Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.
The Role of Values in White-Collar Crime

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Psychology at Massey University.

Nicholas W. Bradshaw

1998
ABSTRACT

White-collar crime is a serious type of crime. Research suggests that it is the most costly type of crime. In spite of its considerable public profile, little is known about white-collar crime. This is due to considerable problems with theory and data. White-collar crime is difficult to study because it is usually well concealed and official data is contaminated by many offenders who are not of white-collar status. This lack of good information has contributed to the failure to develop a widely accepted theory of white-collar crime. Many theories of crime predict that criminals are deficient in either cognitive abilities or they are influenced by deviant subcultures. Most white-collar offenders do not show these deficiencies, instead demonstrating considerable cognitive abilities and a strong influence by normative values. Coleman's Integrated Theory of White-Collar Crime was suggested to be able to account for the normative characteristics of the white-collar offender. The theory suggests that white-collar crime is motivated and facilitated by an imbalance of normative social values. Material gain is valued above prohibitions which society places on acceptable ways of achieving it. One implication of this theory was tested by two hypotheses. Because white-collar crime is facilitated by normative social values, it was suggested that beliefs and values relating to it can be studied in the normative social environment. It was hypothesised that the social emphasis placed on material gain would cause employees of competitive organisations to perceive some white-collar crimes as less serious than employees of noncompetitive organisations. The hypotheses were not supported. There were a number of possible explanations for this, the most likely being problems with sampling and deficiencies in the hypotheses. While the hypotheses may or may not have been valid, the examination of the social environment of white-collar crime was stressed as an important new way to examine social influences on white-collar crime.
Acknowledgements

Many thanks to Keadie Bullock for her insight and patience and to Professor Douglas Paton for his time and support. Last but not least thanks to Merle and Ken Bradshaw for helping me in ways that no other people could.
# TABLE OF CONTENTS

**ABSTRACT** ........................................................................................................ ii

**ACKNOWLEDGEMENTS** ....................................................................................... iii

**TABLE OF CONTENTS** ......................................................................................... iv

**LIST OF TABLES** .................................................................................................. v

**LIST OF FIGURES** .................................................................................................. viii

1. **INTRODUCTION** ................................................................................................. 1

   1.1 IMPEDIMENTS TO UNDERSTANDING WHITE-COLLAR CRIME ................. 5
   
   1.1.1 The Breadth of Expertise Necessary to Study White-Collar Crime ........... 5
   
   1.1.2 The Covert Nature of White-Collar Crime ............................................... 6
   
   1.1.3 The Contribution of Sutherland ................................................................. 9
   
   1.1.4 The Contribution of Edelhertz ................................................................. 13
   
   1.1.5 The Institutionalisation of Edelhertz's Definition in the USA ................. 15
   
   1.1.6 Criminal Versus Civil Prosecution of White-Collar Crime .................. 18

   1.2 WHY WHITE-COLLAR CRIME IS NOT SUCCESSFULLY

   EXPLAINED BY GENERAL THEORIES OF CRIME ....................................... 21

   1.2.1 Sociological Theories of Criminal Behaviour ......................................... 22

   1.2.2 Cognitive Theories of Criminal Behaviour ............................................. 24

   1.3 CHARACTERISTICS OF WHITE-COLLAR OFFENDERS ......................... 28

   1.4 MOTIVATIONS TO COMMIT WHITE-COLLAR CRIME ............................ 38

   1.5 REVIEW ............................................................................................................. 39

   1.6 THE ROLE OF COMPETITIVE VALUES IN WHITE-COLLAR CRIME ........ 40

   1.6.1 The Origin of the Culture of Competition .............................................. 44

   1.6.2 The Culture of Competition and White-Collar Crime ............................ 45

   1.6.3 The Different Value Sets of Capitalist Societies .................................... 47

   1.6.4 The Culture of Competition and Business Ethics .................................... 49

   1.6.5 The Role of Neutralisations in White-Collar Crime ............................... 51
LIST OF TABLES

TABLE 1: Numbers of Respondents in Age Groups Cross Tabulated with Respondent’s Gender and Competitive Status of Respondent’s Organisation................................................................. 68

TABLE 2: Quantitative Analysis of Descriptions of White-Collar Crime: Concepts Which are Suggested by Respondents to be Features of White-Collar Crime................................................................. 69

TABLE 3: Number of Estimations of Line Length More than 25% Deviant from Actual Line Length for Each Respondent in Task Three................................................................. 73

TABLE 4: Correct Line Length and Respondent Estimations of Line Length for Task Three......................................................................................................................... 74

TABLE 5: Mean Errors for Estimates of Line Length as a Percentage of Correct Line Length for Task Three......................................................................................................................... 74

TABLE 6: Mean, Standard Deviation, Range, Maximum Value and Minimum Value for Crimes in Task Four (Not Logarithmically Transformed)......................................................................................................................... 76

TABLE 7: Mean, Standard Deviation, Range, Maximum Value and Minimum Value Logarithmic Transformation of Crimes in Task Four......................................................................................................................... 77

TABLE 8: Cross Tabulation of List Order by Respondent’s Sex, Organisation Type and Age......................................................................................................................... 79

TABLE 9: Significance for the Difference Between Least Squares Means for Street Crime and White-Collar Crime Across the Four List Orders......................................................................................................................... 80

TABLE 10: Rankings of Means for Logarithmic Transformations of Seriousness Ratings for Crimes......................................................................................................................... 85

TABLE 11: Bivariate Correlation’s for Means of Logarithmic Transformations, Means for the Untreated Data and Medians for all Forty Crimes in Task Four......................................................................................................................... 101

TABLE 12: Comparison of Median Ratings for Crime Seriousness Between Davis and Kemp’s (1994) Study and the Current Study......................................................................................................................... 106
LIST OF FIGURES

Figure 1: Percentage of Sample Made Under an Offence Based Definition of White-Collar Crime Who Meet an Offender Based Definition of White-Collar Crime, Contrasted with Social and Demographic Characteristics of White-Collar Offenders* (Wheeler, Weisburd, Waring & Bode, 1988). .................................................................................................................. 32

Figure 2: Frequency Distribution for Ratings of the Seriousness of Receiving Stolen Property Worth $100. ........................................................................................................... 78

Figure 3: Frequency Distribution for Ratings of the Seriousness of Incest Between Father and Daughter. ........................................................................................................... 79
1. INTRODUCTION

White-collar crime is a highly topical issue. Cases are frequently reported in the media arousing intense public interest and debate (Brennan, Ennis & Esslemont, 1992). It has maintained a high profile for many decades, both in New Zealand (Grant, 1990; Brennan, Ennis & Esslemont, 1992) and around the world (Enderwick, 1994). This type of crime can attract fierce public scorn because some white-collar offenders are successful people, yet they use illegal means to make further material gains. Moreover, before their offending became known, many of these people were respected and trusted by their community. Not only does the white-collar offender betray their victims, they also betray society by violating its esteem for people with elevated social status. White-collar offenders have prospered more than most from the norms of society yet they commit acts which seriously violate these norms. Virtually all crime involves the violation of social norms, but usually it is attributed to the perpetrator being of a less than desirable character. Prior to the white-collar offender’s crime, they are frequently believed to be of impeccable character. Because they obviously have a sound mind and good judgement, their decision to commit what may be serious offences casts doubt on which members of society can be trusted to act in the interests of society, even those members of the social elite.

There is an imperative need to identify and quantify the costs of white-collar crime (Grabosky, 1984; CPAG, 1993) but little progress has been made to date. Attempts to do so are seriously impeded by a lack of suitable official statistics, both in New Zealand (Doone, 1990; Newbold & Ivory, 1993; CPAG, 1992; CPAG, 1993) and overseas (e.g. Levi, 1991; Weisburd, Wheeler, Waring & Bode, 1991). American efforts to gather data and fund research are a notable exception. Accordingly, most published quantitative research is based on American data. Statistics from other countries are only useful for approximations of white-collar crime in New Zealand because legal, administrative and cultural differences may have unique effects on how white-collar crime manifests and how it is recorded. However, similarities in the patterns of white-collar crime between
industrialised capitalist countries suggest that many characteristics are shared between countries. In the absence of better information, it is valid to use foreign statistics to infer the characteristics of white-collar crime in New Zealand, but only in general terms. With respect to the American data, the statistics are so impressive that even if New Zealand had only a fraction of the white-collar crime experienced in America, this would still be significant enough to warrant considerable efforts to increase understanding.

The harms caused by white-collar crime can be divided into moral, physical and financial (Meier & Short, 1982; Moore & Mills, 1990).

Financial harm is the most investigated harm resulting from white-collar crime (Schrager & Short, 1978), but even this is poorly understood. There are many ways in which it can be appraised. Accordingly, estimates of financial harm vary considerably, sometimes by orders of magnitude. What is common to all of them is they find the costs of white-collar crimes are considerably greater than all other types of crimes combined. White-collar crime is estimated to cost America between 40 and 200 billion dollars annually (in 1991 US dollars) (Harris, 1991; Haskell & Yablonski, 1983) and between 2% and 5% of GDP (Russell, 1995). This amounts to five to ten times the cost of all street crime. American estimates resonate with assessments by the Serious Fraud Office (SFO) which describe the financial impact of white-collar crime in New Zealand as “much greater than the cumulative financial impact of robbery, theft and burglary combined” (CPAG, 1993). KPMG Peat Marwick estimate that the cost of fraud (which is a subset of white-collar crime) to New Zealand businesses in 1994 was $70.2 million (KPMG Peat Marwick, 1994). This amount is comparable to estimates by Peter Doone, former Deputy Commissioner of the New Zealand Police, that in 1988 and 1989 suspected fraud offences awaiting and under investigation were valued at $50 to $70 million (CPAG, 1993). KPMG stress their figure is probably a considerable underestimate because only fraud that managers were aware of was enumerated. Another factor contributing to KPMG’s underestimation was that only fraud committed against organisations were studied, while frauds committed by organisations were not.
The magnitude of the foreign statistics suggest that the total cost of fraud to New Zealand is probably vastly more than 70.2 million dollars. This is supported by the records of the New Zealand Serious Fraud Office which show that it has $1.2 billion dollars worth of fraud on its books, although much of it is yet to be investigated (Newbold & Ivory, 1993). CPAG, a New Zealand Department of Justice group, estimate that serious fraud detected in the period from March 1990 to April 1993 amounts to $2.9 billion.

Unlike many other types of crime, physical harm is never the objective of white-collar crime (Edelhertz, 1983). However, physical harm can occur as a by-product of white-collar crime. Examples are employees being injured or killed due to failures to purchase essential safety equipment, and the injuries or deaths of people caused by dangerously faulty products. Physical harms occur with disturbing regularity. In 1978, Schrager and Short reported that in America faulty and poorly designed products injure approximately 20,000,000 people annually and kill 30,000. Clinard (1990) noted that in 1987 about 1000 American workers were killed and 2,212,600 manufacturing workers were injured in the course of their occupations. In America during 1983 200,000 to 500,000 workers were needlessly exposed to toxic agents, 2,500,000 workers were inflicted with temporary disabilities and 250,000 were inflicted with permanent disabilities that were due to culpable managerial acts (Haskell & Yablonski, 1983). America’s Occupational Safety and Health Agency’s (OSHA) statistics show that approximately 100,000 people die annually from occupationally related diseases, and 390,000 suffer from job related illnesses. The rates of death from white-collar crime in America are greater than those for violent crime. In 1990 violent crime caused 23,438 deaths (Poveda, 1994).

The moral harm of white-collar crime is the damage it does to the populations faith in the legitimacy of business and government (Stotland, 1977). Some scholars believe this is the most serious harm because the apparent willingness of the members of the elite to violate the law can be used by others as justifications for their criminal acts (Moore & Mills, 1990). The moral harms of white-collar crime is a vague concept, accordingly it
has not been and probably never will be satisfactorily quantified. However, it is relatively easy to qualitatively demonstrate the moral harm of white-collar crime. For example, the Watergate affair had a substantial impact by significantly reducing the American public's esteem for its government (Katz, 1994; Gross, 1978) and increased the public's perception of how serious the Watergate related crimes were (Carroll, Pine, Cline & Kleinhans, 1974). Fraudulent practices which contributed to the collapse of many companies after the 1987 share market crash shook the public's faith in business organisations to operate on legal and ethical principles (Hurley, 1988). While it is difficult to precisely define and evaluate, it is apparent that the moral harm of white-collar crime is also serious.

Analysis of the harms of white-collar crime shows that it is a very real and serious type of crime. The public is aware of white-collar crime and perceives it as a problem (Cullen, Mathers, Clark & Cullen, 1983; Katz, 1980). White-collar offenders attract considerable derision and scorn. Governments around the world are also showing increasing interest in white-collar crime (Ermann & Lundman, 1978). Politicians, both in New Zealand and abroad, have voiced concern and implemented initiatives to monitor and control white-collar crime. The cost of white-collar crime to society and government is certainly large enough to warrant efforts to prevent or at least control it (CPAG, 1992, 1992).

It would be reasonable to expect that the substantial profile and harms of white-collar crime would have motivated an abundance of research and widespread commentary in the literature. This has happened internationally, although in New Zealand there appears to be no research on white-collar crime. However, the growing body of literature has only made patchy progress in revealing the nature of this most perplexing type of crime. The lack of progress is not because of deficiencies in the abilities or efforts of scholars in the field, rather it is due to some unusually intractable problems with defining white-collar crime and gathering data. Because these difficulties are yet to be overcome, the quantity of the literature is not matched by its quality. While some
progress has been made, the field is characterised by a considerable lack of agreement on central issues (even the definition of white-collar crime is strongly debated). Almost none of the existing body of literature follows a common conceptual framework. The result is a large body of literature that lacks compatibility and comparability.

The purpose of this introduction is to demonstrate that white-collar crime is a very significant form of crime, and that it is deserving of considerable efforts towards better understanding, not only for the sake of academic advancement, but also that effective prevention and treatment strategies can be developed. The reasons why this has not happened have proven to be difficult to overcome.

1.1 Impediments to Understanding White-Collar Crime

1.1.1 The Breadth of Expertise Necessary to Study White-Collar Crime

White-collar crime requires input and expertise from many disciplines, including law, sociology, psychology, criminology, organisational theory, management theory and others (Geis, 1984). The breadth of knowledge and expertise necessary to fully understand white-collar crime is beyond many of the scholars who study it. The variety of disciplines interested in white-collar crime also contributes to the wide variety of incompatible approaches. Interdisciplinary approaches have been suggested as a way around this problem although this is not done to the extent that it should be.
1.1.2 The Covert Nature of White-Collar Crime

Much white-collar crime is inherently well concealed. Some scholars suggest that much more white-collar crime goes undetected by enforcement agencies than the cases which are detected (Croall, 1989; Geis, 1991). This poses a considerable barrier to efforts to study white-collar crime. It is impossible to understand white-collar crime if the perpetrators, victims and means by which the crime is committed cannot be observed.

Edelhertz (1983) observed that the perfect white-collar crime is one which is successfully perpetrated without detection by either enforcement agencies or its victims. Most types of crimes are concealed, hence the widespread observation that crime in general is difficult to study (Edelhertz, 1982; Braithwaite, 1985; Croall, 1992; Hurley, 1988; CPAG, 1992). White-collar crimes tend to be even better concealed than other types of crimes. This is the result of a collusion between the characteristics of the white-collar offenders working environment and the characteristics of white-collar offenders themselves.

White-collar crime occurs in organisational environments which are highly regulated and managed by complex rules\(^1\) (Shapiro, 1990). The rules require complex organisational structures and many employees to enact them. These features of the modern organisational environment provide both the opportunity to commit white-collar crimes and the means by which they can be concealed (Shapiro, 1990). White-collar offenders are generally able to conceal their crimes very successfully by exploiting the organisational environment and can invest a great deal of time and effort doing this. This is one reason why white-collar crimes are usually committed over a longer span of time than many other forms of crimes (Shapiro, 1990).

\(^1\) Gross (1978) suggested that high levels of organisational complexity may in itself be criminogenic. Complex organisations need to divide themselves into smaller units with discreet responsibilities and goals. The goals of one sub-unit may conflict with those of others (Meglino, Ravlin & Adkins, 1992). An example is the common conflict between marketing departments and legal departments. The goal of the marketing department is to sell more products and one goal of the legal department is to make sure that their organisation does not break the law. Marketing departments can actively avoid legal departments so that illegal marketing practices will not be vetoed by the legal department.
The training and experience which makes white-collar offenders attractive candidates for jobs also equips them with the skills necessary to commit white-collar crime. They are usually selected for white-collar positions because they are intelligent and capable, as are most white-collar employees. They have an intimate knowledge of their working environment and the rules which govern it. This is evident in the variety of strategies which white-collar offenders use to conceal their crimes. For example, white-collar offenders frequently enlist the unwitting help of innocent co-workers, implicating them in the crime and obscuring their own role. This is usually done by delegating some of the tasks necessary for the crime to co-workers, passing it off as routine work. These techniques can make white-collar crime very complex, manifesting in as many different ways as there are different opportunities for crime. Accordingly, it is often hard to identify exactly how the crime occurred and who the offenders are.

The relationship between employers and employees inherently requires a degree of trust because it is not practical for the employer to supervise all of the employees actions. Relatively high levels of trust are necessary for white-collar positions because incumbents are often employed to bring skills into the organisation that the organisation needs but does not possess. It is not possible nor practical for supervisors to have total oversight of their subordinates actions because they do not fully understand what their subordinate is doing. Shapiro (1990) noted that these characteristics of the employer and white-collar employee relationship creates an asymmetry in the trust required from each party, in favour of the white-collar employee. This makes white-collar crime both relatively easy to commit and hard to detect or control. Shapiro suggests the violation of trust is the central feature of all white-collar crime.

Many white-collar crimes are so well concealed their victims are unaware that they are victims. Reis and Biderman (1980) noted that these factors collude to make the gathering of any form of data directly measuring the characteristics of white-collar crime or white-collar offenders very difficult. A common source of data on white-collar crime
which is used by researchers comes from official sources such as the criminal justice system and government agencies. These sources generally use definitions of white-collar crime which are highly inclusive and prone to contamination by offenders who are demonstrably different from classical conceptions of the white-collar offender. Criminological researchers often use victim studies and self-report studies when official data is not appropriate or available. These alternatives are not as viable for those who study white-collar crime. Because many victims are not aware they are victims, surveying them for their experience as victims of white-collar crime is not valid. Self-report studies are also not generally viable because the white-collar offender is generally very hesitant to reveal any information about their actions because they are well aware that secrecy is vital to the successful commission of white-collar crime.

