Business Corruption: cheating the system or using opportunities?

Katie Porkess, PhD Researcher
k.porkess@exeter.ac.uk
Tel: 01803 863328

and

Jonathan Schroeder, Professor of Marketing
j.e.schroeder@exeter.ac.uk
Tel: 01392 262537

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Streatham Court
Rennes Drive
EXETER EX4 4PU
Telephone +44 (0)1392 263 200
Fax +44 (0)1392 263 242

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Abstract

Corrupt behaviour in organisations involves individuals or groups of people behaving in ways that are outside usually accepted norms for the organisation and/or society at large. This may include influencing or coercing some members of the group to act in ways that are normally unacceptable to them. Such behaviour might be expected to cause stress to, or indeed be as a result of stress for, the individuals and groups concerned. By refusing to join in the corrupt behaviour of their group, such people risk being alienated from it, something that they would find highly stressful. A series of experiments involving both students and the business community in the U.K., showed that individuals who identified strongly with their group behaved corruptly not only to support their wider socially identified category, but also in support of smaller immediate groups. In all cases, high identifiers experienced less stress than low identifiers. A model of group identity, stress and corruption is introduced.

Introduction

The 2000s have been a banner time for corruption. In 2001, ENRON, the USA global energy giant, filed for bankruptcy amidst charges of malpractice and deception, with debts of billion of dollars. The indictments against the former chief executive officer, Jeffrey Skilling, and his fellow executives alleged that they had crafted schemes that produced phantom profits and let them skim millions for themselves. Under pressure to maintain the illusion, Skilling began to behave erratically, exemplified when he verbally attacked Wall Street Analyst, Richard Grubman, in public, referring to him as ". . . asshole".

In January 2008, Société Générale (SocGen), France's second-largest bank, announced it had incurred a loss of €4.82 billion after Jerome Kerviel, an options trader, had staked €50 billion on European futures markets. Kerviel himself did not personally gain from these transactions and claimed that his primary concern was to benefit the bank. His superiors might have been aware of his trading activities, ignored it, or even tacitly encouraged it. At the time, his family said that he was suffering from stress (Stewart 2008).

A year later, Lewis Hamilton tried to cheat Jarno Trulli out of third place in the Australian Grand Prix. The FIA believed that Dave Ryan, a senior member of McLaren Mercedes, pressurised Hamilton to ‘act as a team member’ and lie to the stewards about the circumstances (Gorman 2009). Although, not reported explicitly, video clips show that Hamilton found himself under stress at the time. He later said, “I don’t lie. I have never cheated”.

These examples illustrate the importance of the group (social category) in corrupt behaviour and associated stress. Corruption, group dynamics and stress have all been studied in their own right, but this research focuses on the impact of social identity threat and associated stress on corrupt behaviour.

Borgerson *et al.* (2009) have discussed the role of corporate identity in business ethics. In contrast, the research described in this paper has focused on the impact of

group dynamics on unethical behaviour. This paper first discusses the relevant key concepts in group dynamics using the *Social Identity Approach* (SIA), and its impact on stress and corruption. This is followed by the descriptions and results of three studies and the implications of the findings from these. Finally, a model of group identity, stress and corruption is introduced.

Social Identity Threat and associated stress as predictors of corruption

Social identity threat

The *social identity approach* (SIA) uses the two core ideas that are common to the Social Identity Theory (SIT) (Tajfel 1974, Tajfel & Turner 1979) and the Self-categorisation Theory (SCT) (Turner 1982 1987): firstly, that one cannot understand how people think and act in a social context by simply extrapolating from their characteristics and behaviour as individuals; and secondly, that social context is fundamental to the way that social identity processes influence thought and behaviour. SIT and SCT principles suggest that in organisations and society at large, there is a range of situations in which people's sense of self is primarily informed by their group membership (Oakes *et al*. 1991). As an individual's group membership changes, so does his or her behaviour. So, people have a personal identity and a social identity, and an individual's self-concept is a continuum from personal identity to social identity (Turner 1987). When an individual identifies highly with a particular social category, he or she accepts that group's norms, that is, how its members should and do behave (Haslam 2004). In organisations, members may identify strongly with groups based on demographic categories, professional categories, teams, or even the organisation as a whole (Williams & Dutton 1999).

In order to favour their group, individuals will accept costs to themselves. One such cost may be to accept high stress levels (Haslam 2004 2005, Haslam & Reicher 2004). Another acceptable cost of group identification may be the sacrifice of normal values and ethics (Haslam *et al.* 2006). It is suggested here that this would happen with corrupt

norms, and there is no evidence to the contrary. And if individuals put themselves at legal and reputational risk to engage in corrupt practices that primarily benefit the organisation, it is likely that they identify with it strongly (Pinto *et al.* 2008).

Social Identity and group decision making

Moscovici & Zavalloni (1969), advancing on the findings of Stoner (1961), showed that group interaction served to extremise the initial views of its individual members in whichever direction they were already tending. They called it group *polarisation*. Evidence presented by Janis (1982) suggests that individual contributions to group decisions are characterised more by a desire for consensus than by a desire to be different. Research by Pendry & Carrick (2001) suggests that to avoid ridicule, punishment or ostracism it is often easier to go along with the expectations of the group about how its members should behave. Evidence therefore indicates that, in making their contribution to a group decision, individuals do not want to stand out as deviants but want to be embraced as prototypical group members, someone who embodies the norms of the group. Thus, under conditions of shared social identity, group discussion generally leads to convergence on a prototypical in-group position. So, in specific social settings, group decisions are both consensual and polarised. In particular, this is so when an in-group compares itself with a highly salient out-group.

Groupthink

The concept of *groupthink* is well known and has been popularised by the media and by practitioners of group behaviour. On April 17 1961, a trained group of about 1400 Cuban exiles, aided by the CIA, U.S. Navy and U.S. Air Force invaded Cuba at the Bay of Pigs. However, within three days, all invaders had been killed or captured by Cuban troops. President Kennedy, who authorised the invasion, had been advised by a panel of highly qualified experts, but they had made a number of false assumptions. In his analysis of the fiasco, Janis (1982:9) saw the Bay of Pigs invasion as a perfect example of the

phenomenon he termed groupthink. It refers to a mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to appraise alternative courses of action realistically (Janis 1982). Taking a different approach, the social identity model of groupthink (Turner & Pratkanis 1994) highlights the role that perceived or actual threat from an out-group can play in accentuating the group tendencies. While features of the group may be relatively unexceptional in standard conditions of inter-group comparisons, they become notably more pronounced under conditions of strong social identification. This suggests that groupthink is a product of heightened social identity salience in the context of inter-group threat (Haslam 2004, Suedfield 1988).

Social identity and group behaviour

SIA shows that, like group discussions, the behaviour of individuals is affected by the norms of the group that is currently salient (Haslam 2004). Research by Worchel *et al.* (1998), indicates that productivity is contingent on a match between participant's self-categorisation and task conditions.

Congruity theory (Osgood & Tannenbaum 1955) states that one significant determinant of task productivity is the congruence between a person's self-definition and features of the task environment. Individuals who define themselves in terms of unique personal identities do best performing tasks that appear to demand and reward personalised and independent input, but those who define themselves in terms of a shared sense of social identity are better on tasks that encourage collaborative participation.

In summary, SIA suggests that when individuals identify strongly with a group, they seek to make decisions and take actions that not only conform to the group norms, but also maximise consensus. They will accept costs to themselves such as stress and group norms that are in conflict with their personal norms. In contrast, low identifiers follow a more personal agenda and will even leave the group rather than belong to a social category that does not conform to their values and ethics.

