and leisure are affected by studying at university.

I will therefore need a means of matching your two responses.

The easiest way to do this is for you to think up a nickname or code and write it ON THE TOP OF THE RESPONSE SHEET. This should be memorable so that you will be able to recall it when you write an additional response in your final lecture. Don’t write your name because this is an anonymous task. Please write your nickname or code on the response sheet NOW and continue reading.

[The easiest way to do this is for you to write your full name ON THE TOP OF THE RESPONSE SHEET. This is so we can match your responses when you complete another response in your final lecture. Please write your full name (first and last names) on the response sheet NOW and continue reading.]

When you write your response, it is very important that you focus on the BEHAVIOUR AND OPINIONS of the staff member. That is, I want to know how YOU feel about the attitudes and behaviour of this person. Specifically, how would you describe his/her behaviour and opinions?

Spend a couple of minutes thinking about what you will say, but before you write your message, I’d like you to answer some questions.

When you have had time to think about what you will say, please TURN OVER THE PAGE and complete these questions.
For each question, please circle a number between one and nine, which best reflects your views.

1. Do you think that your response will be able to be linked to you personally by members of the Student Union?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. How comfortable are you that others will be reading your response?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. How strongly will you express your views about the staff member to your audience?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Do you feel accountable to the audience who will be reading your message?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Are you thinking about how your audience will perceive your response?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. How much are you concerned about making a positive impression on your audience?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Do you think that writing this message will enable you to show that you are someone who is opposed to the staff member's views?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. How answerable do you feel for the response you are about to write?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. How much will you say to your audience about your views on the staff member?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not much</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Do you feel accountable for the views you will express?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. How important is it to take your audience into account when considering how strongly you will express your opinions?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. How important is it for you to express a clear response for the benefit of other people in your audience?

<p>| | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>not at all</td>
<td>somewhat</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How seriously will you take the task of writing a response?

|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| not at all | somewhat | very much |

Please respond to the following questions by circling the appropriate number between one and five:

I identify with other university students.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>not at all</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I am a worthy member of the university student community.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>not at all</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In general, being a university student has little to do with the way I see myself.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>not at all</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The fact that I am a university student is an important part of who I am.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>not at all</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In general, I am pleased that I am a university student.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>not at all</td>
<td>very much</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you. It’s now time to write your message. Please think carefully about what you want to say to your audience about the staff member. Concentrate specifically on the behaviours and opinions of the staff member, and spend approximately 5 minutes on your response.

Feel free to go back to the message whilst you are writing your response, but place any quotes from the message in quotation marks. Please now turn to the response sheet and begin writing your response. Make sure that your nickname/code [full name] is written on the top of your response sheet.
Nickname/Code [Full Name]: __________________________

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

After you have written your response to the staff member’s message, please hand both your response and your completed questionnaire to the front of the room, face down.

Thank you very much for your participation in this research.