There are problems with official data, but the covert nature of white-collar crime also causes problems with alternative sources of data from case studies, victim studies and self-report studies. Needless to say, this has seriously hampered attempts to study white-collar crime.

Another source of information useful for the development of theories are case studies. There have been some notable examples on a variety of types of white-collar crime (e.g. Cressey, 1953; Faberman, 1975; Geis, 1987; Clinnard, 1990; Grabosky & Sutton 1989). While these case studies are worthwhile and yield meaningful observations, they do not allow for a broad understanding of the range of white-collar crimes. The cases studies can be questioned for their representativeness because the circumstances which allowed for their discovery may be biased by factors not representative of white-collar crime in general.

The introduction so far has identified two factors inhibiting efforts to understand white-collar crime. The first is the breadth of knowledge necessary to understand the full range of the causes and consequences of white-collar crime. This is not an insurmountable problem, but currently the solution of interdisciplinary approaches is yet to be fully adopted. A more intractable problem relates to the covert nature of white-
collar crime. Simply put, it is very difficult to gain knowledge of something which is very hard to observe. Unfortunately, the covert nature of the crime extends beyond the act itself to encompass the perpetrator and victims. Almost all aspects of white-collar crime are very well hidden from observation, restricting the utility of victim studies and self-report studies as viable alternative sources of data. These problems force researchers to be reliant on official data and case studies. There are notable problems with official data and case studies. It is unfortunate that victim studies and self-report studies are not more commonly used because they would provide a helpful contrast to official data and case studies, allowing for better assessment of how reliable these sources of data are.

The lack of data amenable to a global description of the full range of white-collar crimes is reflected in efforts to define it. Two influential and very different definitions of white-collar crime by Edwin Sutherland and Herbert Edelhertz are described below. Their definitions disagree on fundamental aspects and are largely incompatible with each other. The problems with studying white-collar crime which are caused by its covert nature have contributed to Sutherland and Edelhertz's disagreement on what are the most central features of white-collar crime.

1.1.3 The Contribution of Sutherland

Sutherland was the first to conceptualise white-collar crime as a unique type of crime in 1939 (Geis & Goff, 1983). At the time, his suggestion that members of the elite could commit crime was controversial among criminologists because until then it was generally believed that crime was almost exclusively the result of lower socio-economic status, low intelligence or psychological defects. It was assumed that the elite would be among the most ardent supporters of normative values because they benefited the most from them. Because they were believed to have the least motivation to violate the law and social norms, they were assumed to be least likely to do so.
Sutherland's research into some of the largest privately owned organisations in America revealed that many had significant histories of violating the law. He found that 97.1% of the offending corporations he studied had two or more convictions in the criminal courts or administrative decisions in the civil courts, with an average of fourteen decisions per corporation (Newman, 1977). If a person had such an extensive history, they would be considered by the criminal justice system to be a serious recidivist offender, yet no such label was given to the organisations. The crimes committed by the organisations were systematic and rational. Sutherland's evidence seriously challenged the belief that the elite were not likely to commit crimes, especially with such intentionality. Economic gains from these crimes were usually large, adding to the already considerable wealth of the organisations. The elite, by definition do not want for any of the basic necessities for life. Unlike the lower classes, the crimes of the elite cannot be motivated by need. The white-collar crimes studied by Sutherland could only be motivated by greed, hence they gained a more sinister characterisation than street crime.

White-collar crime was used by Sutherland primarily as an academic argument to illustrate the inadequacies of the criminological theories which were influential at the time\(^2\), and to give support to his new general theory of crime called *differential association*\(^3\) (Matsueda, 1988), which he suggested could account for white-collar crime, unlike the other theories. White-collar crime was soon discussed far more widely than in academic circles. "White-collar crime" became part of every day language and it was readily reported and discussed by the popular media (Geis & Goff, 1983). Not surprisingly, business interests were not pleased at the increased scepticism and scrutiny directed at their affairs. Sutherland yielded to these pressures when he published his monograph *White-Collar Crime* in 1949 by not naming the organisations studied in his research (Geis & Goff, 1983).

\(^2\) The popular theories of the time attributed crime to socioeconomic status or Freudian fixations (Geis & Goff, 1983).

\(^3\) While Sutherland presented Differential Association as a new theoretical approach to criminality it is basically a restatement of social learning theory (Braithwaite, 1985).
Dissatisfaction with the term "white-collar crime" has led to many alternative phrases being suggested. Examples are "abuse of privilege", "economic crime", "economic special opportunity crime", "occupational crime", "organisational crime", "corporate crime", "professional crime", "elite crime", "violation of trust" and "abuse of trust". In practice, all are considered to be subsets of "white-collar crime". The ascendancy of "white-collar crime" does not meet with the approval of many scholars (e.g. Geis, 1984; Edelhertz, 1983, Braithwaite, 1985). It has been attributed with inappropriate emotive connotations. Many believe that it does not fairly represent the nature of the crime and is prone to idiosyncratic interpretation (e.g. Edelhertz, 1983).

There are aspects of Sutherland's definition of white-collar crime that he himself admitted were weak. He never decided on a precise definition, and disagreement over the definition has been prominent ever since. In his book *White-collar Crime* (1949), he defines white-collar crime as:

"...approximately as a crime committed by a person of respectability and high social status in the course of his occupation."

He defined "white-collar" to:

"...principally refer to business managers and executives."

The use of terms such as "approximately" and "principally" seriously reduced the precision of his definition. He gave examples of white-collar crime committed by blue-collar employees such as mechanics and watch repairers which added to the confusion. He also used different definitions of white-collar crime in different papers, some with quite different implications (Geis, 1991). Perhaps his best definition of the white-collar offender was (Geis, 1991):

"...a person with high socio-economic status who violates the laws designed to regulate his economic activities."

11
The definition of what constitutes "crime" was also not uniformly defined by Sutherland. He wavered between the strict criteria of a criminal conviction and the more liberal criteria of behaviour that a criminal court would convict if it had been tried. His inconsistency was in part due to criticisms that he was tarring reputations without the certainty of the rigorous decisions made by courts of law. He eventually defined crime as a violation of the mandate of the law, and that it was not essential for this to be formalised by the courts (Geis, 1991).

While Sutherland's definitions of white-collar crime may not have required that all white-collar offenders were members of the elite, the elite were the focus of most of his studies on white-collar crime (Green, 1993). Consequently, the white-collar offender became stereotyped as having very high social status. Subsequent white-collar crime scandals which received prominent media profiles helped to entrench the stereotype. The Heavy Electrical Equipment trial is an example. The people indicted on charges were all in senior management, and were described as men wearing "Ivy League" suits (Geis, 1987).

In summary, Sutherland contributed to confusion over the definition of white-collar crime in the following ways. First, it is not clear what level of status and what type of occupation are necessary to determine if a person has white-collar status. His emphasis on elite white-collar offenders has added to the confusion. Second, it is not clear whether acts need to be criminally convicted to qualify as crime. This second area of imprecision is not as significant as the first because he settled on a more liberal "mandate of the law" criteria (although debate on this issue has continued to this day). Aside from these criticisms, Sutherland made a very significant contribution by conceptually identifying white-collar crime, despite it being almost completely ignored at the time by academia. He supported his suggestions with a wealth of quantitative data which demonstrated that white-collar crime was much more real and serious than what was previously believed.
1.1.4 The Contribution of Edelhertz

A radically different approach to white-collar crime was suggested by Herbert Edelhertz (1983). Edelhertz worked as the Chief of the Fraud Section of the American Federal Department of Justice. His understanding of legal issues and the requirements of investigations led him to believe that Sutherland's definition was far too restrictive for practical use. He suggested an alternative definition which was very precise. Accordingly, it was highly amenable to operationalisation and was attractive to both enforcement agencies and academics. However, the definition was intentionally blind to two factors which Sutherland considered central to white-collar crime. First, the white-collar status of the offender was ignored. Second, there was no requirement for white-collar crime to be committed in an occupational capacity.

Instead of focusing on the status of the white-collar offender, Edelhertz focused on the characteristics of their offences. The difference in focus between the offender and their offences is the fundamental distinction between the definitions of Sutherland and Edelhertz. Both definitions have become highly influential and the differences between them have contributed to a polarisation of attitudes on whether white-collar crime should be defined by offender or offence based characteristics.

Edelhertz's definition of white-collar crime had a very legalistic character. Legal definitions of crime have to focus on offence characteristics. Focusing on offender characteristics would be an untenable form of discrimination (Poveda, 1994). Definitions of crime which use offence characteristics are democratic, a quality that appealed to many scholars as well as enforcement agencies. While Edelhertz's definition included white-collar status, it was not central to the theory. It went well beyond white-collar status to include a much wider variety of offenders.

Edelhertz's definition of white-collar crime was:
"...an illegal act or series of illegal acts committed by non-physical means and by concealment or guile, to obtain money or property, to avoid payment or loss of money or property, or to obtain business or personal advantage."

The definition was accompanied by a very specific description of the characteristics of white-collar crime:

1. intent to do wrong or break the law.
2. attempts to disguise the purpose or intent of the perpetrators' behaviours.
3. reliance on carelessness or ignorance by the victim(s).
4. acquiescence of the victim in what they believe to be the nature of the transaction.
5. concealment of the crime by:
   a) preventing the victim from realising their status as a victim.
   b) relying on only a small proportion of victims acting to prevent the crime in the event that they become aware of it.
   c) making provisions to take care of dissatisfied victims. For example, by providing restitution.
   d) creating a deceptive paper trail, or by creating or using a deceptive organisational or transactional facade.

There is little debate that Edelhertz's definition is vastly superior to Sutherland's definitions in terms of its ease of operationalisation (Dinitz, 1982). However, it is debatable whether Edelhertz's definition captures the essence of white-collar crime because it ignores the offender's white-collar status and the use of occupational capacity to commit crimes. The exclusion of these characteristics formed the basis of most criticisms of Edelhertz's definition (Poveda, 1992). Many scholars refer to the offender's status as one of the most central features of white-collar crime. However, critics failed to offer alternatives which remain sensitive to the role of the offender's status and occupation in the commission of crimes, while also using precise definitions which were easily operationalised. In this sense Edelhertz's definition had much more
"real world" applicability and appeal than Sutherland’s definition, yet it has remained open to criticism for its lack of theoretical validity.

1.1.5 The Institutionalisation of Edelhertz’s Definition in the USA

A significant force behind the widespread adoption of Edelhertz’s definition by academics and government bodies came from the “crisis of confidence” felt by the American public towards government and industry. During the 1970s a series of scandals rocked the American public’s trust in government and industry, propelling white-collar crime from academia into the public and political arena. The most notable was the Watergate affair. The circumstances of President Nixon’s impeachment demonstrated to the American public that people in elevated positions did not automatically act in the best interests of society. While these types of scandals had been occurring long before the 1970s, their frequency and seriousness became an increasing concern for the American government (Katz, 1980). Politicians, law enforcers and the public saw that white-collar crime had very real and harmful consequences. Predictably, the government moved to restore faith in its administration and industry.

White-collar crime was first explicitly mentioned in the FBI’s annual report in 1974 (Poveda, 1992). Business fraud has been policed by American enforcement agencies since before the turn of the century (Edelhertz, 1983), thus the policing of various aspects of white-collar crime was not new. What was new was the vigour and systematic nature with which the problem of white-collar crime was addressed. Resources allocated to policing white-collar crime doubled between 1975 and 1979. In 1980 the FBI grouped offences in 70 statutes under the umbrella of white-collar crime for investigative and statistical purposes.

In 1977 the Attorney General’s White-Collar Crime Committee endorsed the following definition:
"White-Collar offences shall constitute those classes of non-violent illegal activities which involve traditional notions of deceit, deception, concealment, manipulation, breach of trust, subterfuge or illegal circumvention"

The definition was heavily influenced by Edelhertz, sharing his emphasis on offence based criteria, but it was an even greater departure from the original offender definitions. The new definition attracted much criticism because it was so broad that it included almost any type of fraud and it was devoid of any implications of offender status (Simon & Swart, 1984). The breadth of the definition was far beyond traditional academic conceptions of white-collar crime.

For reasons described previously, data on white-collar crime is very difficult to gather. Governmental data is an obvious and attractive source for researchers because it has already been gathered and the samples are very large. Because official data on white-collar crime was collated using the FBI's definition, which was adopted from the Attorney Generals Committee on White-Collar Crime, scholars who wanted to use this very important resource were forced at least in part to adopt an offence based definition.

Problems with offender based definitions were compounded by changes in federal policy regarding the policing of white-collar crime. Initially white-collar crime was policed to protect the integrity of public institutions and industry. However, the crisis of confidence abated in the 1980s and the impetus for white-collar crime to remain an enforcement priority reduced. Other concerns began to take precedence. A noteworthy new priority was President Reagan's "war on drugs" which took resources from white-collar crime policing efforts. The budget deficit also became a concern for the government (Poveda, 1992). The focus of white-collar crime enforcement shifted. It began to be used as a tool to protect federal revenues by reducing fraud, waste and abuse of federal funds (Poveda, 1992). However, for all it's problems, American governmental data is the best and most comprehensive available.
The nature of people prosecuted under the white-collar crime class of offences changed with the shift in focus and this was reflected in the literature. In America, Steffensmeier (1989) sampled police station records for fraud arrests and found that very few of those arrested were white-collar; in one station only 2% match criteria for white-collar status. Wheeler, Weisburd, Bode and Waring (1988) found that 43% of people convicted of offences designated “white-collar crime” did not have regular employment over the past five years. They also noted the heterogeneity in the socio-economic status (SES) of their sample of “white-collar” offenders. This heterogeneity was considerably greater than what would be expected from a sample taken from a white-collar population.

Assertions by Justice Department officials that white-collar crime can be “committed by all classes” are a logical contradiction (Poveda, 1992). The Justice Department’s definition of white-collar crime has relevance to it’s enforcement priorities, but their definition has questionable relevance to academic concerns such as the offender’s SES. The concentration on offence characteristics may have been tolerable to followers of offender based definitions if the prescribed offences were most likely to be committed by people in white-collar occupations. This was not the case. Pragmatic changes in Justice Department enforcement priorities have shifted offences classified as “white-collar crime” far beyond the realm of offences committed by white-collar workers. While Edelhertz rejected Sutherland’s definition of white-collar crime for being too restrictive, federal definitions of white-collar crime have become too inclusive for academic purposes.

Definitional disagreements have clouded the debate on exactly what type of people commit white-collar offences. Not all white-collar offenders are at the very top of the social hierarchy. However, available federal data does not make it easy to ascertain how far down the social hierarchy white-collar crime stops and where contamination by non-white-collar offenders begins.
Both Sutherland's and Edelhertz's definitions of white-collar crime have significant shortcomings. Sutherland's definition has strong intuitive appeal but it is too vague to be rigorously operationalised. Edelhertz's definition can be easily operationalised, but it's pragmatic focus has been extended by American governmental agencies to a degree where their new definition has lost sight of much of the theoretical relevance of the original concept. From a governmental perspective, it does not matter what you name a crime as long as it is properly policed. Officials are not interested in theoretical validity, they are interested in results. The same cannot be said for researchers. The problem for white-collar crime is that much research on it has been forced to use the American Government's data which uses a definition lacking in validity.

A successful definition of white-collar crime must concentrate on the features which are unique to white-collar crime, but with a degree of precision which is amenable to operationalisation. This is yet to be accomplished. The definitions described above fail to achieve both of these requirements; Sutherland only achieved the former, while Edelhertz only achieved the latter. The white-collar status of the offender must be included in a rigorous and operationalisable definition for the definition to be successful.

1.1.6 Criminal Versus Civil Prosecution of White-Collar Crime

The offence based definitions of white-collar crime upon which most research in the USA is based are criticised because many of the offenders included in governmental data on white-collar crime are clearly not of white-collar status. Unfortunately, there are other reasons to question the representativeness of official data on white-collar crime. A major source of official information comes from convictions in the criminal justice system. Criminal convictions are not pursued by enforcement agencies solely on the weight of the evidence. Civil litigation can be more attractive for pragmatic reasons such as the greater cost and effort required to secure criminal convictions, and the lower probability of success in criminal courts. Accordingly, much white-collar crime is enforced outside of the criminal justice system and is not represented in it's official
data. White-collar crimes convicted in the criminal justice system are only a subset of all white-collar crime, and may be systematically different from other white-collar crime in important ways.

Strict definitions of white-collar crime require that offences must be convicted under criminal statutes. This criteria's rigour is appealing. The requirement of criminal law for convictions to be made beyond reasonable doubt makes it highly likely the accused party was guilty of their offence. Thus, research using criminal prosecution data has a very low risk of the sample being contaminated by subjects falsely convicted of committing the crime(s).

However, scholars have questioned whether definitions of white-collar crime should require that white-collar offenders have criminal convictions (Blum-West & Carter, 1983; Newman, 1977) because the strict legal interpretation of criminality does not reflect the realities of policing white-collar crime. Strict definitions are blind to the effects which enforcement strategies used by regulatory agencies have on how these offences are recorded in official statistics. Commerce, the environment, and occupational health and safety are areas where white-collar crime commonly occurs. Organisations policing these areas often have the option of pursuing redress for infringements under either criminal or civil law (Newman, 1977). In many cases, the procedures are very similar (Blum-West & Carter, 1983). An important difference is that criminal proceedings have a much stricter burden of proof than civil proceedings. Two requirements must be fulfilled for a conviction to be made under criminal law. First, guilt beyond all reasonable doubt must be proven. Second, mens rea (to commit an act with conscious criminal intent) must also be proven. Decisions under civil law are made on the balance of probabilities. Because it is much easier to find a person or organisation guilty under a balance of probabilities than beyond all reasonable doubt, enforcement

---

4 In New Zealand the Court of Appeal has summarised the "intent to defraud", a critical element of white-collar crime as follows: "We think that in order to act fraudulently an accused person must...act deliberately and with the knowledge that he is acting in breach of his legal obligation." (Doone, 1990).
agencies usually choose civil prosecutions over criminal (Shapiro, 1990), although this approach is criticised for letting offenders avoid the criminal label (Sneider, 1990).