Stress

Work done by Folkman *et al*. (1991) defined stress as the strain imposed on a person by stressors in an environment that is perceived by them to be in some way threatening to their well-being. It is this definition that is used in this research.

The physiological origins of stress research (cited in Haslam 2004) have resulted in it being perceived as a personal phenomenon (Lazarus & Folkman 1984). While the physiological dimension of stress cannot be denied, in dealing with it, it is still necessary to know about the workings of people's minds and the context of their social world.

Research has shown that a person's perception of a potential stressor as threatening to themselves, is influenced by the meaning of that stressor for their group rather than for themselves as an individual (Haslam 2004, Haslam & Reicher 2004). Thus, a person's perception of a stressor is determined more by in-group affiliation and norms and less by individual reaction. Previous research (Parker 1993) shows that employees felt pressurised to perform a task when it was perceived to benefit a valued in-group. The implication is that an individual will tolerate high levels of pressure, and so stress, so as not to let down the team, project or organisation.

At the same time, interaction between group members can ameliorate stress by providing support that enables people to cope with adversity (Haslam 2004). So, social identity is both a determinant of stress (Haslam 2004, Haslam *et al*. 2005) and a basis for social support (Haslam *et al*. 2004; Levine *et al*. 2005) and high identification with a group results in lower stress levels.

Webley & Werner (2008) report that the results of a survey on business ethics carried out in 2005 by the American Management Association among more than 1000 executives and managers showed that the factor that is most likely to cause people to compromise on their organisation's ethical standards, mentioned by nearly 70% of the respondents, was 'pressure to meet unrealistic business objectives/deadlines'.

Corruption

Transparency International, which has been at the forefront of the global anti-corruption movement since it was formed in 1993, has an all embracing definition of corruption as 'the abuse of entrusted power for private gain" (www.transparency.org 2005), but, as already mentioned, Kerviel carried out fraudulent activities for the good of his social group, SocGen.

In management literature, the concept of corrupt behaviour overlaps related ideas such as unethical behaviour and organisational misbehaviour (Bennett & Robinson 2003, Marcus & Schuler 2004, Trevino *et al.* 2006). Ashforth *et al.* (2008) have listed some of the 'forms ' of corruption, including embezzlement and cheating. Other suggestions include ethical decision-making (Jones 1991, Jones & Ryan 1997, Trevino 1986, Trevino & Youngblood 1990), unethical behaviour (Brass *et al*., 1998), and deviant workplace behaviour (Bennett & Robinson 2003, Robinson & Bennett 1995).

Corruption has been examined at both the individual level (e.g. Brass *et al.* 1998, Jones & Ryan 1997, Trevino 1986) and organisation level (e.g. Baucus & Near 1991, Brief *et al.* 2001, Hill *et al.* 1992). Finney and Lesieur (1982) state that one of the aspects that distinguish different forms of corruption is whether the violator acts strictly for private benefit or whether the beneficiary includes the organisation itself. These four facets of corrupt behaviour are examined in this research: individual or group action and individual or group beneficiaries.

Unethical behaviour has been grouped in Rest's Framework (1986) into four categories: moral awareness, judgement, intent and action. The research described in this article aims to establish, by examining *moral action*, under what circumstances groups and teams in the workplace will behave corruptly, and it will also look at the role of stress in promoting this behaviour. This moral action refers to all the forms of corruption discussed above.

To summarise, research so far suggests that corrupt behaviour can occur at all levels of an organisation and in all types of organisations and will be undertaken by individuals working alone or in groups. It sits on a continuum from unambiguous cheating to more diffuse unethical behaviour. Given the right combination of circumstances, individuals will behave corruptly in order to support the norms of their group and will do so even at a cost to themselves such as sacrificing their own values and accepting higher levels of stress. However, group members may also provide support and so help to ameliorate stress.

The studies

Based on the above concepts of social identity, stress and corrupt action, a series of laboratory situation experiments examined the behaviour of participants, in conditions that imposed threat to their group identity and provided opportunities for corrupt behaviour. The participants included a student sample as well as members of the business community in the U.K.

In the first study, individuals were given the opportunity to cheat at a task. Next, a second study examined whether the results would hold true for individuals working in groups were more likely to cheat in order to support their teams. Finally, a third study examined whether members of a group would behave unethically under threat and stress in situations where corruption was less clearly defined.

For all these studies, the participants were required to do a meaningful task and then they were asked to complete a survey to capture their attitudes to the task and to wider social norms. A Likert-type response scale was used for all the measures and participants indicated their level of agreement by responding on a scale of 1 (not at all) to 7 (completely). Responses were scored, with reverse coding as appropriate, so that higher scores indicated higher levels of the factor being measured. A range of factors and effects were studied, but only those related to moral action and stress have been reported in this

article. In all cases, after recoding and reliability analysis, the normal checks were carried out on the data, before conducting multivariate analysis of variance (MANOVA).

Study 1

The purpose of the first study was to determine whether high identifying individuals would behave corruptly under social identity threat and whether they would experience stress in doing so. Based on the concepts of prototypicality (Turner 1985), high identifying individuals would be expected to act in order to show their team in a favourable light. This behaviour could include cheating, which was the moral action in this study.

It was hypothesised that

H1. a) As threat to social identity increases, participants will cheat more and b) individuals who identify highly with their social category will cheat more than low identifiers.

H2. a) Levels of stress will increase in the participants as threat increases and that b) high group identifiers will experience lower levels of stress than low identifiers

Study 1 Design

Based on the work of James & Greenberg (1989) and Worchel *et al.* (1998), there were four conditions. In the control condition, C, the participants were simply given a crossword to do and had no opportunity to cheat. The remaining three conditions had the answers provided surreptitiously at the bottom of the page and so provided the opportunity to cheat. In the second condition, N, the participants were only given the crossword and the answers. In addition, in the third condition, I, the students' psychology (in-group) identity threat was emphasised with the statement, "*Rating very difficult - on average psychology students get 5 answers correct*". The last condition, O, business student identity (out-group), was similar, but the participants were provided with out-group threat, "*Rating very difficult - on average business students get 5 answers correct*".

Study 1 Method

The participants (*N*=86) were the 1st Year undergraduates of the School of Psychology, at the University of Exeter, UK. This study was performed during a normal practical class session on organisational behaviour. Participation was on a voluntary basis, and the students did not qualify for additional credits for attending. There were 11 men and 75 women. The mean age was 19.88 and the standard deviation was 4.22.

Study 1 Procedure

The participants were required to do a crossword puzzle on their own, under the cover story that they were taking part in a '*Study to examine the predictors of performance on complex verbal tasks*'. This tool is a standard one used in similar studies and is regarded as a suitable one for psychology students and is akin to the anagram-solving tasks of the experiments of James and Greenberg (1989). The participants were randomly assigned to the four conditions. After 10 minutes, they completed the questionnaire. Next, the participants were given the answers and they self-scored on the number of correct entries. Finally, the participants were informed about the true nature of the experiment.

Study 1 Measures

Some of the measures on the questionnaire related directly to the crossword task: approach to the crossword (e.g. • Is your score on the crossword task a reflection of your true ability?); anxiety experienced, (e.g. • Did completing the crossword make you feel stressed?). The rest of the measures, related to personal preferences providing information about the characteristics of participants such as group identification (e.g. • I feel strong ties with psychology students).

The dependant variable cheating was calculated as the mean of approach to crossword; and stress was calculated as the mean of anxiety, frustration, negative motivation (Abel 1996, Motowidlo *et al.* 1986), negative self-esteem (Crocker & Luhtanen 2003) and negative self-efficacy (Schwarzer & Jerusalem 1995), all traits also accepted by stress management practitioners as contributors to stress. Thus, the study required participants to work on a task that gave them cheating opportunities and/or imposed threat conditions to some, although no one was aware of the different conditions.

Study 1 Results

To test both hypotheses, the data were subjected to a 4(conditions: C, N, I, O) x 2(levels of social identification: low, high) MANOVA analysis. The dependent variables used were score (of the crossword), cheating and stress.

Results of Hypothesis 1

It will be recalled that when faced with threat, high identifying individuals were predicted to behave more corruptly (have higher scores and report more cheating) than low identifiers. The results confirm this (Table 1).

The main effect for score (M=7.84, SD= 9.57) was highly significant (F=6.14, p=.001), as was the main effect for reported cheating (F=7.60, p=.000), indicating that opportunity affected the scores and cheating. There was significant difference in the score and cheating response between the control (no cheating) condition and the rest (cheating) conditions, indicating that those who had access to the answers used them. There was a significant interaction effect for reported cheating (F=3.72, p=.015), which means that conditions (opportunity and threat) influenced the sense of social identity. Overall, high identifiers in the in-group threat (M=15.00) had the highest scores and low identifiers in the control condition had the lowest (M=.82). The most cheating was done by high identifiers

(*M*=5.77) in the in-group threat condition and the least was by low identifiers (*M*=1.77) in the control condition (Figure 1).

Figure 1 to be inserted here

Thus, these results show that given the opportunity, individuals will cheat. It also seems that the perception of cheating (self reported) was influenced by the participants' sense of social identity. High identifying individuals cheated more than low identifiers. Surprisingly, and contrary to SIA principles, there was more cheating in the in-group threat condition than in the out-group threat condition. Next the study analyses if this behaviour is associated with increased stress.

Results of Hypothesis 2

As was hypothesised, the results show that a) the level of stress was reflected in the participants' cheating behaviour and b) that high group identifiers experienced lower levels of stress than low identifiers (Table 1).

The main effect for stress (*M*=3.45, *SD*=.47) was highly significant (*F*=4.42, *p*=.006). Social identity had a significant effect on stress levels (*F*=26.26, *p*=.000). There were significant differences between the no identity condition, N, and the two threat conditions (*F*=7.73, *p*=.000); and between N and I (*F*=9.15, *p*=.000). So, those with low or no social identity experienced more stress than those who had well defined identity threats. In all conditions, low identifiers had higher levels of stress. There was no significant difference in stress between in-group and out-group threat conditions. Where cheating was possible, stress increased as cheating decreased (Figure 2).

Figure 2 to be inserted here

Study 1 Discussion

The results confirm that, given the opportunity, high identifiers cheated, and that they found that action less stressful than low identifiers. But, surprisingly, there was no significant difference between the no-threat and threat conditions and the in-group and out-group identity threat conditions for either cheating or stress.

Study 1 Limitations

There were two limiting points to note about this study. Firstly, it was conducted with participants who worked alone. Secondly the participants' salient identification was with a large social category (psychology students), whereas the aim of the research is to determine also whether these findings would also hold true for smaller groups or teams working together.

Study 2

So, a further study was run that examined cheating behaviour in groups. Participants would be expected to cheat in order to promote their social category in a favourable light (cited in Haslam, 2004). In keeping with the congruity theory (Osgood & Tannenbaum 1955, Harkins & Szymanski 1989), it is their group identification that would be the frame of reference. The moral action in this study was cheating (Rest 1974).

It was hypothesised that

H3. Participants who identify strongly with their group, a) will cheat more in threat conditions than those who do not but b) will experience less stress in doing so.

Study 2 Design

Because the previous study had shown that there were no significant difference between in-group threat and out-group threat, it was decided to use only one threat condition, in-group threat. The study task was an aptitude test, for two reasons. The first

was that it was thought to be a more meaningful for the participants since they would have been familiar with them in their career progression (Ellemers *et al.* 2005). They were also similar to the problem solving tasks used by James and Greenberg (1989) and Mazar *et al*. (2008).

In the control condition, C, the participants were told, "*This study is part of a larger research project assessing the dynamics of groups working under pressure*" and were simply given the aptitude test and had no opportunity to cheat. The remaining two conditions had the answers provided surreptitiously at the bottom of the page and they were also asked to select a leader. In addition, in the second condition, I, the participants' professional (in-group) identity was made salient with the statement, "*This study is part of a larger research project assessing the dynamics of groups working under pressure. The target group of participants for this research are groups similar to yours, working well as a team. Please attempt as many questions as possible*." In the third condition, T, they were, in addition, put in a threat condition with the statement, "*Previous trials have shown that it is possible to get all the questions right in 10 minutes*".

Study 2 Method

The experimenter was known to the participants as a specialist in the management of stress in the workplace and the cover story described in the conditions above, fitted this. Half the participants (*N*=24) were senior managers from several cities in the UK and the rest (N=23) were representatives mostly from small and medium sized businesses in the South West of England, although some business services such as banks, financial advisors and solicitors were also represented. They were either fellow members of business networks that the researcher belongs to, or their guests. The sessions were held during normal scheduled meetings and the participants were informed in advance of the nature of that particular session. Participation was on a voluntary basis. Although some of the participants had business contacts with each other, they were 'loosely coupled' (Pinto *et al*., 2008), in that they did not normally work with each other. Based on the findings of

Holt (1987, cited in Brown 1988) which showed that there were no differences in the performance of groups if they share salient social identity, and that people participating collectively in-group tasks will strive collectively to improve the fortunes of the group as a whole, regardless of their history, participants for this study were not organised in any way. There were 33 men and 12 women, and two did not indicate their gender. The age range was 27 to 69, (M=47.25, SD=11.27).

Study 2 Procedure and Measures

The participants were randomly assigned to teams of three. In order to encourage group bonding, they were asked to give a name to their team (Brown 1988) and participate in a short general knowledge quiz (Tuckman 1965) and the winning team was awarded a small prize. There was one set of aptitude tests for each team member. All the sets were similar, but not identical. The answers were selected from a multiple-choice list, with an associated letter of the alphabet for each answer. One of the rules of the test was that the participants must solve the clues on their own and pool only the results, (i.e. the letters for the answers). To test the group working together, the final part of the task was to form the longest word they could from the list of letters they obtained from their chosen answers. So, the participants had the opportunity for two types of moral action: cheating with the answers for conditions I and T, and breaking the task rules, for all conditions. This is similar to the studies of Mazar *et al*. (2008). They had 15 minutes in total for this activity. Incidentally, the word from all correct answers was ‘DISENFRANCHISEMENT’.

After this, the participants were asked to complete a survey to capture their attitudes to the task and to wider social norms, and then they were given the answers and they self-scored on the number of correct entries. Finally, they were debriefed about the experiment and a prize was given to the team with the longest word. The measures used were the same as in the previous study.

Study 2 Results

A 3(condition: C, I and T) x 2(social identification: high, low) MANOVA was conducted. The dependent variables used were score, cheating and stress.

Results of Hypothesis 3

The results partially support the hypothesis that participants who identify strongly with their team would cheat more but would experience less stress in doing so (Table 2). The main effect for score (M=11.61, SD=5.04) was highly significant (F=61.34,p=.000). The lowest overall score (M=7.00) was from low identifiers in the control condition whereas the highest score (M=17.20) was for high identifiers in the identity salient condition.