Because criminal convictions by definition imply criminal intent, where as civil convictions do not, criminal convictions attract a much greater amount of stigma than civil convictions (Clinard, 1990). Elite individuals and organisations will mobilise substantial resources to ensure that they avoid criminal convictions and any corresponding stigma. The incidence of criminal conviction is inversely related to the power of the individual or organisation to combat criminal convictions (Snider, 1990). Their considerable ability to contest whether they acted with mens rea makes civil litigation more attractive to prosecutors because mens rea does not have to be proved.

Mens rea is hard to prove in many complex organisational environments. The chain of command in larger organisations has considerable potential to diffuse responsibility for any given action. You cannot attribute criminal intent if you cannot clearly identify the perpetrator. The chain of command and responsibility for white-collar crimes can be intentionally obscured or diffused between many parties (including innocent people ignorant of the crime). Incriminating documentation can be systematically destroyed. Even without systematic methods, organisations can threaten to tie up prosecutions pursued by enforcement agencies in protracted and expensive litigation. The complex nature of many business transactions can also cast doubt on whether the crime occurred at all. The strict requirements of criminal law, especially the establishment of mens rea, are not amenable to the complexity of many white-collar crimes and the environment in which they occur.

Because of these factors, many agencies favour civil actions as a more efficient way to police organisational behaviours, even when criminal litigation is quite possible. Hagan and Parker (1985) found only one third of securities violations in Ontario Canada were criminally prosecuted. The weight of the evidence against the defendant was the prime
determinant of the choice of legal action. Criminal proceedings tend to be held in reserve for serious offending or when there is especially strong evidence.

Decisions made by enforcement agencies to pursue civil rather than criminal proceedings are generally made for the sake of administrative convenience rather than the nature of the offending per se. It is apparent that criminally convicted individuals and organisations are only a small subset of all those who engage in white-collar crime. The lack of a civil conviction does not automatically establish that the actions of an organisation or individual are not violations of criminal law. The representativeness of any sample using only convicted individuals and organisations is questionable. However, criminal data remains the primary source of information on white-collar offenders.

1.2 Why White-Collar Crime is Not Successfully Explained by General Theories of Crime.

"General theories of crime" is the name given by the author to theories which attempt to attribute all crime to a particular cause or related set of causes. There are two types of general theories of crime. The first are cognitive theories. Cognitive theories are a subset of general criminological theories which attribute criminal and deviant behaviours to stable and innate personality and cognitive factors. The second are socialisation theories. They suggest offending and deviance is socially learned from deviant subcultures.

The problem for both types of theories is that white-collar offending defies the explanations offered by either of them. Cognitive theories of crime are defied by the white-collar offender because, by definition, the white-collar offender is not deficient in the mental skills or abilities necessary to apply themselves to the type of tasks found in their positions.
Socialisation theories are also defied by the white-collar offender because of two reasons. Firstly, the typical white-collar offender does not come from an underprivileged background, thus they are not likely to be exposed to the criminogenic subcultures that some suggest dwell predominantly in the lower socio-economic classes. Secondly, the white-collar employee has demonstrably normative values. Their values need to be sufficiently similar to those of the organisation and their fellow employees to allow for harmonious interactions between all parties. Even if the white-collar employee has had an underprivileged background, they need to have internalised enough normative social values to be acceptable to their employer and co-workers. Therefore, white-collar offenders are not poorly socialised or lacking in cognitive abilities.

1.2.1 Sociological Theories of Criminal Behaviour

Since before the turn of the century it has been believed that crime was predominantly the domain of the lower classes, and this belief has been strongly influential on many sociological and criminological theories of crime (Tittle, 1983). This belief has become known as the negative class/crime relationship (Tittle, 1983). A corollary of this belief is that people with lower SES are on average less committed to normative social values than people with higher SES, and accordingly are less constrained by social norms prohibiting deviant behaviour.

The growing belief that white-collar crime is a common form of crime, if not the most common, is contrary to the predictions of the negative class crime relationship. White-collar offenders are by definition not members of the lower social classes, in fact their status is relatively elevated. Moreover, because white-collar offenders are not members of the lower social classes, they are not likely to be significantly exposed to the deviant subcultures which are suggested to exist in the lower social classes. While the
frequency of white-collar crime offers a strong argument against the negative class crime relationship, research findings have been more ambiguous.

Tittle, Villemez and Smith (1978) surveyed studies of criminal and deviant behaviour which used self-report data and criminal justice system data. They found that while earlier criminal justice system studies showed a negative class crime relationship, the strength of the relationship showed a monatomic decline in more recent studies. Self-report studies also found a much weaker relationship than criminal justice system studies. Braithwaite (1981), also investigated the literature on the negative class crime relationship. He surveyed a much larger number of studies than Tittle et al., and found considerable support for the negative relationship. Tittle et al. were strongly criticised for suggesting that their survey of the literature was exhaustive when it was not, and also for a number of methodological flaws (Braithwaite, 1981).

Tittle (1983) argued that many sociological theories did not successfully account for criminal behaviour. They relied on the additional external assumption of a negative class crime relationship. While his argument had merit, the findings of Braithwaite (1981) offered strong support for the validity of the negative class/crime relationship. Tittle may have been correct when he suggested that many sociological theories relied on the external assumption of a negative class/crime relationship, but Braithwaite's findings suggest that the relationship actually exists.

White-collar crime offers a strong challenge to the negative class/crime relationship. Deviant subcultures which exist in the lower strata of society cannot be the only significant factor influencing crime because white-collar people frequently commit crimes yet they are free of the socialising influences of the lower classes. Different explanations need to be sought for white-collar crime.
1.2.2 Cognitive Theories of Criminal Behaviour

Cognitive theories of crime (which attribute offending to stable and innate traits) are also presented with considerable problems by white-collar crime (Croall, 1992). These theories suggest that crime is the result of deficient cognitive abilities and innate behavioural potentials which hinder the actors ability to behave in socially appropriate ways.

Travis Hirschi and Michael Gottfredson (1987; 1989; 1990) are influential proponents of trait based theories. They define criminality as:

"...the tendency of individuals to pursue short-term gratification in the most direct way with little consideration for the long term consequences of their acts...Indicators of such a tendency include impulsivity, aggression, [high] activity level, and a lack of concern for the opinion of others...People high in this tendency are relatively unable or unwilling to delay gratification; they are relatively indifferent to punishment and to the interests of others. As a consequence, they tend to be impulsive, active, and risk-taking."

Hirschi and Gottfredson suggest that criminally inclined people are unable to delay the pursuit of gratifying goals. They feel so strongly motivated by their goals that they are willing to use socially prohibited means to accomplish them, even if this imposes considerable costs on themselves and others. The gratification of goals is pursued with urgency, in a reckless manner which is intentionally or unintentionally ignorant of social prohibitions and aversive consequences.

The most central concept to the theory is self-control, a concept which has featured in other theories of crime (e.g. Wilson & Herrnstein, 1985). Hirschi and Gottfredson suggest that low self-control is by far the most significant causal factor for criminal behaviour, discounting other innate or social factors as significant causes. People with high self-control are suggested to be able to restrain themselves from pursuing goals in
socially deviant ways. They are also more capable of accurately anticipating the long term consequences of their actions. These people plan their actions more carefully and are more cognisant of the personal and social benefits of pursuing goals in a socially desirable way. Hirschi and Gottfredson suggest that self-control exists on a continuum, with people exhibiting varying degrees of it. It is conceivable that a person's capacity to delay self-gratification may vary depending on factors such as tiredness, family environment and drug use.

While this theory has received considerable attention it has not gained acceptance by many scholars, especially those studying white-collar crime. This is in part due to strong criticisms of a central assumption of their theory. Hirschi and Gottfredson suggest that their research shows there are no substantial differences between population subgroups in their rates of offending. They used their results to invalidate theories which attribute crime and deviancy to socialisation because these theories suggest rates of crime should vary with SES. Hirschi and Gottfredson suggest the "uniform" rate of crime between groups implies that crime has a unitary cause, which they claim is low self-control. Steffensmeier (1989) strongly criticised this assumption, demonstrating that contrary to their claims, white-collar offenders were materially different from other offending groups, suggesting their crimes had different causes to other criminals. Steffensmeier noted many other authors found Hirschi and Gottfredson's claims "overstated and misleading".

There are a variety of strands of evidence which cast doubt on low self-control as the sole cause of criminal behaviours. While low self-control has long been implicated in criminal and deviant behaviours, some research suggests that it is not necessarily a prerequisite for such behaviours. Blackburn (1968) found a significant minority of violent offenders had very high self-control, unlike the majority of violent offenders who had low self-control. Compared to the low self-control subjects, those with high self-control were more likely to deny they had socially undesirable traits, had less feelings of anger and hostility and had lower scores on the MMPI psychopathic deviate scales.
While those with high self-control wanted to present an image of being normal, they committed more intensely violent acts than those with low self-control. Blackburn suggested that people with very high self-control were capable of being extremely violent, despite their pro-social characteristics, because they “bottle up” their anger and tensions until they are overcome and violently strike out. These results are supported by more recent studies which found differing levels of ego control, a similar construct to self-control, in different types of offenders (Laufer, Johnson & Hogan, 1981; Wilson & Herrnstein, 1985).

While committing a serious assault is very different from committing white-collar crime, Blackburn’s research does suggest low self-control is not a prerequisite for all criminal behaviours. Benson and Moore (1992) suggested the elite type of white-collar offender may have higher than average levels of self-control. Elite white-collar offenders are aggressive and show little concern for others, but in a carefully controlled way. They are mindful of the boundaries imposed by their social, occupational and legal environments. Elite white-collar offenders will behave criminally when their behaviours enhance the probability of attaining valued goals, but they have sufficient self-control to repress behaviours which risk incurring serious costs. High self-control may actually facilitate the successful commission of white-collar crimes.

Like Hirschi and Gottfredson, Caspi et al (1994) found support for the influence of a construct similar to self-control on criminal and deviant behaviours. However, they also found evidence that negative emotionality was also a factor. This implies there are other significant factors in crime as well as low self-control. They commented that Hirschi and Gottfredson’s suggestion that self-control was the only significant innate factor in criminal behaviours was:

"...simplistic psychologically. Crime-proneness is defined not by a single tendency (such as self-control or impulsivity) but by multiple psychological components."
The typical characteristics of white-collar offenders cause considerable problems for Hirschi and Gottfredson’s assertion that poor self-control is the unitary cause of crime and deviance. Firstly, most white-collar offenders do not have significant histories of offending (Weisburd et al., 1991). If they are predisposed to impulsively pursue gratification, why has this not been expressed until a specific offence? Secondly, white-collar offenders are typically older than other types of offenders (Weisburd et al., 1990). They have had ample time to commit other offences. If they have previously resisted other forms of illegal behaviour, would this not demonstrate that they are capable of self-control and accordingly deferring the reckless pursuit of gratification? Thirdly, white-collar positions typically require professional training and/or much experience in a particular field. This long, slow and potentially difficult progression up the occupational hierarchy requires white-collar professionals to have sufficient self-control to be able to endure short term disadvantages in order to attain more substantial longer term goals. Finally, many white-collar crimes are committed over long periods of time, much longer than most other crimes (Shapiro, 1990), requiring considerable planning and ongoing efforts to commit and conceal them. This style of crime does not offer the immediate rewards craved by low self-control offenders. These typical characteristics of white-collar offenders are dissonant with Hirschi and Gottfredson’s characterisation of the criminal as someone who has low self-control.

Eysenck is another strong proponent of cognitive causes of white-collar crime. He implicates intelligence, psychoticism and neuroticism in general offending (Eysenck & Gudjonsson, 1989). He does not elaborate on the relationship between psychoticism and neuroticism and white-collar crime. Impulsivity and sociability are two subtraits which are suggested to have an especially strong influence on criminal behaviours. These two factors parallel Hirschi and Gottfredson’s factors of self-control and the ability to anticipate the social consequences of crime. Accordingly, the influence of impulsivity and sociability on white-collar crime can be rejected for the same reasons as Hirschi and Gottfredson’s factors.
Intelligence is also suggested by Eysenck to have a very significant negative relationship with general criminality, more influential than psychoticism and neuroticism. He suggested that white-collar offenders who are caught have a lower level of intelligence than those who are not caught. The high calibre of many who have been charged with white-collar crimes casts doubt on the validity of Eysenck's assertion. Hayes and Walker (1986) noted that while there is much research connecting lower intelligence to crime, there is also considerable variation in this relationship which suggests that other factors are also responsible for crime.

Cognitive theories of crime attribute crime to low intelligence or innate antisocial behavioural potentials. Both of these characteristics are not attractive to employers, especially for white-collar positions. Accordingly, employers tend to expend resources and energies in order to avoid employing people with these criminogenic potentials. Furthermore, it would be reasonable to expect that many people with these potentials who make it through selection procedures would be relatively quickly removed from their positions should they behave in an antisocial manner. It is not plausible to attribute the vast majority of white-collar crime to people with low intelligence or innate antisocial behavioural potentials.

1.3 Characteristics of White-Collar Offenders

Very little is known about white-collar crime and white-collar offenders, partly because of the lack of suitable official data. New Zealand is especially lacking in official information (Doone, 1990). Even when there is data, methodological and theoretical disagreements cast doubt on its validity. This state of affairs is in part due to exceptional difficulties facing white-collar crime researchers. While scholars have made some promising suggestions, there are problems with gathering data for testing them. Even when there are significant findings, they are rarely replicated. In short, it is difficult to get a firm answer in the literature to almost any questions. Knowledge of white-collar offenders is so limited there are no accepted programmes of treatment for convicted
white-collar offenders (Thomas, 1993; Harris, 1991). Baring this in mind, a synopsis of the most significant findings on white-collar crime follows.

Almost all research has failed to differentiate white-collar offenders from their non-offending counterparts on the basis of demographic characteristics. Accordingly, the typical demographic characteristics of white-collar offenders are the same as for all white-collar workers. They tend to be white, male, middle class, middle aged, and they have a minimal or non-existent prior criminal record (Weisburd et al, 1991). The biases which favour placing these people in white-collar positions mean that relatively few from other demographic groups gain white-collar positions, precluding them from being able to commit white-collar crime.

A group of researchers from Yale University are involved in arguably the most complete programme of study on white-collar crime ever. They have published several papers on a variety of aspects of white-collar crime, from the sentencing of white-collar offenders (Wheeler, Weisbur & Bode, 1982) to the demographic characteristics of white-collar offenders (Wheeler, Weisburd, Waring & Bode, 1988). Their book *Crimes of the Middle Classes* summarises their findings (Weisburd, Wheeler, Waring & Bode, 1991). The researchers used eight categories of offences suggested to be representative of white-collar offences. The categories are antitrust practices, securities fraud, bribery, mail fraud, false claims, tax fraud, credit fraud, and bank embezzlement.

The Yale studies have made the most significant contribution to the understanding of white-collar crime for a very long time. The Yale research originated in a congressional request for information on white-collar crime. This weighty backing allowed the researchers access to data which was previously unavailable to white-collar crime researchers. This data came from the Federal Bureau of Investigation's Uniform Crime Reports (UCR) and Pre-Sentencing Information reports (PSI) used by the federal courts. PSIs are prepared by probation officers and give a detailed background of convicted offenders in order to assist judges in sentencing. The PSIs used in the research ranged
from three to twenty pages in length. They usually include background information essential to the case, the defendants medical history, employment history, family history, an overall summary of the defendant, and descriptions of the offence from the perspectives of the defendant and the prosecution. The rich detail and depth of the data allowed for unprecedented insight into white-collar crime and white-collar offenders.

However, for all the strengths of the data used, there are reasons to question how representative the crime categories used in their studies were of white-collar crimes. As noted earlier, while the FBI recorded data specifically on white-collar crime, shifts in policing priorities have resulted in their definition of white-collar crime including a much broader range of offences than what many scholars would consider to be "white-collar crime". The effect of this shift in definition is demonstrated by the Yale study's data which contains a considerable minority of petty frauds and offenders who were of less than white-collar status. Green (1993) noted embezzlement, one of the categories of crime in the Yale study, is very broad and many arrested for embezzlement clearly do not meet traditional offender based criteria for white-collar offenders. A significant minority of the Yale sample were of lower SES, many were not in steady employment, and 43% (excluding antitrust offenders) had prior offending records (Weisburd, Chayet & Waring, 1990). This last observation should be tempered with the fact that virtually all street criminals have arrest records (Wheeler et al, 1988). If the offence categories based on UCR data used in the Yale studies are believed to be truly representative of white-collar crime, the results suggest some white-collar crime shares many characteristics with "street crime". Conversely, the results can also be interpreted to indicate the sample used in the Yale studies is contaminated by non-white-collar criminals and that many of the crimes in the sample are not consistently representative of white-collar crime.

While the quality of their data was a major advance on data used in previous studies Weisburd et al. noted that there were still significant limitations in their sample. Their data was only from cases prosecuted in the federal courts. Differences in enforcement
and law between federal agencies and state agencies mean that the offences used by
the Yale study were not representative of all white-collar crime in the USA, and
accordingly would be a source of bias in the data. Perhaps even more significantly, they
noted that their data only covered criminal convictions. Weisburd et al. recognised the
debate over the inclusion of civil offences in definitions of white-collar crime.

Weisburd et al. defend their use of a more liberal and inclusive offence based definition
of white-collar crime rather than an offender based definition for two reasons. First, their
broad definition encompassed several more restrictive definitions allowing for
comparison between them (see Figure 1). Second, their definition allowed the extent of
the crimes of the middle-classes to be ascertained for the first time. They found white-
collar crime to be predominantly a middle class phenomenon. This finding was a
revelation and the most significant of the Yale studies. Previously it had been assumed
the middle classes had relatively low rates of offending because they have strong
normative social values. The crimes of the middle classes have been largely ignored by
criminological theories. Traditional white-collar crime theories only accounted for the
 Crimes of people with high SES and general criminological theories only accounted for
the crimes of people with low SES. This may be acceptable if the middle classes were
relatively more law abiding than those at both extremes of SES, but this is not the case.
Middle class crime was found to be the most common form of white-collar crime, much
more common than elite white-collar crime. The implications of Weisburd et al.’s (1991)
findings for criminological theories are considerable. The failure of existing theories to
predict the extent of middle class crimes suggests that they are seriously deficient.