As expected, cheating (M=3.41, SD=1.45) was significant (F=4.88, p=.024). The control condition was significantly different from the identity salient condition, but there was no difference between identity salient and threat conditions. The lowest level of reported cheating (M=2.41) was performed by high identifiers in the control condition, and the highest (M=4.71) was by high identifiers in the identity salient condition. Together with the score results, this indicates that high identifiers in the identity salient condition were the highest cheaters.

Stress (M=3.41, SD=1.45) was significant by social identification (F=5.36, p=.026). It was lower for high identifiers in all conditions. Thus, social identification affected the cheating results. High identifiers cheated most under identity salient condition and experienced least stress under identity threat (Figure 3).

Figure 3 to be inserted here

Discussion of Study 2

The results for study 2 confirm that, given the opportunity, high identifying groups cheated more than low identifiers and that they found that action less stressful. But, surprisingly, there was significantly higher levels of cheating in the identity salient condition than in the threat condition. Teams with leaders cheated most under threat but they experienced lower levels of stress.

One observation made during the tests was that many of the participants in the control condition, where the answers were not provided, were reluctant to engage with their teams in the final step of forming the longest word. They were more interested and involved in solving the test clues. Where the participants had access to the answers, some of them said that they saw the tests as personal challenges and would not cheat. "*Using the answers would be cheating myself*" was one comment. As already mentioned, tasks that encourage personal self-categorisation (Osgood & Tannenbaum 1955) generally elicit much less enthusiastic response when they are defined as group activities. In this case, these participants saw the tests as personal challenges and so were reluctant to contribute to the group activity (Ouwerkerk *et al*. 1999, Tyler 1999a, Harkins & Szymanski 1989).

Stoner (1961:300) found that work groups which have high peer-group loyalty and common goals appear to be effective in achieving their goals. Social identity salience increases conformity to group norms and also productivity levels. But, this last is greater among members of real groups than nominal ones (Oakes *et al*. 1994, Turner 1985). So it may well be, that this situation of non-engagement with team members would not arise with established groups.

Study 2 Limitations

This raises the question whether individuals who routinely work together and so have known each other as a group over a period of time, display different levels of group identification, and so corrupt behaviour than the type of ad-hoc groups that have been studied in this research. This is an issue for a future study.

Study 3

Planning for Study 3

Discussions at the planning stage of study 2 revealed two issues. One was that many business people would not regard using given answers as 'cheating'. Rather, they saw this as using an opportunity: 'When you have a spoon, you use it' was one comment.

The other point raised was that in discussing 'corruption' with business people, it soon became clear that the word had different meanings and connotations not only for different individuals, but also for different industries. This supports work by Daboub *et al.* (1995:141) who found that firms in certain industries are more likely to commit corrupt acts (Baucusas & Near 1991, Simpson 1986) and that firms in specific industries have similar rates of corruption activity (Creassey 1976).

So, without a clear consensus on the meaning of corruption among possible participants, a study was conducted to determine the boundaries of unethical behaviour in the business community. As in the previous study, the aim was to ascertain whether, when faced with threat, team members who identify highly with their work group would behave more unethically than low identifiers in order to obtain favourable outcomes for their group and if high group identifiers would experience lower levels of stress than would low identifiers in engaging in these unethical behaviours. However, this experiment was also designed to look more generally at the behaviour of groups from the business community and how the members in the task teams interacted with each other on ethical issues even when there was no pre-existing identification with the group. Because of the amorphous nature of ethical decision making, the conversation at each table was recorded and this produced valuable insights.

Based on the concepts of prototypicality (Turner 1985), high identifying individuals would be expected to act in order to promote their social category in a favourable light.

The groupthink phenomenon was not expected as there would not be an explicit outgroup threat, only the implied one of the other participating groups.

It was hypothesised that

H4. a) As threat increases, participants will behave more unethically and that b) when faced with threat, high identifying individuals will behave more unethically than low identifiers, but c) would show lower levels of stress than low identifiers.

Study 3 Design

To make the task in this study relevant and meaningful, it was changed to design a training programme, something many of the participants would have been familiar with, and which would have given it meaning and purpose (Ellemers *et al.* 2005, James & Greenberg 1989, Worchel *et al.*1998). There were three different experiment conditions. In the control condition, C, the participants were simply given the task. In the second condition, I, the participants were made aware of their in-group identity. They were informed, "*Your organisation has previously carried out a similar project successfully. Indeed, the current project was awarded on the basis of that reputation*." In the third condition, T, they were also told that, "*However, you've just been informed that your organisation is experiencing financial difficulties. A good surplus from this project (and other projects) could be used elsewhere within the company and would ease the situation. This could help avoid possible redundancies for some members of your team*." The intention was to promote goal orientation and performance matching (Jackson & Harkins 1985, Paulus & Dzindolet 1993). This design had the advantage that it gave the opportunity for unethical behaviour to all participants, but under different social identity contexts. The moral action in this study was unethical behaviour.

Study 3 Method

The participants (*N*=79) were from the business networking group as in study 2 and again, they were 'loosely coupled' (Pinto *et al*., 2008). There were 38 men and 41

women. The mean age was 48.5, (*SD*=8.82). As in the previous study, most of the participants were aware of the experimenter's job as a stress consultant, and the cover story reflected this: '*A study to examine the behaviour of teams working under pressure'*.

Study 3 Procedure

The participants were assigned randomly to teams of three and the teams were randomly assigned to one of the three conditions. They worked on an exercise to organise a training programme for 100 delegates, with a budget of £30,000. Each team member had responsibility for a different aspect of the project: trainer, venue and materials. For each of these areas, there were options that ranged from the acceptable to unethical, each with its associated costs. The unethical options cost the least. So, the higher the spend, the more ethical were the options taken. Any surplus funds from the project could be used by the team as they wished. They were also told that the best performing team would get a prize. The discussions of the participants was recorded, with their knowledge and consent. Some of these comments are discussed below, along with the quantitative results. As in the previous studies, the participants completed a questionnaire when they had completed the task. After this, the participants were debriefed (Tuckman 1965, Tuckman & Jensen 1977).

Study 3 Measures

As in the previous studies, the measures in the questionnaire fell into two categories, some related directly to the task and the rest related to personal preferences of the participants. The nature and structure of the measures remained as in the previous studies, apart from reflecting the change in the dependent variable: that is, replacing the word 'cheating' with 'taking unethical options'.

To summarise, participants worked on an appropriate task in groups that gave opportunities for taking unethical actions and imposed threat conditions to some.

Study 3 Results

A two-way MANOVA was carried out with a 3(conditions: C, I, T) x 2(social identification: low, high). The dependent variables were spend (£), cheating and stress.

Results of Hypothesis 4

It had been predicted that when faced with threat, participants would select unethical options and that high identifying individuals would behave more unethically than low identifiers, but would show lower levels of stress than low identifiers. The results give mixed support for this (Table 3).

There was significant effect for spend (*M*=15484, *SD*=5589; *F*=5.04,*p*=.009), with the lowest (*M*=14916) from low identifiers in the threat condition and the highest spend (*M*=20111) for the low identifiers in the control condition (Figure 4). These results show that the threat condition elicited the most unethical choices, however, it seems that low identifiers chose less ethical options than high identifiers.

Figure 4 to be inserted here

Unethical behaviour (*M*=2.02, *SD*=1.45) was significantly affected by social identity (*F*=4.13, *p*=.046).The lowest level of unethical behaviour (*M*=1.29) was performed by high identifiers in the threat condition, and the highest (*M*=2.48) by low identifiers in the control condition. Social Identity had significant effect (*F*=5.01, *p*=.025) on stress (*M*=2.62, *SD*=.58). High identifiers in all conditions experienced less stress than low identifiers (Figure 5), and least stress (*M*=2.84) in the identity salient condition (*M*=2.29).

Figure 5 to be inserted here

The findings support the predictions that the participants would choose less ethical (cheaper) options under threat. But it seems that low identifiers reported more unethical behaviour than high identifiers and they also experienced more stress than high identifiers. Consequently, the results do not support H4 fully. This could be because low identifiers felt

greater stress in having to conform to unethical group norms. So, as in the previous study, it seems that the participants' level of corrupt behaviour depended more on peer influence and their sense of identification with their teams than threat conditions.

Study 3 Discussion

The findings from this study confirms that high social identification results in higher levels of unethical behaviour, but lower levels of stress. However, this study produced some surprising results. Contrary to the findings from the previous study, low identifiers reported that they behaved more unethically than high identifiers. It could be that they did not identify with their group, as they had worked with it only for this exercise, and team bonding had not taken effect (Tuckman 1965), and so the low identifying participants were more aware of the nature of their unethical decisions and choices. High identifiers, on the other hand, would be less sensitive about the unethical nature of their decisions. It could also be that the participants' normal attitudes to ethical issues were not reflected in the task. One comment on a tape was, *"For this workshop we won't use a company that uses child labour, but we all know what we would do in real life"*. However, that team's actual behaviour, as evidenced by the spend figures, indicate that they selected less ethical options. This illustrates the polarised views and actions of these participants.

There was a notable discrepancy between the spend results, which reflected the participants' actual choices, and the unethical behaviour results, which were derived from self-reported measures. This implies that their moral actions did not match their moral awareness, judgement or intent Rest (1986). It could also be that participants did not consider their choices and actions to be unethical Mazar *et al*. (2008).

That the participants experienced little stress was another surprising result. Stress results were significant only for social identity, which supports established research (Haslam 2004) as well as the results of study 1. Some comments made by the participants to the researcher after the sessions may clarify this: *"That was great fun!"* ; *"As small business owners, we are so used to working on our own, that working in a team was*

relaxing"; *"For a change, we did not have to make decisions by ourselves. Great!"* Clearly, doing the group task was not stressful. Working collaboratively can be more fun than working alone as it can fulfil a need for a sense of belonging (Baumeister & Leary 1995, Manstead 1997). However, it is more likely that there was congruity between the group members and the group norms. Thus, there was little stress experienced with the unethical group behaviour because the group's members were at ease with achieving the goals for the group. This also illustrates polarisation (Moscovici & Zavalloni 1969) and groupthink tendencies (Turner & Pratkanis 1994).

Study 3 Limitations

Some of the limitations of this study were that the participants worked in small groups which were also ad-hoc, and that the test was a one-off one. This does not wholly reflect work conditions where employees often work in larger groups, that may be established, working together over a long time, and sometimes repeatedly on the same tasks in the same environment. Another modification for future studies would be the use of real money. As the studies of Mazar *et al.* (2008) have shown, behaviour differs significantly on how far the units of rewards are removed from actual hard currency.

General discussion

The findings from these three studies show that high social identification results in higher levels of corrupt behaviour, but lower levels of stress, for both individuals and groups. One observation common to both the group experiments was the discrepancy in the corrupt behaviour as evidenced by the task results and the self-reporting responses to questions about that corrupt behaviour. It seems that whereas students working on their own, as in Study 1, were willing to admit to cheating, those working in a group were not. These results may be explained by the fact that psychology students are familiar and appreciative of this type of research and so are more discerning about such

questionnaires. On the other hand, this may be because the group did not recognise that their behaviour, which conformed to the group norms, were corrupt (Mazar *et al.* 2008).

This research investigated the effect of social identity threat on stress and corrupt behaviour. Individuals and groups were willing to participate in corrupt behaviour, whether they were students at the bottom rung of the career ladder or senior executives. Stress was lower in all cases when identification was higher. Social support also meant that individuals working in groups experienced lower levels of stress than those working on their own. The results show that opportunity and/or threat affects the participants' sense of social identification which itself plays a significant role in corrupt behaviour in both individuals and groups, whether that is clear-cut cheating or more diffuse unethical behaviour (Figure 6).

Figure 6 to be inserted here

The implication is that when group identification is strong in a team and conditions present the opportunity for it, corrupt behaviour may occur even when there is no threat. This may account for Hamilton's attempt at cheating against Trulli, and it may explain Kerviel's motivation for his actions which were conducted even when there was no apparent threat. This may be the reason for the ENRON board members, who had a strong sense of group identification and supported each other, acting fraudulently. Does this suggest that the Bay of Pigs fiasco, investigated by Janis would have occurred even if Cuba and Russia had not presented a threat to the U.S.A.?

More generally, this model can be adapted for any behaviour. The wider implications are that social context can determine the sense of social identity, group norms developed and behaviour in general, thus enhancing existing research (Figure 7).

Figure 7 to be inserted here

Research limitations

There are some limitations in the research. Mentioned at the end of Study 2 was the need to ascertain if established teams would display different levels corrupt behaviour than the type of ad-hoc groups that have been studied in this research. The teams in this study were small and research is needed into bigger groups. The studies used a single occurrence: a longitudinal study of two or more experiments may reveal different studies. Lastly, as Mazar *et al.* (2008) has shown, the use of money may reveal different behaviours in participants. It may also be criticised that the laboratory conditions used in the studies do not reflect normal workplace conditions. However, the participants for the group studies were practicing professional and business people who had come together for normal business meetings.

Conclusion

The effects of stress on corrupt behaviour as a result of identity threat has been examined in this research. The studies showed that under threat, individuals working on their own will behave corruptly to support their wider social category. This behaviour was replicated by groups of participants from the business world in the UK working in small teams. These findings support and enhance previous research. However, the results of out-group threat were not significantly different from in-group threat. A strong sense of social identity influenced corrupt behaviour, rather than threat. This appears to contradict established research, which suggests that group threat should elicit the most extreme behaviour.

References

Abel, M.H. 1996. 'Self-esteem: Moderator of mediator between perceived stress and expectancy of success'. *Psychological Reports,* 79, 635-641.

Ashforth, B.E., Gioia, D.A., Robinson, S.L. and Trevino, L.K. 2008. 'Re-viewing Organisational Corruption'. *Academy of Management Review,* 33:3, 670-684.

Baucus, M.S. and Near, J.P. 1991. 'Can illegal corporate behaviour be predicted? An event history analysis'. *Academy of Management Journal*, 34, 9-36.

Baumeister, R.F. and Leary, M.R. 1995. 'The need to belong: desire for interpersonal attachments

Bennett, R.J. and Robinson, S.L. 2003. 'The past, present, and future of workplace deviance research'. In Greenberg, J. (Ed.), *Organisational Behaviour: The State of the Science* (2nd Ed.): 247-281. Mahwah, NJ: Lawrence Erlbaum Associates.

Borgerson, J.L., Schroeder, J.E., Magnusson, M.E. and Magnusson, F. 2009. 'Corporate communication, ethics, and operational identity: a case study of Benetton'. *Business Ethics: A European Review*, 18:3, 209-223.

Brass, D.J., Butterfield, K.D. and Skaggs, B.C. 1998. 'Relationships and an ethical behaviour: a social network perspective'. *Academy of Management Review*, 23, 14-31.