Weisburd et al. compared Katz’s (1979)\(^6\) definition of white-collar crime to their own. As
can be seen in Figure 1, the amount of agreement between Katz’s offender based
definition of white-collar crime and the Yale study’s offence based definition is highly
dependent on the category of crime. The characteristics of offenders in the antitrust and
securities fraud offence classes are a good match with the predictions of offender based
definitions of white-collar crime, but the match in characteristics decreases down the list to tax fraud. The differences between offender based definitions and offence based definitions are best demonstrated by the analogy offered by Weisburd et al. They suggest that white-collar crime and street crime are at opposite ends of a continuum, and they overlap in the middle. Classical offender based definitions were suggested to draw their line further away from street crime than the offence based definition used by the Yale studies.

Figure 1. Percentage of Sample Made Under an Offence Based Definition of White-Collar Crime Who Meet an Offender Based Definition of White-Collar Crime, Contrasted with Social and Demographic Characteristics of White-Collar Offenders* (Wheeler, Weisburd, Waring & Bode, 1988).

<table>
<thead>
<tr>
<th>Offence</th>
<th>Percent</th>
<th>Offender Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antitrust</td>
<td>100.0%</td>
<td>White, male, middle aged, stable white-collar employment, well educated, high SES.</td>
</tr>
<tr>
<td>Securities Fraud</td>
<td>72.3%</td>
<td>Unlikely to have prior criminal record.</td>
</tr>
<tr>
<td>Bribery</td>
<td>72.3%</td>
<td>White, male, middle aged, stable white-collar employment, well educated, high SES.</td>
</tr>
<tr>
<td>Mail Fraud</td>
<td>30.2%</td>
<td>Likely prior criminal record.</td>
</tr>
<tr>
<td>Credit Fraud</td>
<td>26.8%</td>
<td>Less than half steadily employed. Few material assets, nearly half have prior criminal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>convictions, relatively young, male, low level of education.</td>
</tr>
<tr>
<td>False Claims</td>
<td>25.5%</td>
<td></td>
</tr>
<tr>
<td>Bank Embezzlement</td>
<td>23.4%</td>
<td>The youngest, approximately equal numbers of males and females, unlikely to be</td>
</tr>
<tr>
<td></td>
<td></td>
<td>unemployed or to have prior criminal record, low level of education.</td>
</tr>
<tr>
<td>Tax Fraud</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>All White-Collar Crimes</td>
<td>29.2%</td>
<td></td>
</tr>
</tbody>
</table>

*Wheeler et al (1988) warn that there was considerable variation within each offence category, and that the descriptions are of aggregate characteristics.

The issue of whether offence based definitions of white-collar crime offer significant advantages over offender based definitions is open to debate. Both have notable strengths and weaknesses. The Yale studies have convincingly demonstrated that classical definitions of white-collar crime are too narrow, especially because they have

---

5 Katz defined white-collar social status as "bourgeois professions (doctor, lawyer, accountant, cleric), the managerial ranks of public and private corporations, public officials with significant discretionary powers (i.e., not mailmen), and owners of substantial capital."
failed to uncover the very significant amount of middle-class crime. Conversely, offence based definitions include a significant minority of the offenders who obviously do not have white-collar status. The integration of the strengths of offender and offence based definitions into a single theory of white-collar crime would offer a significant advance over the existing theories.

Despite the detrimental effects of definitional problems, the Yale studies found many aspects of white-collar crime to be materially different from street crime. On average white-collar crime caused more financial harm than street crime. While only 2% of street crime involved the unlawful taking of money or assets worth $100,000 or more, this amount increased to 16.2% for white-collar crime (Wheeler, Weisburd, Waring & Bode, 1988). White-collar crime was much more likely than street crime to use a legitimate organisation for the commission of the offence. It also used more people and was better organised (Wheeler et al, 1988). White-collar crimes were more likely to be national or international in scope. Despite the heterogeneity of the characteristics of white-collar offenders, some clear differences were found between them and street criminals (Wheeler et al, 1988). White-collar offenders were better educated and they have more material wealth. 46% of white-collar offenders owned their home while only 6% of street criminals owned their home. 82% of white-collar offenders were white where as 34% of street criminals are white (Wheeler et al, 1988). White-collar offenders were usually adults when they were arrested for the first time, where as street criminals were more likely to be adolescents (Weisburd et al, 1990). These statistics are supported by Steffensmeier, Allan, Harer and Streifel (1989) who found those convicted for forgery and embezzlement are approximately 10 years older than those convicted under other offence categories.

One notable finding of the Yale studies was that most white-collar crime was relatively mundane compared to the stereotype, especially common in the media, of complicated and meticulously perpetrated crimes. These findings are supported by the experiences of fraud prevention and control practitioners (Wells, 1990). Weisburd et al. (1991)
described the basic ingredients of most white-collar crime as “lying, cheating and fraud”. Croall (1989) observed white-collar crime cases in English courts. She found that many white-collar crimes were routine violations of regulatory civil laws, rather than criminal laws. Levi (1993) has also noted most “white-collar” crime was not sophisticated. He observed that the majority of frauds in Britain involve the misuse of checks and credit cards, which are simple crimes that have more in common with street crime than white-collar crime. The perpetrators of these crime were typically people of blue-collar status.

Another significant finding of the Yale studies was that white-collar crime occurs in a bewilderingly large number of varieties, both within and between the eight classes of crime used in the research (Weisburd et al., 1991). One way they made sense of this variety was to conceptualise white-collar crime as varying in the amount of complexity (See Figure 1). Many factors contribute to the complexity of an offence, such as the number of people involved, the amount of organisation of the offence, and the extent of the efforts to conceal the offence. Antitrust and securities fraud are the most complex class of offences. In the middle are bribery, mail fraud and false claims. The most simple white-collar offences are tax fraud, credit fraud, and bank embezzlement.

The complexity of the offence is in turn positively related to the seriousness of its harms and the status of its perpetrators. Hagan and Parker (1985) found that the more organised securities crimes were, the broader the scope of their impact. Not only are more complex crimes more harmful, they are also committed by people of higher status (Wheeler et al., 1988). The harms caused by white-collar crime, the level of organisation of the crime, and the social status of its perpetrators are intimately inter-related. Only people of high status have access to the resources suitable for committing the most serious forms of white-collar crime. Members of the elite have a lot of power, offering them unique and unusually profitable opportunities to commit crime. The harms caused by their crimes are the most serious because they are intentionally designed to yield considerable benefits for themselves. These considerable benefits are felt by their victims as considerable losses or harms. For example, the collapse of the Bank of
Credit and Commerce International (BCCI) resulted from one of the biggest white-collar crimes ever. Funds worth $20 billion US dollars were fraudulently obtained from investors (Financial Times, 1991). Most people do not have the power necessary to commit crimes of this scope, and accordingly cannot inflict this amount of harm on others. Complexly organised offences are much less common than less complex forms of white-collar crime (Weisburd, Wheeler, Waring & Bode, 1991). However, it is unknown whether the net impact of the greater harms caused by more organised offences is offset by their lesser frequency.

It should be noted that the classes of white-collar offences which are the most sophisticated, most harmful, and are committed by the most privileged are also those that most closely match traditional offender based definitions of white-collar crime (see Figure 1). As the offence classes progress from the most complex to the most simple, their match with the predictions of offender based definitions decrease. The decrease in the offender's match corresponds to an increase in their similarity to street criminals. This is not surprising because traditional definitions of white-collar crime and earlier studies of white-collar offenders placed much emphasis on the crimes of the elite.

Just because the elite can commit the most materially rewarding, organised and harmful offences, it does not necessarily follow that they will always commit the most organised and harmful crimes. These people can and do also commit more mundane white-collar crimes which are typical of less powerful groups (Weisburd et al, 1991). Despite the diversity of the white-collar offenders characteristics, the researchers at Yale noted that most offenders share the ability to be a "con man", not in the stereotypical sense, rather by presenting themselves with an aura of legitimacy and normalcy. They share the ability to persuade others that they are worthy of being entrusted with their assets and resources.
The involvement of women in white-collar crime follows the pattern of women's involvement in white-collar employment. Women are underrepresented over all in white-collar employment and their representation further diminishes with increased occupational status. The male dominance of offences in the Wheeler et al. (1988) study ranged from 99.1% for antitrust cases to 54.8% for bank embezzlement. On average males accounted for 85% of the sample, compared to an average of 69% for males in street crime. Daly (1989) performed a quantitative study of the role of women in white-collar crime. She found that 35% to 40% of people arrested in America for embezzlement, forgery and fraud are women. This suggests women form a substantial minority of white-collar offenders. There is also evidence that the male and female share of white-collar crime is converging (Daly, 1989). However, Daly noted there were significant differences in the trends shown by research using offence based definitions of white-collar crime (i.e. mostly using UCR data) and research using offender based definitions, which suggested women play a very minor role in white-collar crime. Daly used Wheeler et al.'s (1982) UCR data and eight offence categories, noting the weaknesses of using offence based data. She found women's involvement in white-collar crime varied considerably across the eight categories, from 45% of embezzlers to less than 5% of securities, bribery and antitrust offences.

These results are contradicted in a study by Lockhard, Kirkevold and Douglas (1980). They found women's involvement in crimes involving deception, which includes all types of white-collar crime, was at a ratio of two men for one woman, while for property crimes women were outnumbered by men nine to one. Differences between the studies may be due to the types of crimes sampled. White-collar crime was not the focus of Lockhard et al.'s study.

Collins and Schmidt (1993) administered incarcerated white-collar offenders with a battery of tests for comparison with a sample of white-collar workers. Dimensions measured included personality traits, personal integrity and biographical information. White-collar offenders were found to have a greater tendency towards irresponsibility,
lack dependability, and have a lower regard for rules and social norms. The trend shown by white-collar offenders across the measures was described as a lack of "social conscientiousness". However, a lack of social conscientiousness is contrary to the evidence suggesting white-collar offenders do possess normative values. If a lack of social conscientiousness is a significant factor in white-collar crime, it would have to work in subtle ways.

White-collar offenders are consistently found to not perceive themselves as criminals (Benson, 1984, 1985, 1990; Benson & Cullen, 1988; Rothman & Gandossy, 1982). While they may admit what they did was a violation of the law, they frequently and strenuously deny they are of the "criminal type" (Benson, 1985), and offer explanations of their behaviour intended to demonstrate this (Rothman & Gandossy, 1982; Benson, 1990). They resent the efforts of the criminal justice system, especially during the trial process, to publicly label them as criminals (Benson, 1990). During the trial the prosecution is required to demonstrate the pejorative intent of the defendant. This is frequently done by concentrating on the less socially desirable actions of the defendant and magnifying the seriousness of their crimes (Benson, 1990). White-collar offenders feel aggrieved by this tactic because their good acts are ignored, they feel that the portrayal is one sided and unfair. They believe that if their behaviour is analysed as a whole, the sum of their actions show them to be a good person. Many white-collar offenders have been exemplary members of society other than their usually limited offending histories. When sentencing, judges struggle with balancing the good acts of the white-collar offender against their crimes (Wheeler, Weisburd & Bode, 1982). This is one of the reasons why white-collar offenders can receive sentences which the public perceive as lenient.

When in jail, white-collar offenders are usually excellent inmates. Their behaviour towards prison management and wardens is extremely cooperative, showing an "almost sycophantic submission to authority and an almost compulsive observance of organisational rules" (Benson & Cullen, 1988). White-collar offenders generally reject
prison inmate culture and seek out inmates with similar backgrounds and attitudes to their own (Benson & Cullen, 1988). They perceive themselves to be morally superior to street criminal inmates (Benson & Cullen, 1988), however, their relationships with them are positive. Prison managers in New Zealand have observed other inmates seeking out white-collar offenders for advice on matters relevant to their technical expertise, such as legal advice from incarcerated lawyers. Benson and Cullen (1988) suggested that contrary to popular wisdom white-collar offenders have good resources which help them to cope well with the prison environment. Unlike most other prisoners, they are used to existing in hierarchical environments, and have no problem with deferring to authority figures.

The strenuous efforts of white-collar offenders to resist the criminal labelling process and their excellent behaviour when incarcerated suggests they do not share the values of street criminals and other deviant subcultures, and they wish to be perceived to have normative social values. The vast majority of the white-collar offender's behaviours when in jail are acceptable to normative values. These behaviours suggest that the white-collar offender does truly believe in normative values.

1.4 Motivations to Commit White-Collar Crime

The brevity of this section is testament to the lack of meaningful insights into the reasons why white-collar crime occurs. Motivation is a critical factor in the commission of crime, yet little can be distilled from the literature aside from self-apparent generalisations.

One common factor to most, if not all white-collar crime is greed (Croall, 1992; Braithwaite, 1985). Most theorists agree on this, but as Braithwaite (1985) noted, greed is too broad a concept to be of much theoretical use. There has been much speculation on other factors which motivate white-collar workers to commit crime such as boredom,
a desire for revenge, and loyalty to another person or group (e.g. Stotland, 1977), but they are seldom tested (Croall, 1992).

The Yale researchers noted that a very common factor among white-collar offenders was a pressing financial need (Weisburd, Wheeler, Waring & Bode, 1991). Donald Cressey's (1986) research led him to a similar conclusion. He suggested white-collar crime is motivated by "unshareable financial problems", noting much white-collar crime accompanied grandiose lifestyles of "wine, women and wagering". The Yale researchers observed that while many white-collar offenders had substantial incomes and resources, they were frequently overwhelmed by credit obligations (Weisburd, Wheeler, Waring & Bode, 1991).

There is some evidence suggesting men and women have different motivations for committing white-collar crime. Zeitz (1981) found women are more motivated by the needs of others, especially family and partners. Men are prone to rationalising white-collar crime as borrowing. Women do not do this, they recognise their acts as theft. There is little in the literature to support or refute Zeitz's findings.

White-collar crime intrinsically involves the criminal pursuit of material gain or the criminal prevention of material loss. Accordingly, it is not surprising that greed and pressing financial need are common motivations for white-collar crime. Both can be strong motivations, and for someone working in a white-collar position it is likely that they will have access to substantial resources and funds which they can criminally manipulate for their own gain. Unfortunately, little is known about why white-collar offenders find themselves with unshareable financial problems, or why they are greedy.

1.5 Review

Very little progress has been made in understanding white-collar crime and white-collar offenders. Several reasons for this have been given:
1. The covert nature of white-collar crime

2. Problems with defining white-collar crime

3. Biases in official data on white-collar crime caused by
   a) the adoption of a broad offence based definition in America by the FBI
   b) the tendency of enforcement agencies to not prosecute white-collar crimes under criminal law, even when this is possible

4. The failure of general theories of crime to successfully account for white-collar crime

The general theme to these problems is that there is poor information on white-collar crime and there is poor theory on white-collar crime. The two are inter-related. It is hard to develop good theory without good information, and it is hard to look for good information without good theory to suggest where it should be sought. Improvements in one area are likely to contribute to improvements in the other.

The consistent failure to make progress over many decades suggests that new approaches to data and theory on white-collar crime should be investigated. A new approach to white-collar crime follows.

### 1.6 The Role Of Competitive Values In White-Collar Crime

The theory of white-collar crime suggested below is heavily based on suggestions made by Coleman's (1987) "Interactionist Theory of Motivation" which comprises part of his "Integrated Theory of White-Collar Crime". His theory attributes white-collar crime to socialisation, but differs from other socialisation theories by suggesting that the values conducive to white-collar crime are learned from within normative culture. Other socialisation theories tend to attribute white-collar crime and general crime to non-
normative values learned from deviant subcultures. At face value, Coleman's suggestion that criminal behaviours can originate from within normative social values may appear to be an oxymoron. However, he suggests that it is the over emphasis of certain values at the expense of others which can results in extremes of behaviour which are criminal. His theory has appeal because most white-collar offenders are free of the influence of deviant subcultures and appear to be committed to normative social values. It would be reasonable to expect that criminogenic influences for these people would come from within normative culture.

One of the most perplexing features of white-collar offenders is that many have long histories of positive community involvement yet their crimes involve highly antisocial behaviours. The author describes this as the paradox of the white-collar offender. Stated another way, the white-collar offender appears to be committed to normative social values, yet he or she commits crimes which seriously violate the prohibitions found in normative social values. This contradiction is problematic for general theories of crime because the white-collar offender's pro-social conduct can be offered as a counterpoint to the enduring patterns of deviant behaviour predicted by general theories of crime.

Unlike most other theories of crime, Coleman's theory can account for the paradox. A major proposition of his theory was that the motivations for white-collar crime originate in the pressures created by capitalist societies for their members to constantly increase material wealth and social status. While white-collar offenders tend to believe in normative social values, their belief in the goodness of material gain can become disproportionately influential when compared to other normative values. At first glance the criminal influence of capitalist culture may be taken to be relatively benign when compared to other criminogenic forces such as drug addiction, gang affiliation and violent psychiatric disorders. In many ways these other factors are much more immediate and potent than capitalist culture, but the reason why capitalist culture is more influential for the people who commit white-collar crime is that they are not subjected to these other factors.
Coleman notes that because there "seems to be nothing unusual about the white-collar offenders biological makeup or socialisation" other factors must be examined as causes of white-collar crime. He suggests the interactionist approach is suitable for this task because it conceptualises motivation as a socially defined symbolic construct. Socially defined symbolic constructs prescribe what goals are desirable. Not only are goals and associated values socially learned, the appropriateness of different ways of pursuing these goals are also socially learned. Simply put, people feel motivated to achieve goals which are socially learned, and people also learn what are appropriate ways to enact our motivations in order to achieve goals.