Brief, A.P., Buttram, R. T. and Dukerich, J.M. 2001. 'Collective Corruption in the Corporate World: Toward a Process Model'. In Turner, M.E. (Ed.) *Groups at work: theory and research*: 471-499. Mahwah, NJ: Laurence Erlbaum.

Brown, R.J. 1988. *Group Processes: Dynamics Within and Between Groups*. Oxford: Blackwell.

Creassey, D.H. 1976. 'Restraint of trade recidivism and delinquent neighbourhoods'. In Short , J.F.(Ed.), *Delinquency, crime and society*: 209-238. Chicago: University of Chicago Press.

Crocker, J., and Luhtanen, R.K. 2003. 'Level of Self-Esteem and Contingencies of Self-Worth: Unique Effects on Academic, Social, and Financial Problems in College Students'. *Personality and Social Psychology Bulletin*, 29, 701-712.

Daboub, A.J., Rasheed, A.M.A., Priem, R.L. and Gray, D.A. 1995. 'Top management team characteristics and corporate illegal activity'. *Academy of Management review*, 20, 138-170.

Ellemers, N., De Gilder, D. and Haslam, S.A. 2005. 'Motivating individuals and groups at work: a social identity perspective on leadership and group performance'. *Academy of Management Review*, 29:3, 459-478.

Finney, H.T. and Lesieur, H.R. 1982. 'A contingency of theory of organisational crime'. *Research in the Sociology of Organisations*, 1, 255-299.

Folkman, S., Chesney, M., McKusick, L., Ironson, G., Johnson D. and Coates, T. 1991. 'Translating coping theory into an intervention'. In Eckenrode, J. (Ed.), *The Social Context of Coping*. New York: Plenum Press.

Gorman, E. 2009. 'Hamilton may escape McLaren's fate'. *The Times*, 6th April.

Harkins, S.G. and Szymanski, K. 1989. 'Social loafing and group evaluation'. *Journal of Personality and Social Psychology*, 56, 934-941.

Haslam, A. and Reicher, S. 2004. 'Social identity and the dynamics of organisational life: Insights from the BBC Prison study. In: Bartel, C., Bladder, S. and Wrzesniewski, A. (Eds*.) Identity and the Modern Organization*. New York: Erlbaum.

Haslam, S.A. 2004. 'Group Decision Making'. In *Psychology in Organisations* (2nd Ed.): 99-119. London: Sage.

Haslam, S.A. 2004. 'Group Productivity and Performance'. In *Psychology in Organisations* (2nd Ed): 162-182. London: Sage.

Haslam, S.A. 2004. 'Stress'. In 2nd Edition, *Psychology in Organisations* (2nd Ed.): 183-206. London: Sage.

Haslam, S.A. 2004. 'The Social Identity Approach'. In *Psychology in Organisations* (2nd Ed.), 17-39. London: Sage.

Haslam, S.A. 2005. 'Stressing the group: Social Identity and the unfolding dynamics of responses to stress'. *Journal of Applied Psychology*, 44, 1-17.

Haslam, S.A., Jeten J., O'Brien A, and Jacobs, E. 2004. 'Social Identity, social influence and reactions to potentially stressful tasks: support for the self-categorisation model of stress'. *Stress and Health,* 20, 3-9.

Haslam, S.A., O'Brien A., Jeten J., Vormedal K., and Penna S. 2005. 'Taking the Strain: Social Identity, social support, and the experience of stress'. *British Journal of Social Psychology*, 44, 1-17.

Haslam, S.A., Ryan, M.K., Postmes, T., Spears, R., Jetten, J. and Webley, P. 2006. 'Sticking to our guns: Social Identity as a basis for the maintenance of commitment to faltering organisational projects'. *Journal of Organisational Behaviour*, 27, 607-628.

Hill, C.W.L., Kelley, P.C., Agle, B.R., Hitt, M.A. and Hoskisson, R.E. 1992. 'An empirical examination of the causes of corporate wrongdoing in the United States'. *Human Relations*, 45:1055-1076.

Jackson, J.M. and Harkins, S.G. 1985. 'Equity in effort: an explanation of the social loafing effect'. *Journal of Personality and Social Psychology*, 49, 1199-1206.

James, K. and Greenberg, J. 1989. 'Ingroup salience, intergroup comparison and individual performance and self-esteem'. *Personality and Social psychology Bulletin*, 15, 604-616.

Janis, I.L. 1982. '*Groupthink: Psychological Studies of Policy Decisions and Fiascos*'. (2nd Ed). Boston: Houghton Mifflin.

Jones, T.M. 1991. 'Ethical decision-making by individuals in organizations: an issue-contingent model'. *Academy of Management Review*, 16:4, 366-395.

Jones, T.M. and Ryan, L.V. 1997. 'The link between ethical judgement and action in organizations: A moral approbation approach'. *Organization Science*, 8: 663-680.

Lazarus, R.S. and Folkman, S. 1984. *Stress, Appraisal and Coping*. New York: Springer Publishing Co.

Levine, R.M., Prosser, A. Evans, D. and Reicher, S.D. 2005. 'Identity and Bystander intervention: how social group membership shapes helping behaviour'. *Personality and Social Psychology Bulletin,* 31:4, 443-453.

Manstead, A.S.R. 1997. 'Situations, belongingness, attitudes and culture: four lessons learned from social psychology'. In McGarty, C. and Haslam, S.A. (Eds.), *The Message of Social Psychology: Perspectives on Mind in Society*: 238-251. Oxford: Blackwell.

Marcus, B. and Schuler, H. 2004. 'Antecedents of counterproductive behaviour at work: A general perspective'. *Journal of Applied Psychology*, 89:647-660.

Mazar, N., Amir, O. and Ariely, D. 2008. 'The Dishonesty of People: A Theory of Self-Concept Maintenance'. *Journal of Marketing Research*, 16, 633-644.

Moscovici, S. and Zavalloni, M. 1969. 'The group as a polarizer of attitudes'. *Journal of Personality and Social Psychology*, 12, 125-135.

Motowidlo, S.J., Packard, J.S. and Manning, M.R. 1986. 'Occupational stress: its causes and consequences for job performance'. *Journal of Applied Psychology,* 71: 618-629.

Oakes, P.J., Haslam, S.A. and Turner, J.C. 1994. *Stereotyping and Social Reality*. Oxford: Blackwell.

Oakes, P.J., Turner, J.C. and Haslam, S.A. 1991. 'Perceiving people as group members: the role of fit in the salience of social categorizations'. *British Journal of Social Psychology*, 30, 125-144.

Osgood, C. and Tannenbaum, P. 1955. 'The principle of congruity in the prediction of attitude change', *Psychology Review*, 62, 42-55.

Ouwerkerk, J.W., Ellemers, N and De Gilder, D. 1999. 'Group commitments and individual effort in experimental and organizational contexts'. In. Ellemers, N., Spears, R. and Doosje, B.J. (Eds.), *Social Identity Context, Commitment, Content*: 184-304. Oxford: Blackwell.

Parker, M. 1993. 'Industrial relations myth and shopfloor reality: the team concept in the auto industry'. In N. Lichtenstein, N. and Howell, J.H. (Eds.), *Industrial Democracy in America*: 249-274. Cambridge: Cambridge University Press.

Paulus, P.B. and Dzindolet, M.T. 1993. 'Social influence processes in brainstorming'. *Journal of Personality and Social Psychology*. 64, 575-586.

Pendry, L. and Carrick, R. 2001. 'Doing what the mob do: priming effects on conformity'. *European Journal of Social Psychology,* 31, 83-92.