Material gain is a highly valued goal in western cultures. While there are prohibitions for achieving material gains through deviant and illegal means, Coleman suggests material gain can become so strongly valued that it overrides many prohibitions for achieving it. Materialism, individualism (Behrman, 1988; Chryssides & Kaler, 1993) and other values are all part of what Coleman called capitalist culture. Coleman suggests that a central feature of capitalism culture is the competitiveness between members of the culture for material gain. He calls this the culture of competition. Success in capitalist cultures is measured by the acquisition of material wealth and status relative to the success of other members of society.

Other influential theorists have also speculated that the competitiveness for material gain encouraged by capitalist culture may be a significant motivating factor for white-collar crime. This suggestion began with Sutherland (1949) and have continued to this day. Weisburd et al. (1991) stated:

"This really takes us back to the basic value structure of our society. If, in the socialization process in the family, neighbourhood, and school, persons learn that life's lessons counsel risk taking and the rewards of material affluence rather than honesty and material integrity, we then can be sure that many will aim for the "fast track," despite running the risks of illegality. And here we run
into one of Sutherland's major themes - namely, that if people are surrounded by definitions and situations favourable to the violation of the law they will become law violators.*

Braithwaite's (1992) theory of white-collar crime suggests social inequality can be a motivating factor for the crimes of both the advantaged and disadvantaged. His theory suggests we all have needs. If they are sufficiently strong, needs can motivate criminal behaviours in order to satisfy them. Needs are not the same for all social classes. Members of the lowest social classes are less likely to be able to meet their needs for a minimal standard of living. Braithwaite described these basic needs as goods for personal use. Because people with higher social status are less likely to be wanting for goods for personal use, their needs are of a different nature. They need goods for exchange with others so they can further increase their material wealth. Goods for personal use are different from goods for exchange. All goods for personal use are necessary to maintain a basic standard of living, while goods for exchange are surplus to goods for personal use and are used to increase their owners affluence. Crimes pursuing goods for personal use are motivated by need, while crimes pursuing goods for exchange are motivated by greed.

Social inequalities were suggested by Braithwaite to increase crime because of two reasons. First, they decrease the goods for personal use available for the underprivileged social classes to satisfy their needs. Accordingly, they need to resort to deviant and illegal means to ensure their basic needs are met. Second, inequalities increase the availability of the goods for exchange for the rich, allowing them to acquire even more goods. This in turn decreases the availability of goods for personal use, further impoverishing the lower classes. The rich keep on wanting to acquire goods for exchange even when their basic needs are amply catered for because their "need" is socially constructed. Like Coleman, Braithwaite emphasised the social construction by capitalist culture of the need for material success. For every material goal that is attained, there is a higher one to strive for. While the need for goods for personal use
can be satisfied, capitalist culture creates a need for goods for exchange which can never be satisfied. This pressure created by capitalist culture can be so great that it motivates criminally deviant actions in order to achieve further material wealth.

1.6.1 The Origin of the Culture of Competition

Having attributed white-collar crime to the culture of competition, it is necessary to identify where competition originates from. Coleman suggests the origin is in the political economy of industrial capitalism, which began in the seventeenth century with the industrial revolution. Industrialisation vastly increased the ability of people to produce goods. The capacity to reliably produce large surpluses reduced the tendency of people to share their excess resources because excess resources offer their producers an opportunity to substantially better their own living standard by trading their excess goods for other goods.

It is attractive to conclude that white-collar crime is the result of greed and self-centred egoism, and to assume these traits are an innate part of human nature. Coleman refuted this, offering examples of hunting and gathering societies which have a vastly more cooperative and egalitarian ethos where resources are readily shared among the tribe or community. This ethos is necessitated by the relative scarcity of resources. Refusal to share resources can result in severe consequences for the members of the society who do not receive them. This necessity to share goods is reduced or eliminated when the society has the ability to reliably produce surplus wealth. The examples of hunting and gathering societies suggest that economically self-interested behaviours must be learned because they are not universally exhibited across societies and cultures.

The writings of Bonger (1969) support Coleman's suggestion that industrialisation is the source of societies shift from egalitarianism to competition:
"As soon as productivity is increased to the extent that the producer can regularly produce more than he needs, the division of labour puts him in a position to exchange the surplus for things he could not produce himself, at this moment there arises in man the notion of no longer giving to his comrades what they need, but of keeping for himself the surplus of what his labour produces, and exchanging it. Then it is that the mode of production begins to counter the social instincts of man instead of favouring it as heretofore."

Industrialisation created the conditions conducive for a shift from cooperative behaviour to competitive behaviour. Accordingly, industrialisation was the origin of the culture of competition. The culture of competition has become so entrenched as a capitalist value that competitiveness now rivals cooperation as a principle value.

1.6.2 The Culture of Competition and White-Collar Crime

The "culture of competition" creates two related motivations to commit white-collar crime. These are the desire for new material gains and the fear of loosing previous material gains (often called the "fear of failure").

The desire for material gains is described by Coleman as:

"...the pursuit of economic self interest and the effort to surpass their fellows in the accumulation of wealth and status..."

The fear of failure is the other side of the demands made by the culture of competition. Any substantial loss of material wealth and status is highly aversive, even if the loss does not threaten the persons ability to provide the basic necessities for life:

"One element of the culture of competition that theorists of individualism have seldom discussed is the pervasive sense of insecurity that has always been a powerful undercurrent in the culture of industrial capitalism. This fear of failure..."
permeates every stratum of the contemporary society from the corporate leaders to the underclass." (Coleman, 1987).

Coleman goes on to quote Malcolm X, noting his commentary applies equally well to "achievement oriented business executives" as it does for "lower-class street hustlers":

"Full-time hustlers can never relax...As is the case in any jungle, the hustlers every waking hour is lived with both the practical and the subconscious knowledge that if he ever relaxes, if he ever slows down, the other hungry, restless foxes, ferrets, wolves, and vultures out there with him wont hesitate to make him their prey..." (Malcolm X, 1965).

A key feature of the culture of competition is that a person's success is measured relative to their peers. Except for the very few at the top of the social hierarchy, there is always someone else to strive to surpass. Achieving greater material success is a way of demonstrating your intrinsic worth and your superiority over others. Failure to do so is highly aversive, and is taken to indicate deficiencies in personal abilities and even personal worth. Materialism is closely connected to capitalism, being the physical embodiment of capitalist success.

The powerful desires for material and social success and the fear of the loss of these successes are social constructions of the culture of competition. The need to achieve material successes is felt very strongly. Success must be constantly maintained or improved upon. It is difficult to understate how strongly social and material success are valued. These values are pervasive in capitalist societies. This is illustrated by the relative scarcity of people who pursue alternative non-material forms of success such as spiritual enlightenment or a devoted family life.

The emphasis by capitalist culture on the acquisition and maintenance of material gain can become criminogenic when the desire to achieve material and social success is sufficiently strong to overcome other social values which place prohibitions on how this
is achieved\(^6\). The culture of competition is a normative social value. It does not exist in isolation. The rest of society's values moderate the excesses which it can motivate, and the culture of competition in the context of wider social values is not criminogenic. However, the over emphasis of the culture of competition to the detriment of other moderating values has the potential to motivate deviant behaviours and white-collar crime.

1.6.3 The Different Value Sets of Capitalist Societies

If the culture of competition were by itself sufficient to motivate criminal behaviour, most people would be criminals. Thankfully, this is not the case because while material and social success are highly valued by capitalist societies, there are limitations on acceptable ways for achieving success. These limitations are imposed by egalitarian social values. Social values such as sovereignty over privately owned property, fairness, and honesty require that competitive success oriented behaviours be mindful of minimising certain forms of harm they may cause to society and individuals. However, because strongly egalitarian values require that resources be equally shared with all members of society, strict adherence to them would not allow individuals to exclusively gain from their successes. Thus, there is an antagonism between capitalist and egalitarian social values.

The balance between an individual's commitment to egalitarian and capitalist values has implications for white-collar crime. Dominance by capitalist values would reduce the influence of the proscriptions that egalitarian values place on what behaviours are acceptable for achieving material success. Because capitalist values are a legitimate part of the normative value system, strong adherence to capitalist values can also be

\(^6\) Jesilow (1994) suggested white-collar crime is the result of the failure to fully adopt the capitalist model, rather than its overindulgence. He suggested the large amount of regulation common to most "capitalist" economies prevents markets from being truly free. The Business Round Table in New Zealand are active proponents of this ideology (Varnham, 1996). The complexly legislated business environment is suggested to actually aid businesses in conducting illegal and unethical acts because it provides the camouflage and loopholes which favour the litigious nature of big businesses, and distorts the market favouring monopoly holders. The validity of these suggestions is hard to ascertain. It is apparent that legislators attempt to regulate the business environment because they believe businesses cannot be relied upon to independently act in the interests of society and the free market.
perceived to be legitimate. The fault with this reasoning is that strong adherence can lead to economically self-interested behaviours which are substantially harmful to others and accordingly violate egalitarian social values. Strong adherence to capitalist values is incompatible with other (egalitarian) components of society's total value set.

Antagonism between capitalist and egalitarian values does not necessarily imply unworkable incompatibilities in the capitalist value system. They have a mutual influence on each other. This mutual influence prevents either value set from becoming too extreme. This is necessary because an extreme position on either value set would most likely be untenably antagonistic with the other, in which case the two value sets would become incompatible. It is necessary for capitalist values and egalitarian values to moderate each other so the two value sets can comfortably coexist within societies total value system. Much legislation regulating business is designed to achieve this.

The existence of different values within a total value set is normal. Rokeach (1973) suggested that the function of value systems is to resolve the inevitable conflicts which will arise between different values within the system. As people learn new values they need to integrate them into their value system, resolving conflicts between values and assigning priorities to them. Coleman describes how apparent contradictions between capitalist and egalitarian values are resolved:

"In contrast to traditional values, the competitive struggle for personal gain is defined as a positive, not a selfish or harmful, activity."

Coleman suggests business values are less morally constrained than wider social values (including egalitarian values). The lessening of moral requirements for business is justified as necessary for competitive markets to work properly, which ultimately benefits society by providing increased efficiencies. In capitalist societies it is believed that self-interested competition is the best way to maximise the productivity of the economy. Adam Smith (Jesilow, 1982) and Milton Friedman (Chryssides & Kaler, 1993) are noteworthy proponents of these beliefs. If these beliefs were not widely accepted,
many business practices would be difficult or impossible because of their incompatibility with egalitarian social values. Business values are accepted by society as a special case where less restrictive codes of conduct are necessary for the effective operation of the free market. Most people support more restrictive egalitarian values for non-business conduct, but they also support the need for less morally constrained codes of business conduct. Capitalism has created two different context specific value sets which are simultaneously supported by society.

1.6.4 The Culture of Competition and Business Ethics

The culture of competition creates a strong incentive to push the social boundaries of what behaviours are acceptable in order to make material gains, particularly in the case of business ethics. The violation of business ethics frequently results in white-collar crime. The pressure created by the culture of competition can manifest in white-collar crime in two ways.

The first is where the validity of the ethical standards themselves are questioned. This is done by exploiting the wide range of ethical standards among the business and academic communities. While many authors assume an universal understanding of what is meant by "business ethics", there is actually little agreement (Lewis, 1985; Holmquist, 1993). Lewis found widely differing interpretations in the literature. Organisations and individuals can selectively adopt and personalise values suitable to their needs. This is not done on a moral basis, rather it is intended to legitimise their activities to society and law enforcers, and to ease their conscience.

Not only can formal statements of business ethics by academics and business leaders be questioned, broader social values relating to business conduct can also be questioned. In the latter part of this century social values have undergone a transition from monism to pluralism (Kekes, 1993). Monism is where the same values are relatively universally held by all members of society. Pluralism is where most values are
not universally held by society, except for core values which place absolute limits on personal values, but do not prescribe the form of the values within the limits. An example of a core value is the sanctity of life. Values have become much more personalised and influenced by individual circumstances. Just as there is much variation in formal statements of business ethics, there is now also much variation in the less formal social values around business ethics. The pressure created by the culture of competition for material gains can encourage the selective adoption of values in order to achieve unethical ends.

The second is where personal values of right and wrong are subordinated to higher values. The willingness to put aside personal values and violate social norms in order to achieve organisational goals is an example of how the culture of competition creates pressures to place a greater emphasis on material success (personal or the organisation's) than wider social values. Managers interviewed by Simpson (1992) commented that there was little room for personal values in business decisions, with organisational requirements taking precedence. This is supported by Staw and Szewjowski's (1975) finding that American Fortune 500 companies are more likely to violate the law when their economic environment is difficult. Brenner and Mollander (1977) found two thirds of managers surveyed believed unethical practices were a routine part of doing business in their industry. They also found respondents were cynical about their peers ability to act in an ethical manner in a variety of ethically difficult scenarios. Their conclusion was that "apparently, economic values override ethical values". Fritzsche and Becker (1984) presented vignettes describing ethically challenging situations to managers. They found a significant number of managers suggested courses of actions which were based on act utilitarian ethical philosophies which emphasise end results above the actions used to achieve them. Several ethically questionable acts were condoned as acceptable ways of achieving desirable ends.

There has been little research on the state of New Zealand business ethics but what there is mostly mirrors overseas trends (Enderwick, 1994). In his survey of senior
managers, Alam (1993) found New Zealand companies give a low priority to ethical values. Few respondents mentioned high levels of ethical conduct as one of their organisation's top priorities, and few companies use ethical requirements in employee appraisals and training. A significant minority of respondents indicated moral considerations were sometimes or frequently ignored in accounting policies. Perhaps most significantly, over 40% of respondents believed that the ethical values of their organisations had declined in the past five years. Brennan, Ennis and Esslemont (1992) found that more than half of respondents believed the standard of ethical behaviour had declined in New Zealand businesses in the past decade. Despite the decline, they found that less than 40% of companies have a code of ethics. Alam found that 50.5% of the respondents organisations had codes of ethics. The trends of New Zealand and overseas research suggest businesses in western countries do not have high ethical standards which can manifest in deviant behaviours by organisations and individuals. Articles in New Zealand business media support the connection between low ethical standards and white-collar crime (Grant, 1990; Baird, 1988; Hurley, 1988).

The ethical environments of modern organisations are fluid and complex (Simpson, 1992). In this challenging environment, the importance of material gain can be more salient than the prohibitions of normative social values, which can result in unethical behaviours and white-collar crime. While these behaviours can be justified because they achieve material gain (which in itself is a legitimate goal), their perpetrators must also be aware that they violated other social norms in order to achieve them. This dissonance would cause problems for the perpetrators of unethical conduct and white-collar crime. Neutralisations and rationalisations are the mechanism by which this dissonance is reduced. They are described in the following section.

1.6.5 The Role of Neutralisations in White-Collar Crime

The value the culture of competition places on material gain can be so great that it can provide motivations to violate the law and other social norms in order to increase
material wealth. White-collar crime can result when success values are sufficiently motivating that they are given precedence over other social values. As well as providing the *motivation*, capitalist culture can also provide some of the *means* for committing white-collar crime. These means are neutralisations and rationalisations (Sykes and Matza, 1957).

Minor (1980) made the distinction between rationalisations and neutralisations. Neutralisations are used by the perpetrator before the crime or deviant act is committed to convince themselves their behaviour is socially acceptable. Rationalisations are used by the perpetrator after the crime or deviant act to convince other people their actions were socially acceptable and justifiable. The key difference between rationalisations and neutralisations is that the perpetrator needs to be far more committed to believing neutralisations than rationalisations. Rationalisations are essentially an excuse and a useful tool to boost the perpetrator’s chances of avoiding sanctions. The perpetrator does not have to believe in rationalisations to use them (Hamlin, 1988). Neutralisations require far more commitment from the perpetrator because if they could not convince themselves their deviant or illegal actions were justifiable, they could not commit the act. Thus, neutralisations form an integral part of the offending process.

Geis (1984) suggested neutralisations play a key role in white-collar crime by allowing the white-collar offender to violate the law and moral norms while maintaining his or her self-concept as a law abiding person. The white-collar offender has an affinity with normative social values and feels motivated to behave appropriately. Neutralisations free the white-collar offender from normative moral constraints by providing a justification that their deviant behaviours were in some way acceptable. Many of the neutralisations they use are not contrived, instead they are common in capitalist business ideology. Some originate in arguments promoting more liberal business regulation and business practices (Varnham, 1996). While these arguments are used in legitimate contexts such as debates about business regulation, they can also be used by individuals and organisations to justify their violations of the law.
Milton Rokeach (1973) is arguably the most influential scholar in the field of values theory. Several of his suggestions are resonant with the portrayal of the white-collar offender as being predominantly committed to normative values. He suggests that values are intimately linked to self-esteem and self-concept. If the white-collar offender values being a good member of society then rationalisations will be necessary to maintain their self-esteem and self-concept despite their violation of social norms. He also suggests that pre-existing values found in wider society can be used as rationalisations to reduce dissonance within the actors total value set.

Cressey (1986) suggested that white-collar crime is the result of a three step psychological process which explicitly involves rationalisations:

1. The feeling that a personal financial problem cannot be shared
2. The knowledge of how to solve the problem in secret, by violating a position of financial trust.
3. Access to rationalisations and neutralisations which counter the morally restraining effects of the normative values of the perpetrator.

He noted that there are at least three ideologies common in American business culture which are used as rationalisations and neutralisations by white-collar offenders:

1. *Business is business*: it is acceptable to commit an illegal act if it is a common practice in business.
2. *Necessity*: it is acceptable to commit an illegal act if the businesses or individuals needs are so great that crime is the only option which will obtain the desired outcomes.
3. *Criminal laws are socialistic*: it is acceptable to commit some illegal acts because Government regulation is socialistic and counterproductive for business.
Coleman identified six commonly mentioned rationalisations used by white-collar offenders:

1. **Borrowing**: "It's not theft, it is only borrowing". This is commonly used by embezzlers, it is not as suitable for many other forms of white-collar crime.

2. **Denial of harm**: The white-collar offender claims that their actions did not harm anyone, and accordingly they did nothing wrong.

3. **The laws are unnecessary or unjust**: Laissez faire free market ideology common to capitalist values suggests that many regulatory laws are excessive and unnecessary. Thus, it is acceptable to ignore and violate them.

4. **Survival**: The offender claims to have had no choice in whether to offend because the act was the only way to ensure economic survival.

5. **Employer expectations**: Employees of organisations can feel pressured into committing illegalities because failure to commit them may result in the loss of opportunities and privileges, or even termination of employment.

6. **Everybody's doing it**: this is commonly used to justify illegalities when the practice is widespread in business. Refusing to commit the act on moral grounds can be perceived to be futile because there are plenty of others in the organisation who will do it.

Neutralisations, and to a lesser degree rationalisations, are an important part of white-collar crime because without them white-collar offenders could not overcome the prohibitions of other social values in order to commit crime. White-collar offenders are committed to normative social values. Much evidence supports this. They tend to not have extensive criminal histories, much of their behaviour when being prosecuted is intended to demonstrate their normal values, and when incarcerated, white-collar offenders appear highly resistant to inmate culture. The competitive culture creates pressures for material gains and neutralisations and rationalisations provide the means by which white-collar offenders can illegally pursue this goal in a manner consistent with their self concept as a good person.
1.6.6 Review

The introduction up to the first review demonstrated that traditional theoretical and investigative approaches have failed to provide many advances in the understanding of white-collar crime. The second part of the introduction up to the current review offers an alternative theory of white-collar crime. Previous theories failed to account for the apparent normality of white-collar offenders. They do not have the deficiencies in socialisation and cognitive abilities which most previous theories predict. The new theory introduces Coleman's concept of the culture of competition which is part of capitalist culture. The advantage that the current theory has over previous theories is that it attributes white-collar crime to the misinterpretation and misapplication of normative social values. Accordingly, white-collar offenders do not need to be exposed to deviant subcultures which many other sociological theories of crime require.

The social environment of white-collar workers can provide many factors necessary for the commission of white-collar crime. The culture of competition provides the motivation for material gain, the pluralism of social values allows for the choice of personal values amenable to white-collar crime, and business culture provides a range of neutralisations which can be used to "justify" white-collar crime and maintain the white-collar offenders self concept as a good person. Simply put, white-collar crime is suggested to be the result of an imbalance of normative social values. While the white-collar crime may itself be outside of normative values, the impetus for the crimes comes from within normative social values.
1.7 The Occupational Environment and White-Collar Crime

One significant implication of Coleman's theory of white-collar crime is that many of the beliefs and values necessary to commit it come from normative social values. This implies that social values can be investigated to find out about some of the factors contributing to white-collar crime. This is encouraging for the researcher because normative social values are much more accessible than traditional sources of information on white-collar crime, such as white-collar offenders and data from state agencies. Normative culture, by definition, is common in society and is readily available for observation. Coleman's interactionist theory of white-collar crime not only makes suggestions of the values and beliefs held by the white-collar offender, it also suggests that other people would also have values conducive to white-collar crime. The availability of the social environment allows for the relatively easy assessment of how values such as the culture of competition affect the beliefs and attitudes of people towards white-collar crime. The current research will suggest a social implication of Coleman's theory and test it in the social environment.

A central feature of Coleman's theory is the culture of competition. This is suggested to provide beliefs and values conducive to the commission of white-collar crime. People more exposed to the culture of competition would be more likely to have beliefs and values conducive to white-collar crime than people who are less exposed. One of these beliefs would result in the tendency to minimise the seriousness of white-collar crimes. This is elaborated below.

It is suggested above that people can be differentially exposed to the culture of competition. This is likely to occur in different occupational environments. The culture of competition would be expected to be most influential in environments which are most competitive. There are many occupational environments which are competitive. Most
business organisations compete with other organisations for profit. These organisations would be expected to have cultures which strongly endorse one of the key values of the culture of competition, namely the acquisition of wealth, because the acquisition of wealth (profitability) is the core purpose of a business. The culture of the organisation would be expected to manifest in the values and beliefs of its employees. Competitive organisations value the acquisition of wealth and their employees would be expected to do so as well.

While there are organisations which compete for profits, there are also many that do not. Examples are charity organisations and state organisations. The core function of these organisations is the provision of service. These organisations do not value the acquisition of wealth because, unlike competitive businesses, that is not their purpose. These organisations have no requirement for a competitive culture because they do not operate in competitive environments. Accordingly, noncompetitive organisations are much less likely than competitive organisations to have cultures which value competition or the acquisition of wealth. The beliefs and values of people working for noncompetitive organisations are likely to have a correspondingly small emphasis on competition and the acquisition of wealth. Thus, the culture of competition would manifest more strongly in the values and beliefs of people working for competitive organisations than people who work for noncompetitive organisations.

Differential exposure to the culture of competition is likely to result in different beliefs and values depending on the level of exposure. The high value which the culture of competition places on material success has effects on other beliefs and values. Attitudes towards appropriate behaviours for pursuing material wealth tend to be more liberal for people who are strongly exposed to the culture of competition (such as members of competitive organisations) than people who are not (such as people who work for noncompetitive organisations). This occurs because the acquisition of wealth can be prioritised over values which proscribe acceptable ways of obtaining material wealth.
One particular way in which more liberal attitudes would be expected to manifest would be that members of competitive organisations would perceive some white-collar crimes to be not as serious as people from noncompetitive organisations. While the culture of competition provides the impetus for more liberal attitudes towards white-collar crimes, there are limitations. Most members of competitive and noncompetitive organisations have normative values and want to believe that they are good people. Members of competitive organisations are not likely to go as far as believing that white-collar crimes are not crimes at all. They only perceive white-collar crimes as relatively less serious than members of noncompetitive organisations. The culture of competition only encourages a different prioritisation of values, it does not encourage the removal of values. This is important for members of normative society because they want to be normal, and the abandonment of social values would not be normal.

The normative nature of members of competitive organisations also places limitations on what crimes they are likely to perceive as less serious than members of noncompetitive organisations. Strong social sanctions for behaviour are likely to be as influential for members of competitive organisations as they are for members of noncompetitive organisations. Both groups are likely to perceive white-collar crimes which cause death or injury equally seriously. Differences are restricted to less serious white-collar crimes.

Members of competitive organisations are also likely to perceive all street crimes with equivalent seriousness to members of noncompetitive organisations. This is because the culture of competition is part of the normative value set while the values associated with street crime are not. As members of normative society, people from competitive organisations perceive non-normative behaviours as seriously as other members of normative society, such as people from noncompetitive organisations.
To summarise, Coleman's Integrated Theory of White-Collar Crime suggests that white-collar crime is a social phenomenon. This implies that beliefs and values conducive to white-collar crime can be tested in the social environment. The current paper makes suggestions of how the culture of competition which is part of Coleman's theory would affect attitudes towards the seriousness of crime. However, these differences are restricted to white-collar crimes less serious than those which cause death and injury. Moreover, because both people from competitive and noncompetitive organisations have normative values, they will perceive street crimes with equivalent seriousness.

1.8 Hypotheses

H1: white-collar workers from competitive organisations will rate white-collar crimes as less serious than workers from noncompetitive organisations.

H2: the differences in ratings of seriousness between respondents from competitive organisations and noncompetitive organisations will be restricted to the less serious white-collar crimes.

2. METHOD

2.1 Subjects

Subjects were divided into two groups sampled from different populations. The first population was white-collar workers from competitive organisations and the second was white-collar workers from noncompetitive organisations.

The competitive organisations from which the first sample groups was selected were required to have specific features.
1. high levels of competitiveness within their industry
2. there were many organisations competing for business
3. the organisation from which the sample was taken was large
4. the organisation operated in a relatively large sector of the economy.

Noncompetitive organisations from which the second group was sampled were more difficult to operationally define. While the phrase "noncompetitive organisations" is inaccurate, it was chosen for the sake of simplicity. It would have been more accurate to refer to them as "less competitive organisations". Reforms to the New Zealand economy since the 1984 Labour government have introduced competition to many areas of the economy where none or little previously existed. Some state organisations are managed in very similar ways to competitive organisations. Many state bodies are required to compete with other organisations and even to make profits. Even charity organisations compete for donations from the community. There are elements of competition in most areas of New Zealand's economy, many of which were previously substantially noncompetitive, thus it would not be practical to seek organisations with no competitors. The required characteristics for organisations that are less competitive were that:

1. they are exposed to substantially less competition for clients and resources than is typical for profit making organisations
2. the organisation be relatively large.

While there are many non-profit making organisations from which the noncompetitive sample could be drawn, caution should be exercised when selecting samples of white-collar workers from charity organisations. Firstly, these organisations do not typically have abundant resources. Accordingly, white-collar workers may not be common in these organisations because the organisation does not have the resources to pay the higher salaries demanded by white-collar positions. Secondly, people who work in these organisations may be attracted to charity work because they reject the more extreme capitalist values, hence they may perceive white-collar offences as unusually serious.
Because of these reasons, samples will only be taken from large noncompetitive organisations. Larger organisations are more likely to have a bureaucracy which requires a significant number of white-collar workers and the resources to fund these positions. Simply put, using larger non-profit organisations will provide more professionally oriented people.

Organisations were approached about allowing their employees to participate in the research. If the organisation agreed, prospective respondents were then supplied with information about the research and what was required from them. To avoid the potential for coercion by management for employees to participate and to preserve the respondent's right to freely "opt in" to the research, questionnaires were left in places where they can be picked up by those interested in participating.

2.2 Magnitude Estimation

Magnitude estimation was chosen as the method for investigating perceptions of the seriousness of crimes. There are many different versions of this method. The method chosen for the current research got respondents to indicate the perceived magnitude of a stimuli by assigning a number to it. Respondents are presented with a standard stimuli. The standard stimuli is used for comparison with all other stimuli (called the comparison stimuli). The standard stimuli is assigned an arbitrary value. The perceived magnitude of the comparison stimuli is given by the respondents as a value relative to the arbitrary value given to the standard stimuli. If the respondent judges the comparison stimuli to be twice as large as the standard stimuli, they would give it a value twice that of the arbitrary value given to the standard stimuli.

An advantage of the type of magnitude estimation used is that it can be administered using a pen and paper, a simple and cost effective method. Some other magnitude estimation methods use cross modality matching where subjects indicate the perceived magnitude of a stimulus by responding in another modality to which the stimulus was
received. For example, a subject may indicate the attractiveness of a face by squeezing a hand grip. Cross modality matching methods are favoured by researchers in perceptual psychophysics. Despite the wide range of ways in which perceptions of magnitude can be measured, the different types of magnitude estimation techniques yield very similar data (Gescheider, 1988). Thus, there is little to loose in opting for a pen and paper method which does not require expensive and complex equipment.

2.3 Questionnaire Format

2.3.1 Task One

There were two purposes for the questions in task one. The first two requested details of the respondent’s age and sex. These are two factors which have commonly been found to affect opinions about types of crimes (Davis & Kemp, 1994). The response biases of these groups may cause significant interactions in the data which may need to be controlled for. Other demographic factors such as race and socioeconomic status have been implicated in response biases, but these have not been included as the specific nature of these biases is not well understood.

The second two questions check the socioeconomic status of the sample groups. Respondents were selected for their SES (i.e. white-collar) before being administered the questionnaire. Occupation and educational achievements were used as double checks of SES.

2.3.2 Task Two

This question was designed to find out what respondents understand “white-collar” crime to mean. This information was supplemental to that of Task Four. While it was
possible for respondents to have an opinion of the seriousness of particular white-collar offences without knowing what white-collar crime itself is, it would be useful to know what respondents had in mind when they complete task four (Stevens, 1975; Parton et al, 1991). There were many plausible different ways in which respondents may conceptualise white-collar crime, such as crimes committed on behalf of the organisation, or crimes committed against the organisation, or both.

2.3.3 Task Three

This task served two purposes. Firstly, it was a training task to get respondents used to performing magnitude estimation tasks. Secondly, it was intended to detect respondents who cannot perform the technique reliably so they can be removed from the data. A minority of people cannot perform magnitude estimation tasks in a reliable manner, or in a way which validly reflects their perception of the magnitude of the stimulus (Cross, 1982).

The magnitude estimation task required respondents to estimate the length of eight lines. This was done by comparison with the length of a line which was the standard stimuli. The length of the standard stimuli was assigned the arbitrary value of 100.

2.3.4 Task Four

Respondents were required to estimate the seriousness of a variety of crimes. This was done using a magnitude estimation task. Forty crimes were presented to respondents. Twenty were white-collar crimes and the other twenty were common "street" crimes. The crimes used in Task Four were modelled on examples of crimes given in the works of Davis and Kemp (1994) and Rossi et al. (1974). Davis and Kemp provided most of the street crimes and Rossi et al. provided most of the white-collar crimes.
The standard crime was burglary, as was used by Davis and Kemp (1994). It was assigned an arbitrary value of 100 "Seriousness Units".

Davis and Kemp used both phrases and more lengthy vignettes to describe the crimes but presented only the phrase data in their report because the correlation between the two data sets were so high ($r = 0.96$). However, phrases were not used for many of the crimes for this research because during pre-trials found that many respondents commented that they were uncomfortable with what they felt to be not enough information to make a clear judgement. Parton et al. (1991) suggested that in the absence of sufficient information respondents rely on their own stereotypes of criminals and criminal acts, possibly introducing uncontrolled idiosyncratic response patterns into the data. Whether this is a significant source of variance is called into question by Davis and Kemp's (1994) finding that vignettes and single word phrases correlated very highly with each other. Phrases were restricted to descriptions of the crime itself, no description of the offender or their motivation was offered. Offender characteristics were not included because responses may have been biased by attitudes and stereotypes of the offender (Parton et al., 1991).

Davis and Kemp's work was most appropriate as a basis for the street in the current study because their crimes were developed for a New Zealand sample. In the absence of a suitably similar New Zealand study on attitudes towards white-collar crime Rossi et al.'s (1974) work was chosen to provide the white-collar crimes.

It was necessary to alter the wording of some the phrases and vignettes from those used by the original researchers. Davis and Kemp (1994) used only phrases for their data Rossi et al. (1974) used vignettes. Because it was decided to use vignettes for the present study, phrases from Davis and Kemp (1994) were expanded into a format similar to that used by Rossi et al. All vignettes are crimes in New Zealand, except for number 40, "Refusal to make essential repairs to a rental property". This question was included because it is a clearly unethical business practice. The wording of vignettes
was also changed where it was found in pre-trials that respondents had trouble understanding the exact meaning. This was especially the case for some of the white-collar crimes because Rossi et al. described them in an American terminology, which some respondents had difficulty understanding.

Order effects have been found for magnitude estimation. Anchoring effects of preceding stimuli can have a strong influence on appraisals of subsequent stimuli (Marks, 1982; Gescheider, 1988). These concerns were addressed by administering the 40 crimes in Task Four of the questionnaire in four counterbalanced versions.

3. RESULTS

Letters were sent to 112 organisations requesting permission to ask employees if they were willing to participate in the research. 38 (33.9%) of these organisations were noncompetitive and the other 74 (66.1%) organisations were competitive. 28 (24.6%) organisations gave permission. 17 were competitive and 11 were noncompetitive giving approval rates by the organisations of 23.0% and 28.9% respectively, and an overall approval rate of 25.0%. 281 questionnaires were delivered to these organisations. 108 questionnaires were returned, giving a response rate of 38.4%. 28 (34.1%) of the returned questionnaires were from employees of noncompetitive organisations and the other 54 (65.9%) questionnaires were from employees of competitive organisations.

82 of the 110 returned questionnaires (74.5%) were suitable for analysis. The remaining 28 questionnaires were excluded for a variety of reasons. 5 were excluded on the basis of the respondent's occupation. 2 lawyers and 1 fraud investigator were excluded because their professional experience of the law may have biased their responses (McCleary, O'Neil, Epperlein, Jones, & Gray; 1981). The 2 other respondents were not in paid occupations (a student and retiree).
15 cases were excluded because the respondents were employed in blue-collar positions. While a blue-collar sample was originally part of the experimental design, efforts to gather a suitable sample were abandoned. This decision was made for two reasons. First, unexpected difficulties were encountered in getting suitable numbers. Second, blue-collar workers were not of central relevance to the research, thus extra efforts to sample this group distracted from the main focus of the research and accordingly could not be justified.

The questionnaires were delivered to potential respondents in a manner intended to ensure that they were of white-collar status. Task One in the questionnaire contained two questions intended to verify the occupational status of respondents (white-collar or blue-collar). The questions asked respondents to give their occupation and educational qualification(s). If both the respondents occupation and educational qualifications were incompatible with the occupational status indicated on the title of the questionnaire, the respondent's occupational status was recoded accordingly. 3 respondents were recoded from blue-collar to white-collar and 3 cases were recoded from white-collar to blue-collar.

Task Three in the questionnaire was designed to assess the respondent's general ability to perform magnitude estimation tasks by getting them to perform a line length estimation task. Respondents were excluded from the data set if their estimations of the length of the lines were more than 25% deviant from the correct line length for more than two lines. 8 respondents were excluded on this basis.

In summary, 15 of the 110 returned questionnaires were not suitable because respondents were employed in blue-collar positions. Of the remaining 95 respondents, 5 were excluded because of unsuitable occupations, and 8 were excluded for deficient performance on the Task Three line length estimation task.
3.1 Analysis

Data analysis was performed using SAS version 6.12 and SPSS for Windows version 6.1. All data from Task Four was transformed with a base ten logarithmic procedure and will be reported in this form. The data in Task Four was subjected to a stratified ANOVA, with the stratification being by subjects.

3.2 Task One

28 (34.1%) of the respondents were from noncompetitive organisations and 54 (65.9%) were from competitive organisations.

31 of the respondents were female (37.8%) and 51 of the respondents were male (62.2%). The average age of respondents (Table 1) was estimated using the mean of the two extremes in each age category in the questionnaire. The mean age for respondents was 38.73 years old. The average age for females was 35.89 years old and the average age for males was 40.50 years old. Females were much more likely to be in the younger age groups where their numbers equalled those of the males. In the older age groups males increasingly outnumber females, to the degree where in the oldest age group (56-65 years old) there are no females. In the 15-25 year old age group there were 5 females and 5 males. In the 26-35 year old age group there were 11 females and 11 males. In the 36-45 year old age group there were 8 females and 18 males. In the 46-55 year old age group there were 7 females and 13 males. In the 56-65 year old age group there were no females and 4 males. No respondents were in the 65+ age group.