Pinto, J., Leana, C.R. and Pil, F.K. 2008. 'Corrupt Organizations or Organizations of corrupt Individuals? Two Types of Organizational-level Corruption.' *Academy of Management Review*, 33:3, 685-709.

Rest, J.R. 1986. *Moral Development: Advances in Research and Theory*. New York: Prager.

Robinson, S.L. and Bennett, R.J. 1995. 'A typology of deviant workplace behaviours: A multidimensional scaling study'. *Academy of management Journal*, 38, 555-572.

Schwarzer, R. and Jerusalem, M. 1995. 'Generalized Self-Efficacy scale'. In Weinman, J., Wright, S. and Johnston, M., *Measures in health psychology: A user's portfolio. Causal and control beliefs,* 35-37. Windsor, UK: NFER-NELSON.

Simpson, S.S. 1986. 'The decomposition of antitrust: Testing a multi-level, longitudinal model of profit-squeeze'. *American Sociological Review*, 51, 859-875.

Stewart, J.B. 2008. 'The Omen: How an obscure Breton trader gamed oversight weaknesses in the banking system'. *The New Yorker*, October 20, 54-65.

Stoner, J.A.F. 1961. *A comparison of individual and group dimensions involving risk'*. Unpublished thesis: School of Industrial Management, Massachusetts Institute of Technology.

Suedfield, P. 1988. 'Authoritarian thinking, groupthink and decision making under stress: are simple decisions always worse?' *Society*, 25, 25-27.

Tajfel, H. 1974. 'Social identity and intergroup behaviour'. *Social Science Information*, 13, 65-93.

Tajfel, H. and Turner, J.C. 1979. 'An Integrative Theory of Inter-group Conflict'. In Austin, and Worchel, S. (Eds.), *The Social Psychology of Intergroup Relations*: 33-47. Monteroy, CA: Brooks/Cole.

Trevino, L. K. 1986. 'Ethical decision-making in organisations: a person-situation interactionist model'. *Academy of Management Review*, 11:3, 601-617.

Trevino, L.K. and Youngblood, S.A. 1990. 'Bad apples in bad barrels: A causal analysis of ethical decision-making behaviour'*. Journal of Applied Psychology,* 75, 378-385.

Trevino, L.K., Weaver, G.R. and Reynolds, S.J. 2006. 'Behavioural ethics in organisations: A review'. *Journal of Management,* 32, 951-990.

Tuckman, B.W. and Jensen, M.A.C. 1977. 'Stages of Small-Group Development Revisited'. *Group & Organization Management*, 2:4, 419-427.

Tuckman, B.W., 1965. 'Developmental sequence in small groups'. *Psychological Bulletin*, 63:6, 384-399.

Turner, J.C. 1982. 'Towards a cognitive redefinition of the social group'. In Tajfel, H. (Ed.), *Social Identity and Intergroup Relations*: 15-40. Cambridge: CUP.

Turner, J.C. 1985. 'Social categorisation and the self-concept: a social cognitive theory of group behaviour'. In Lawler, E.J. (Ed.), *Advances in Group Processes*: 77-122. Greenwich, CT:JAI Press.

Turner, J.C. 1987. 'A Self-Categorization Theory'. In Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D. and Wetherall, M.S. (Eds.), *Rediscovering the Social Group: A Self-categorization Theory*: 42-67. Oxford and New York: Blackwell.

Turner, M.E. and Pratkanis, A.R. 1994. 'Social identity maintenance prescriptions for preventing groupthink: reducing identity protection and enhancing intellectual conflict'. *International Journal of Conflict Management,* 5, 254-270.

Tyler, T.R. 1999a. 'Why people co-operate with organisations; an identity-based perspective'. In Staw, B.M. and Sutton, R. (Eds.), *Research in Organisational Behaviour*: 201-246. Greenwich, CT: JAI Press.

Webley, S. and Werner, A. 2008. 'Corporate Codes of Ethics: Necessary but not Sufficient'. *Business Ethics: A European Review*, 17:4, 405-415.

Williams, M. and Dutton, J.E. 1999. 'Corrosive political climates: The heavy toll of negative political behaviour in organisations'. In Quinn, R.E., O'Neill, R.M. and St.Clair, L. (Eds.), *The pressing problems of modern organisations: Transforming the agenda for research and practice*: 3-30. New York: American Management Association.

Worchel, S., Rothgerber, H., Day, A., Hart, D. and Butemeyer, J. 1998. 'Social identity and individual productivity within groups'. *British Journal of Social Psychology,* 37, 389-413.

FIGURES

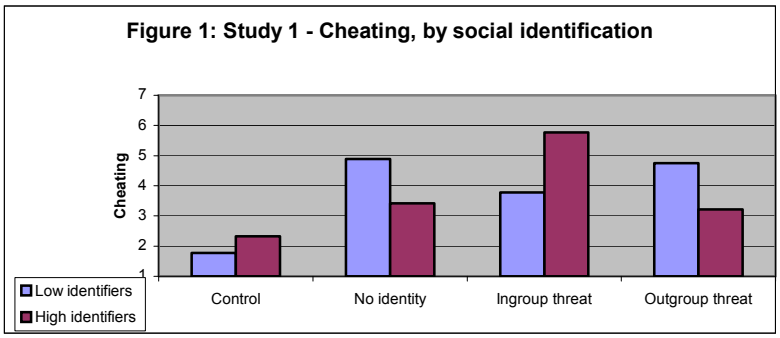


Figure 1: Study 1 - Cheating, by social identification
Cheating
7
6
5
4
3
2
1
Low identifiers
High identifiers
Control
No identity
Ingroup threat
Outgroup threat

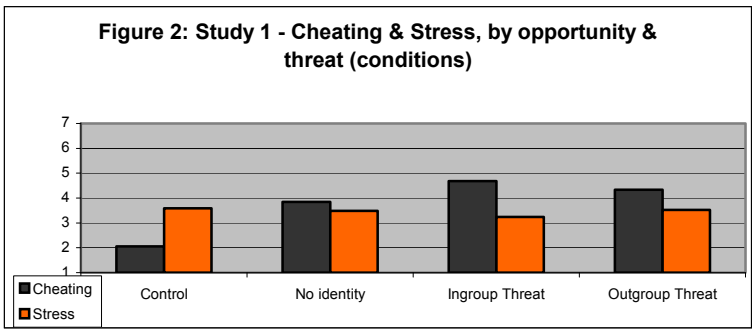


Figure 2: Study 1 - Cheating & Stress, by opportunity & threat (conditions)
7
6
5
4
3
2
1
Cheating
Stress
Control
No identity
Ingroup Threat
Outgroup Threat

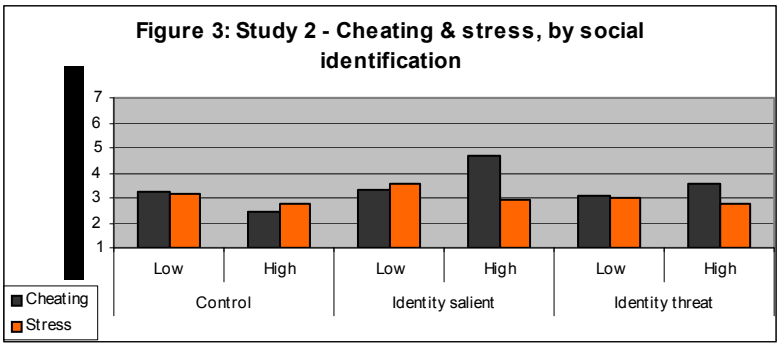


Figure 3: Study 2 - Cheating & stress, by social identification
7
6
5
4
3
2
1
Low
High
Low
High
Low
High
Control
Identity salient
Identity threat
Cheating
Stress