In the 15-25 age group 10 respondents were from competitive organisations and no respondents were from non-competitive organisations (see Table 1). In the 26-35 age group 17 respondents were from competitive organisations and 5 respondents were
from non-competitive organisations. In the 36-45 age group 16 respondents were from competitive organisations and 11 respondents were from non-competitive organisations. In the 46-55 age group 9 respondents were from competitive organisations and 11 respondents were from non-competitive organisations. In the 56-65 age group 2 respondents were from competitive organisations and 2 respondents were from non-competitive organisations.

Table 1. Numbers of Respondents in Age Groups Cross Tabulated with Respondent's Gender and Competitive Status of Respondent's Organisation.

<table>
<thead>
<tr>
<th>Age Group (years old)</th>
<th>Gender of Respondent</th>
<th>Competitive Status of Respondent's Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>%*</td>
</tr>
<tr>
<td>15-25</td>
<td>5</td>
<td>6.1</td>
</tr>
<tr>
<td>26-35</td>
<td>11</td>
<td>13.4</td>
</tr>
<tr>
<td>36-45</td>
<td>8</td>
<td>9.8</td>
</tr>
<tr>
<td>46-55</td>
<td>7</td>
<td>8.5</td>
</tr>
<tr>
<td>56-65</td>
<td>nil</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>31</td>
<td>51</td>
</tr>
</tbody>
</table>

*Percentages are taken from total number of subjects (82).

Below are details of the respondents levels of educational attainment. Respondents were allowed to tick several boxes, each box indicating a different qualification. The highest level of qualification was included in the data. It should be noted that many respondents had a mixture of polytechnic, trades and university qualifications, hence membership of particular categories is not exclusive of the others.

4 respondents did not complete their secondary schooling through to seventh form level (4.9%). 6 respondents made it as far as finishing secondary schooling (7.4%). 35 respondents completed an undergraduate university qualification (43.2%). 21 respondents completed postgraduate university qualifications (25.9%). 6 respondents had trades qualifications (7.4%). 9 respondents had completed polytechnic qualifications (11.0%).
3.3 Task Two

Two analyses were conducted on responses to Task Two in the questionnaire. The first is a quantitative content analysis. The second is a qualitative analysis.

The quantitative content analysis was based on eleven concepts which are prominent within white-collar crime theory as characteristic features of white-collar crime. Written descriptions of white-collar crime given by respondents in Task Two were evaluated for whether or not each of the eleven concepts were mentioned (Table 2).

Table 2. Quantitative Analysis of Descriptions of White-Collar Crime: Concepts Which are Suggested by Respondents to be Features of White-Collar Crime.

<table>
<thead>
<tr>
<th>Concept Described by Respondent</th>
<th>Not Suggested</th>
<th>Suggested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%*</td>
</tr>
<tr>
<td>White-collar crime involves the violation of the trust of another party.</td>
<td>65</td>
<td>79.3</td>
</tr>
<tr>
<td>White-collar crime requires powers, privileges and/or information inherent to the white-collar offender's occupational position.</td>
<td>46</td>
<td>56.1</td>
</tr>
<tr>
<td>White-collar crime can be theft.</td>
<td>53</td>
<td>64.6</td>
</tr>
<tr>
<td>White-collar crime can be fraud.</td>
<td>48</td>
<td>58.5</td>
</tr>
<tr>
<td>White-collar crime can be embezzlement.</td>
<td>67</td>
<td>81.7</td>
</tr>
<tr>
<td>White-collar crime is crime committed by people with elevated social status.</td>
<td>48</td>
<td>58.5</td>
</tr>
<tr>
<td>White-collar crime can be committed for the benefit of the perpetrator's organisation.</td>
<td>68</td>
<td>82.9</td>
</tr>
<tr>
<td>White-collar crime can be committed for the benefit of the perpetrator.</td>
<td>22</td>
<td>26.8</td>
</tr>
<tr>
<td>White-collar crime can be committed by people of both white-collar and blue-collar occupational status.</td>
<td>78</td>
<td>95.1</td>
</tr>
<tr>
<td>White-collar crime is a non-violent crime.</td>
<td>66</td>
<td>80.5</td>
</tr>
<tr>
<td>White-collar crime is an inherently sophisticated type of crime.</td>
<td>78</td>
<td>95.1</td>
</tr>
</tbody>
</table>

*Percentages are taken from total number of subjects (82).

20.7% of respondents (17) suggested that the violation of the trust of another party was a feature of white-collar crime. 43.9% of respondents (36) noted that white-collar crime involved the use of powers, privileges and/or information linked to the offender's position within their organisation. 35.4% of respondents (29) suggested that white-collar crime involved theft. Fraud and embezzlement were also suggested by 41.5%
and 18.3% of respondents respectively (15 and 34) as features of white-collar crime. 41.5% of respondents (34) suggested that white-collar crime is committed by people of elevated status. 17.1% (14) suggested that white-collar crime can be committed for organisational gain, whereas 73.2% (60) suggested white-collar crime can be committed for personal gain. 4.9% (4) suggested that both blue-collar and white-collar workers commit white-collar crime. 19.5% (16) noted that white-collar crime is a non-violent crime. Finally, 4.9% (4) suggested that white-collar crime is an inherently sophisticated type of crime.

The most mentioned feature of white-collar crime by a considerable margin was that it can be committed for the benefit of the perpetrator. A clear majority of respondents mentioned this feature, no other feature achieved majority status. At the other end of the scale, the least number of respondents suggested white-collar crime can be committed by people of both white-collar and blue-collar occupational status, and that white-collar crime is an inherently sophisticated type of crime. These two features were equally scarcely mentioned. The rest of the suggested features were clustered relatively closely together, attaining percentages of respondents ranging from the high teens to the low forties.

Qualitative analysis of the contents of Task Two revealed a broad diversity in what people understand white-collar crime to mean. The comments offered varied widely in their focus, covering areas from technical features of white-collar crime, to motivations to commit white-collar crime, to the characteristics of white-collar offenders. Comments varied in tone from personal and subjective to technical and legalistic. Their length varied from two lines to more than the twenty seven lines provided in the questionnaire for responses.

While a clear majority of responses to Task Two referred to at least a few of the concepts used in the quantitative analysis, a noticeable minority responses offered
descriptions of white-collar crime whose content was outside of the eleven categories used:

"... using documents, electronic means of communication to take advantage of somebody (examples: selling information, bribe etc.)."

While the quantitative analysis treated fraud, theft and embezzlement as discrete concepts, their application in the descriptions of white-collar crime suggested that they were instead collectively used to allude to a broader legal concept. This more general concept could be loosely described as "the commission of theft by means of dishonesty". This deduction was made because fraud, theft and embezzlement were often mentioned together, usually in a combination of two of the concepts and more rarely all three. For example:

"...usually involves theft/fraud/misappropriation/falsification of company records."

"...Fraud is probably the most common example and the various forms of fraud would constitute the majority of white-collar crime."

While the quantitative analysis suggested an inconsistent use of the concepts of fraud, theft and embezzlement, the illustrative tenor of the responses suggest that it may be of more utility to treat them in a unitary manner. 62.2% of respondents mention at least one of the three concepts. If this interpretation of the respondent behaviour is valid, the majority of respondents had the general concept of the commission of theft by means of dishonesty in mind when they offered their description of white-collar crime.

The majority status in the quantitative analysis of the concept of white-collar crime being committed for personal gain is clearly reflected in the qualitative analysis. It was a common theme:
"The unauthorised use or appropriation of goods or services, being the property of an employer or business, for the personal gain or benefit of an individual employee."

There are a small number of exceptions to this trend where respondents refer to crimes committed for organisational gain, such as corporate crime and environmental pollution:

"...For employers the use of your position of trust to knowingly deprive employees and customers of safe standards, reasonable wages, access to realistic prices and basic honest practices."

Almost all of the responses referred to features of white-collar crime which are familiar to readers with an academic background in the field. The two most apparent and common themes to the qualitative analysis were that white-collar crime is committed for personal gain and that white-collar crime involves a form of illegality described above as the commission of theft by means of dishonesty. Beyond these very broad generalisations, descriptions were far more diverse and idiosyncratic. Inaccuracies were common in the responses. However, a strong majority of respondents had a concept of white-collar crime which reflects at least in part the realities of white-collar crime.

3.4 Task Three

In Task Three respondents were required to estimate the lengths of eight lines using magnitude estimation techniques for the purpose of evaluating their general ability to perform magnitude estimation tasks. Seven cases were excluded from the data set because they violated the criteria for inclusion which requires the respondents estimation of the lines length to be no more than 25% deviant from the correct score in no more than two out of the eight lines (Table 3).
Four respondents gave direct ratios for the lines lengths rather than using the modulus of 100 as suggested in the instructions for Task Three. The following is an example of a direct ratio rating. The correct rating for the length of the top comparison line is 300 because the lines' length is three times the standard lines length of 100. Respondents who use direct ratios would write 3 (assuming their judgement of the lines length was correct) because the comparison lines length is three times the length of the standard line. Three of the four cases were included in the analysis despite this error. This was done for two reasons. Firstly, the direct ratios were substantially correct (not violating the 25% rule for more than two cases) when the direct ratio was accounted for. Secondly, their behaviour in Task Four was not discernibly different from respondents who had carried out Task Three correctly. The performance of the fourth respondent who used direct ratios was highly idiosyncratic and accordingly discarded from the data.

Table 3. Number of Estimations of Line Length More than 25% Deviant from Actual Line Length for Each Respondent in Task Three.

<table>
<thead>
<tr>
<th>Number Of Lines Whose Estimated Length Was More That 25% Deviant From Actual Length</th>
<th>Number of Respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>0</td>
<td>64</td>
</tr>
</tbody>
</table>

*Respondents who used direct ratios are excluded from this data.

Table 4 gives the means and standard deviations for the estimated lengths in Task Three. There is a trend where the longer the line length to be estimated, the greater the amount of variation in estimates (as expressed by the standard deviation). All of the mean estimates of line length are less than the actual line length except for the third comparison line from the top which is only slightly larger than the actual value, with a mean estimate of 152.31 and an actual length of 150.
Further analysis of the accuracy of the respondent's estimates of line length revealed that their performance decreases with increases in the comparison line's length (Table 5). The decrease in performance was out of proportion to increases in line length. Mean errors were analysed as a percentage of the comparison lines length. Mean percentage errors in estimates of line length were so small for the shortest line (50 units, 5mm long) that no difference was discernible. The relationship between increases in line length and increases in error was not perfect. The mean error of the longest line length (800 units, 80 mm long) was less than the mean error for the next.

Table 5. Mean Errors for Estimates of Line Length as a Percentage of Correct Line Length for Task Three.

<table>
<thead>
<tr>
<th>Line Length (millimetres)</th>
<th>Mean Error (as Percentage of Line Length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>10</td>
<td>2%</td>
</tr>
<tr>
<td>15</td>
<td>3%</td>
</tr>
<tr>
<td>20</td>
<td>5%</td>
</tr>
<tr>
<td>30*</td>
<td>5%</td>
</tr>
<tr>
<td>30*</td>
<td>6%</td>
</tr>
<tr>
<td>60</td>
<td>11%</td>
</tr>
<tr>
<td>80</td>
<td>9%</td>
</tr>
</tbody>
</table>

*Line length repeated twice

longest line length (800 units, 80mm long) with 9% and 11% respectively. The 300 unit (30mm) long line was the only line whose length was repeated twice. Statistics for both lines were similar but not identical with mean errors of 5% and 6% of the standard line's length. The 200 unit (20mm) long line shared the mean length estimate error of 5% with one of the 300 unit lines. While there were exceptions to the general
trend, they were not so large as to strongly challenge the observation that mean errors line length estimates increased in proportion to the length of the line to be estimated.

3.5 Task Four

Respondents varied considerably in the magnitude of scores which they used for rating the seriousness of the forty crimes in Task Four, by as much as many orders of magnitude. For example, the highest score for any of the crimes was 1,000,000, which was given to premeditated rape, sexual molestation of a child, and incest between father and daughter. The lowest scores for these three crimes were 200, 200 and zero respectively. The least serious crime of defacing a coin received a maximum score of 5,000 and a minimum of zero.

The data in Table 6 shows that all of the standard deviations for the non-transformed data were considerably greater than the means. This indicated that the ratings of the seriousness of crimes were strongly positively skewed. It also indicated that the majority of respondents use much smaller numbers for their ratings of seriousness than a small minority who favoured very large numbers. This is clearly demonstrated in the Graphs in Figures 2 and 3 which give the examples of Incest between Father and Daughter and Receiving Stolen Property worth $100, which are respectively the crime with the greatest range between scores and the crime with the least range between scores.

The distributions of the ratings in the two graphs are typical of those for all forty crimes. The positive skew is visibly demonstrable. While the range of ratings is wide, there are a few numbers which are especially favoured by many respondents. These numbers are almost exclusively multiples of ten. There is also a tendency for a strongly favoured median which is much closer to the smallest rating than the largest rating. Receiving stolen property worth $100 is a good example of this distribution.
### Table 6. Mean, Standard Deviation, Range, Maximum Value and Minimum Value for Crimes in Task Four (Not Logarithmically Transformed).

<table>
<thead>
<tr>
<th>Crime</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killing someone during an argument</td>
<td>13176.63</td>
<td>38590.87</td>
<td>199600</td>
<td>200</td>
<td>200000</td>
</tr>
<tr>
<td>Premeditated rape</td>
<td>33159.63</td>
<td>156693.59</td>
<td>996800</td>
<td>200</td>
<td>1000000</td>
</tr>
<tr>
<td>Sexual molestation of a child</td>
<td>23198.77</td>
<td>114165.89</td>
<td>996800</td>
<td>200</td>
<td>1000000</td>
</tr>
<tr>
<td>Incest between father and daughter</td>
<td>31606.14</td>
<td>157669.91</td>
<td>999999</td>
<td>1</td>
<td>1000000</td>
</tr>
<tr>
<td>Assaulting a child under 14</td>
<td>4542.32</td>
<td>16274.02</td>
<td>99950</td>
<td>50</td>
<td>1000000</td>
</tr>
<tr>
<td>Abandoning a child under 6</td>
<td>5088.29</td>
<td>16436.84</td>
<td>99910</td>
<td>90</td>
<td>1000000</td>
</tr>
<tr>
<td>Armed robbery of a bank</td>
<td>4577.44</td>
<td>17790.64</td>
<td>149800</td>
<td>200</td>
<td>1500000</td>
</tr>
<tr>
<td>Assault during an argument. No medical treatment was necessary</td>
<td>690.67</td>
<td>1748.15</td>
<td>9980</td>
<td>20</td>
<td>10000</td>
</tr>
<tr>
<td>Assault during an argument. Victim was hospitalised over night</td>
<td>2199.15</td>
<td>11236.08</td>
<td>99960</td>
<td>40</td>
<td>1000000</td>
</tr>
<tr>
<td>Assaulting a police officer</td>
<td>1619.82</td>
<td>5611.94</td>
<td>49980</td>
<td>20</td>
<td>50000</td>
</tr>
<tr>
<td>Carrying an offensive weapon</td>
<td>855.24</td>
<td>2026.49</td>
<td>9975</td>
<td>25</td>
<td>10000</td>
</tr>
<tr>
<td>Looting goods during a riot</td>
<td>1104.57</td>
<td>5568.62</td>
<td>49950</td>
<td>50</td>
<td>50000</td>
</tr>
<tr>
<td>Driving while disqualified</td>
<td>1433.23</td>
<td>5999.73</td>
<td>49880</td>
<td>20</td>
<td>50000</td>
</tr>
<tr>
<td>Receiving stolen property worth $100</td>
<td>156.46</td>
<td>279.65</td>
<td>1890</td>
<td>10</td>
<td>1900</td>
</tr>
<tr>
<td>Possession of cannabis</td>
<td>280.77</td>
<td>1149.13</td>
<td>9999</td>
<td>1</td>
<td>10000</td>
</tr>
<tr>
<td>Selling cannabis</td>
<td>620.44</td>
<td>1583.06</td>
<td>9999</td>
<td>1</td>
<td>10000</td>
</tr>
<tr>
<td>Non-payment of a $100 parking fine</td>
<td>70.46</td>
<td>226.11</td>
<td>1999</td>
<td>1</td>
<td>2000</td>
</tr>
<tr>
<td>Defacing a coin</td>
<td>92.36</td>
<td>567.34</td>
<td>4999</td>
<td>1</td>
<td>5000</td>
</tr>
<tr>
<td>Theft of $100</td>
<td>194.51</td>
<td>600.53</td>
<td>4999</td>
<td>10</td>
<td>5000</td>
</tr>
<tr>
<td>Kidnapping for a ransom</td>
<td>5617.07</td>
<td>17638.48</td>
<td>99800</td>
<td>200</td>
<td>1000000</td>
</tr>
<tr>
<td>Embezzlement of $5000</td>
<td>1021.42</td>
<td>2534.60</td>
<td>19950</td>
<td>50</td>
<td>20000</td>
</tr>
<tr>
<td>Intentionally failing to include income on tax return</td>
<td>338.00</td>
<td>685.55</td>
<td>4999</td>
<td>1</td>
<td>5000</td>
</tr>
<tr>
<td>Knowingly selling a dangerously faulty product which may cause injury</td>
<td>4274.39</td>
<td>19788.92</td>
<td>149925</td>
<td>75</td>
<td>150000</td>
</tr>
<tr>
<td>Knowingly selling a dangerously faulty product which causes a death</td>
<td>10212.35</td>
<td>32673.36</td>
<td>199650</td>
<td>150</td>
<td>200000</td>
</tr>
<tr>
<td>Knowingly selling contaminated food which causes a death</td>
<td>11165.31</td>
<td>34191.12</td>
<td>199910</td>
<td>90</td>
<td>200000</td>
</tr>
<tr>
<td>Making false statements in advertising</td>
<td>693.40</td>
<td>1751.47</td>
<td>9999</td>
<td>1</td>
<td>10000</td>
</tr>
<tr>
<td>Knowingly selling worthless stocks as valuable investments</td>
<td>1093.82</td>
<td>2722.86</td>
<td>19999</td>
<td>1</td>
<td>20000</td>
</tr>
<tr>
<td>Failing to reveal serious side effects of pharmaceuticals</td>
<td>4841.06</td>
<td>17059.43</td>
<td>99999</td>
<td>1</td>
<td>100000</td>
</tr>
<tr>
<td>Falsely inflating claims on an expense account</td>
<td>440.62</td>
<td>1257.79</td>
<td>9990.00</td>
<td>10</td>
<td>10000</td>
</tr>
<tr>
<td>Knowingly releasing toxic chemicals into the environment</td>
<td>2774.33</td>
<td>7977.35</td>
<td>49950.00</td>
<td>50</td>
<td>50000</td>
</tr>
<tr>
<td>Failing to provide a safe working environment</td>
<td>2851.42</td>
<td>16749.26</td>
<td>149600.0</td>
<td>40</td>
<td>150000</td>
</tr>
<tr>
<td>Causing death of an employee through faulty equipment</td>
<td>7668.29</td>
<td>29160.03</td>
<td>199900.0</td>
<td>100</td>
<td>200000</td>
</tr>
<tr>
<td>Overcharging for credit in selling goods</td>
<td>350.02</td>
<td>723.84</td>
<td>4999.00</td>
<td>1</td>
<td>5000</td>
</tr>
<tr>
<td>Knowingly using inaccurate scales in weighing meat for sale</td>
<td>474.41</td>
<td>1286.27</td>
<td>9999.00</td>
<td>1</td>
<td>10000</td>
</tr>
<tr>
<td>Fixing prices on a product like petrol</td>
<td>1331.66</td>
<td>5930.17</td>
<td>49999.00</td>
<td>1</td>
<td>50000</td>
</tr>
<tr>
<td>Accepting a kick back from a contractor for purchasing their product</td>
<td>618.78</td>
<td>2480.90</td>
<td>19999.00</td>
<td>1</td>
<td>20000</td>
</tr>
<tr>
<td>Offering a bribe to secure a contract</td>
<td>817.27</td>
<td>1988.12</td>
<td>9999.00</td>
<td>1</td>
<td>10000</td>
</tr>
<tr>
<td>Anti-competitive practices inhibiting entry of competitors into an industry</td>
<td>1144.72</td>
<td>4162.78</td>
<td>34999.00</td>
<td>1</td>
<td>35000</td>
</tr>
<tr>
<td>Using company resources for unauthorised personal use</td>
<td>337.41</td>
<td>1109.14</td>
<td>9990.00</td>
<td>10</td>
<td>10000</td>
</tr>
<tr>
<td>Refusal to make essential repairs to a rental property</td>
<td>385.13</td>
<td>886.80</td>
<td>4999.00</td>
<td>1</td>
<td>5000</td>
</tr>
</tbody>
</table>
Table 7. Mean, Standard Deviation, Range, Maximum Value and Minimum Value Logarithmic Transformation of Crimes in Task Four.