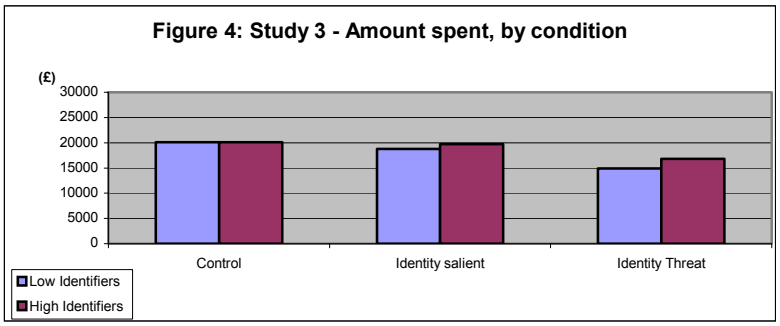


Figure 4: Study 3 - Amount spent, by condition
(£)
30000
25000
20000
15000
10000
5000
0
Control
Identity salient
Identity Threat
Low Identifiers
High Identifiers

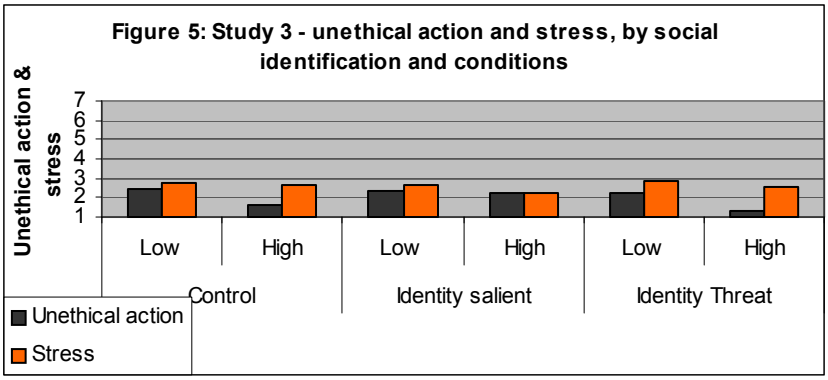


Figure 6: The influence of opportunity and threat on stress and corrupt behaviour

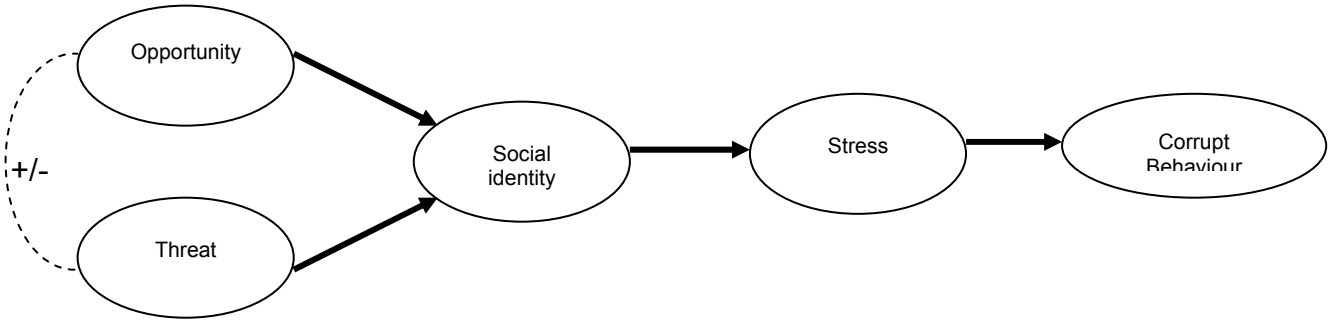
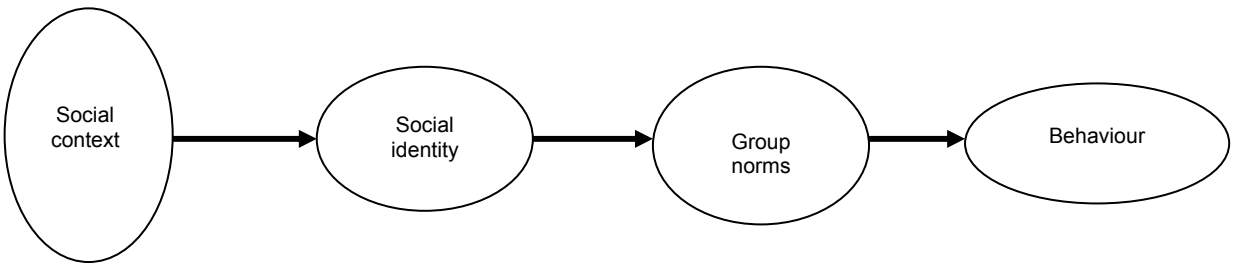


Figure 7: The influence of social context and group norms on behaviour



TABLES

Table 1: Reliability, means and contrasts of participants' responses for Study 1

Social identity as independent variable, by condition

Dependant variable	Scale		Statistics		Effects			Contrasts F(1,78)				
	N	α	Mean	Std. Dev	Cond F(3,78)	Social Idy F(1,78)	Cond x Social Idy F(3,78)	C v N, I,O	N v I,O	I v O	N v I	N v O
Score	1	NA	7.84	9.57	**6.14†**	.00	2.38	**17.90†**	.10	.27	.00	.27
Cheating	3	.90	3.75	2.24	**7.60†**	.06	**3.72***	**20.27†**	.16	1.57	.96	.07
Stress	39	.81	3.44	.52	**4.42†**	**26.26†**	1.72	3.61	**7.73†**	1.14	**9.15†**	3.51

N = 86
Note *p<.05, †p<.01 (significant effects in **bold**)

Table 2: Means and contrasts of participants' responses for Study 2

Social Identity as independent variable, by condition

Dependant variable	Scale		Statistics		Effects			Contrasts F(1,39)			
	N	α	Mean	Std. Dev	Control F(2,39)	Socal Identity F(1,39)	Cond x Social identity F(2,39)	C v I,T	IvT	CvT	CvI
Score	1	na	11.67	4.94	**61.34†**	.00	.09	**96.46†**	**17.68†**	**30.59†**	**120.15†**
Cheating	8	.79	3.40	1.45	**4.88***	.31	2.68	**6.04***	2.88	1.07	**9.74***
Stress	24	.76	3.00	.58	1.14	**5.36***	.41	.28	2.08	.28	1.26

N=47
Note *p<.05, †p<.01 (significant effects in **bold**)

Table 3: Means and contrasts of participants' responses for Study 3

Social Identity as independent variable, by condition

			Statistics		Effects			Contrasts			
Dependant variable	**Scale**		**Overall**					**F(1,72)**			
	N	**α**	**Mean**	**Std. Dev**	**Cond F(2,72)**	**Social Idy F(1,72)**	**Cond x Social Idy F(2,72)**	**C v I,T**	**IvT**	**CvT**	**CvI**
Spend (£)	1	na	18250	5424	**5.04†**	.59	.22	3.82	**5.31***	**8.75†**	.30
Unethical behaviour	3	.68	2.02	1.45	.85	**4.13***	1.13	1.13	1.69	.42	.40
Stress	24	.77	2.64	.58	.47	**7.04***	.64	.64	.63	.03	.82

N=79

Note *ρ<.05, †ρ<.01 (significant effects in **bold**)