<table>
<thead>
<tr>
<th>Crime</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killing someone during an argument</td>
<td>3.31</td>
<td>0.70</td>
<td>3.00</td>
<td>2.30</td>
<td>5.30</td>
</tr>
<tr>
<td>Premeditated rape</td>
<td>3.29</td>
<td>0.76</td>
<td>3.79</td>
<td>2.30</td>
<td>5.00</td>
</tr>
<tr>
<td>Sexual molestation of a child</td>
<td>3.29</td>
<td>0.73</td>
<td>3.79</td>
<td>2.30</td>
<td>6.00</td>
</tr>
<tr>
<td>Incest between father and daughter</td>
<td>3.18</td>
<td>0.85</td>
<td>6.00</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Assaulting a child under 14</td>
<td>3.96</td>
<td>0.61</td>
<td>3.30</td>
<td>1.70</td>
<td>5.00</td>
</tr>
<tr>
<td>Abandoning a child under 6</td>
<td>3.02</td>
<td>0.62</td>
<td>3.05</td>
<td>1.95</td>
<td>5.00</td>
</tr>
<tr>
<td>Armed robbery of a bank</td>
<td>3.00</td>
<td>0.57</td>
<td>2.68</td>
<td>2.30</td>
<td>5.18</td>
</tr>
<tr>
<td>Assault during an argument. No medical treatment was necessary</td>
<td>2.34</td>
<td>0.56</td>
<td>2.70</td>
<td>1.30</td>
<td>4.00</td>
</tr>
<tr>
<td>Assault during an argument. Victim was hospitalised over night</td>
<td>2.66</td>
<td>0.52</td>
<td>3.40</td>
<td>1.60</td>
<td>5.00</td>
</tr>
<tr>
<td>Assaulting a police officer</td>
<td>2.62</td>
<td>0.59</td>
<td>3.40</td>
<td>1.30</td>
<td>4.70</td>
</tr>
<tr>
<td>Carrying an offensive weapon</td>
<td>2.43</td>
<td>0.57</td>
<td>2.60</td>
<td>1.40</td>
<td>4.00</td>
</tr>
<tr>
<td>Looting goods during a riot</td>
<td>2.44</td>
<td>0.51</td>
<td>3.00</td>
<td>1.70</td>
<td>4.70</td>
</tr>
<tr>
<td>Driving while disqualified</td>
<td>2.41</td>
<td>0.62</td>
<td>3.40</td>
<td>1.30</td>
<td>4.70</td>
</tr>
<tr>
<td>Receiving stolen property worth $100</td>
<td>1.88</td>
<td>0.48</td>
<td>2.28</td>
<td>1.00</td>
<td>3.28</td>
</tr>
<tr>
<td>Possession of cannabis</td>
<td>1.75</td>
<td>0.77</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Selling cannabis</td>
<td>2.35</td>
<td>0.59</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Non-payment of a $100 parking fine</td>
<td>1.38</td>
<td>0.64</td>
<td>3.30</td>
<td>0.00</td>
<td>3.30</td>
</tr>
<tr>
<td>Defacing a coin</td>
<td>1.57</td>
<td>0.86</td>
<td>3.70</td>
<td>0.00</td>
<td>3.70</td>
</tr>
<tr>
<td>Theft of $100</td>
<td>1.87</td>
<td>0.47</td>
<td>2.70</td>
<td>1.00</td>
<td>3.70</td>
</tr>
<tr>
<td>Kidnapping for a ransom</td>
<td>2.31</td>
<td>0.59</td>
<td>2.70</td>
<td>2.30</td>
<td>5.00</td>
</tr>
<tr>
<td>Embezzlement of $5000</td>
<td>2.35</td>
<td>0.64</td>
<td>3.70</td>
<td>1.70</td>
<td>4.30</td>
</tr>
<tr>
<td>Intentionally failing to include income on tax return</td>
<td>2.13</td>
<td>0.64</td>
<td>3.70</td>
<td>0.00</td>
<td>3.70</td>
</tr>
<tr>
<td>Knowingly selling a dangerously faulty product which may cause injury</td>
<td>2.50</td>
<td>0.60</td>
<td>3.30</td>
<td>1.68</td>
<td>5.18</td>
</tr>
<tr>
<td>Knowingly selling a dangerously faulty product which causes a death</td>
<td>3.18</td>
<td>0.68</td>
<td>3.12</td>
<td>2.18</td>
<td>5.30</td>
</tr>
<tr>
<td>Knowingly selling contaminated food which causes a death</td>
<td>3.17</td>
<td>0.71</td>
<td>3.35</td>
<td>1.95</td>
<td>5.30</td>
</tr>
<tr>
<td>Making false statements in advertising</td>
<td>2.19</td>
<td>0.82</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Knowingly selling worthless stocks as valuable investments</td>
<td>2.56</td>
<td>0.60</td>
<td>4.30</td>
<td>0.00</td>
<td>4.30</td>
</tr>
<tr>
<td>Failing to reveal serious side effects of pharmaceuticals</td>
<td>2.88</td>
<td>0.72</td>
<td>5.00</td>
<td>0.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Falsely inflating claims on an expense account</td>
<td>2.22</td>
<td>0.51</td>
<td>3.00</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Knowingly releasing toxic chemicals into the environment</td>
<td>2.85</td>
<td>0.62</td>
<td>3.00</td>
<td>1.70</td>
<td>4.70</td>
</tr>
<tr>
<td>Failing to provide a safe working environment</td>
<td>2.63</td>
<td>0.59</td>
<td>3.57</td>
<td>1.60</td>
<td>5.18</td>
</tr>
<tr>
<td>Cauising death of an employee through faulty equipment</td>
<td>3.09</td>
<td>0.66</td>
<td>3.30</td>
<td>2.00</td>
<td>5.30</td>
</tr>
<tr>
<td>Overcharging for credit in selling goods</td>
<td>2.19</td>
<td>0.56</td>
<td>3.70</td>
<td>0.00</td>
<td>3.70</td>
</tr>
<tr>
<td>Knowingly using inaccurate scales in weighing meat for sale</td>
<td>2.19</td>
<td>0.63</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Fixing prices on a product like petrol</td>
<td>2.23</td>
<td>0.89</td>
<td>4.70</td>
<td>0.00</td>
<td>4.70</td>
</tr>
<tr>
<td>Accepting a kick back from a contractor for purchasing their product</td>
<td>2.11</td>
<td>0.75</td>
<td>4.30</td>
<td>0.00</td>
<td>4.30</td>
</tr>
<tr>
<td>Offering a bribe to secure a contract</td>
<td>2.34</td>
<td>0.77</td>
<td>4.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Anti-competitive practices inhibiting entry of competitors into an industry</td>
<td>2.21</td>
<td>0.98</td>
<td>4.54</td>
<td>0.00</td>
<td>4.54</td>
</tr>
<tr>
<td>Using company resources for unauthorised personal use</td>
<td>2.12</td>
<td>0.50</td>
<td>3.00</td>
<td>1.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Refusal to make essential repairs to a rental property</td>
<td>2.05</td>
<td>0.77</td>
<td>3.70</td>
<td>0.00</td>
<td>3.70</td>
</tr>
</tbody>
</table>

77
The median seriousness rating of 100 was given to the crime by 23 respondents. The next most common ratings were 50, given by 19 respondents, and 20 given by 12 respondents. Collectively these ratings account for 65.8% of the sample. The next most popular rating of 200 was given by only 6 respondents.

The considerable variability of scores presented significant problems for the statistical analysis. One of the foremost being the substantial heterogeneity of variance, which untenably violated a central assumption of the ANOVA procedures used to analyse the data. The decision was made to transform the data with a base ten logarithmic procedure in order to increase homogeneity.

This operation resulted in a much greater homogeneity of variance, which is evident in the vastly reduced standard deviations. The increased homogeneity was of an acceptable level for ANOVA. One requirement of the data transformation was that there be no zero scores because there is no such thing as the logarithm of zero. To address this all zero scores were transformed to one. The impact of this transformation on the data was minimal.
The four random orders of the forty questions in Task Four in the questionnaire were examined. The orders were called List A, List B, List C, and List D. A full analysis examining the interaction between List and demographic characteristics (sex and age) was difficult to interpret because of the small numbers of respondents in each category (Table 8). In some categories there were no respondents and in all categories there were too few for meaningful category by category statistical analysis.

### Table 8. Cross Tabulation of List Order by Respondent's Sex, Organisation Type and Age.

<table>
<thead>
<tr>
<th>List</th>
<th>Gender</th>
<th>Organisation Type</th>
<th>Age of Respondents (years old)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Competitive</td>
<td>15-25</td>
</tr>
<tr>
<td>A</td>
<td>Female</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>B</td>
<td>Female</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td>31</td>
<td>51</td>
</tr>
</tbody>
</table>

However, meaningful analysis was possible at higher levels of aggregation. Street crimes and white-collar crimes interacted marginally with the List order (p = 0.089). There was a significant crime category by organisation type (competitive and noncompetitive) by list interaction (F = 1.74, p = 0.019). The least squares means for
the street crime/white-collar crime by list order interaction (Table 9) showed highly significant differences for List A (least squares means = 2.42 [street crimes], 2.69 [white-collar crimes], p<0.001), List B (least squares means = 2.34 [street crimes], 2.59 [white-collar crimes], p<0.001), and List C (least squares means = 2.31 [street crimes], 2.43 [white-collar crimes], p<0.01). List D showed only a moderate interaction (least squares means = 2.29 [street crimes], 2.39 [white-collar crimes], p = 0.063). List D appears to make a smaller distinction between street crimes and white-collar crimes than the other three lists.

<table>
<thead>
<tr>
<th>List</th>
<th>Street Crimes</th>
<th>White-Collar Crimes</th>
<th>P(difference between Street Crimes and White-Collar Crimes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2.42</td>
<td>2.69</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>B</td>
<td>2.34</td>
<td>2.50</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>C</td>
<td>2.31</td>
<td>2.43</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>D</td>
<td>2.29</td>
<td>2.39</td>
<td>0.063</td>
</tr>
</tbody>
</table>

The crimes in Task Four were divided into a taxonomy in order to analyse attitudes towards different types of crimes, and to compare these attitudes between the subject groups. The taxonomy distinguished between street crimes, which contribute twenty out of the forty crimes in Task Four, and white-collar crimes, which contribute the other twenty crimes. Street crimes were divided into crimes against the person, crimes against property, and victimless crimes. The white-collar crimes were divided into white-collar crime causing death, white-collar crime involving injury (white-collar crime which causes injury or with the potential to cause injury, anti-competitive practices, dishonesty for organisational gain, and dishonesty for personal gain.

STREET CRIME

a) Crimes Against the Person

Killing someone during an argument
Premeditated rape
Sexual molestation of a child
Incest between father and daughter
Assaulting child under 14
Abandoning a child under 6
Assault during argument, no medical treatment was necessary
Assault during an argument. Victim was hospitalised over night
Assaulting a police officer
Kidnapping for a ransom

b) Crimes Against Property
Armed robbery of a bank
Looting goods during a riot
Receiving stolen property worth $100
Theft of $100

c) Victimless Crimes
Carrying offensive weapon
Driving while disqualified
Possession of cannabis
Selling cannabis
Non-payment of a $100 parking fine
Defacing a coin

WHITE-COLLAR CRIME

a) White-Collar Crime Causing Death
Knowingly selling a dangerously faulty product which causes a death
Knowingly selling contaminated food which causes a death
Causing death of an employee through faulty equipment
b) **White-Collar Crime Involving Injury**

Knowingly selling a dangerously faulty product which may cause injury

Failing to reveal serious side effects of pharmaceuticals

Knowingly releasing toxic chemicals into the environment

Failing to provide a safe working environment

Refusal to make essential repairs to rental property

c) **Anti-competitive Practices**

Fixing prices on a product like petrol

Accepting a kick back from a contractor for purchasing their product

Offering a bribe to secure a contract

Anti-competitive practices inhibiting entry of competitors into an industry

d) **Dishonesty for Organisational Gain**

Making false statements in advertising

Knowingly selling worthless stocks as valuable investments

Overcharging for credit in selling goods

Knowingly using inaccurate scales in weighing meat for sale

e) **Dishonesty for Personal Gain**

Embezzlement of $5000

Intentionally failing to include income on tax return

Falsely inflating claims on an expense account

Using company resources for unauthorised personal use

A basic analysis was conducted on the data examining organisation type (competitive and noncompetitive) and crime type (street crime and white-collar crime) and crime category. No significant overall difference between competitive and noncompetitive organisations in ratings of severity was found for street crime and white-collar crime (F
= 0.05, p = N/S). However, when the two organisation types were combined, a significant difference between the rating of the different crime categories can be found (F = 383.51, p < 0.0001). A marginally significant interaction occurred between organisation type and crime category (F = 1.90, p = 0.078). When this interaction was examined in detail, the majority of this difference appears to be due to employees of competitive organisations rating victimless crimes as significantly more serious than employees of noncompetitive organisations (least squares means = 1.904 [competitive organisations], 1.602 [noncompetitive organisations], p<0.001).

Age and sex were added to the model. The small numbers of respondents in each age category required the aggregation of the five age groups into the two groups of 15 to 35 years old and 36 to 65 years old. There were 32 people in the younger age group (39.0%) and 50 in the older age group (61%). The only notable age effect was the younger age group rating street crimes as marginally less serious than white-collar crime (F = 3.75, p = 0.053). Closer examination revealed this difference to be largely due to the younger group perceiving Victimless Crimes as less serious than the older group (least squares means = 1.831 [>35 years old], 1.675 [<= 35 years old], p = 0.013). There were no significant differences between the sexes (F = 0.29, p = 0.590).

The inclusion of age and sex improved the model considerably. The organisation type by crime category interaction was significant (F = 2.12, p = 0.048). The statistical removal of the extraneous influence of gender and age resulted in several significant differences in the least squares means. Respondents from competitive organisations had significantly greater perceptions of seriousness than respondents from noncompetitive organisations for the white-collar crime categories of white-collar crime involving injury (least squares means = 2.668 [competitive organisations], 2.527 [noncompetitive organisations], p = 0.10) and white-collar crime for personal gain (least squares means = 2.299 [competitive organisations], 2.130 [noncompetitive organisations], p = 0.032). No significant differences were found between the white-collar crimes of anti-competitive white-collar crime (least squares means = 2.216
white-collar crime causing death (least squares means = 3.106 [competitive organisations], 3.107 [noncompetitive organisations], p = 0.987). No significant difference were found between the two samples for the street crimes of crimes against the person (least squares means = 2.968 [competitive organisations], 2.900 [noncompetitive organisations], p = 0.1755) and crimes against property (least squares means = 2.300 [competitive organisations], 2.176 [noncompetitive organisations], p = 0.111).

To summarise the findings for comparisons between organisation types and crime types, age and sex appear to be significant factors which need to be accounted for when the relationship between organisation type and types of white-collar crime were examined. When they were not taken into account significant differences between street crime and white-collar crime were found, but specific factors contributing to the differences could not be discerned. The inclusion of age and sex allowed for the establishment of significant differences between competitive and noncompetitive organisations in their attitudes towards the seriousness of some categories of crime. These differences were not across all categories of crime, rather existing only for victimless crimes, white-collar crime involving injury and white-collar crime for personal gain.

The crimes were ranked in their order of mean seriousness for the logarithmic transformation of the data (Table 10). The street crimes of killing someone during an argument was rated the most serious. The three next most serious street crimes, in descending order, were the sexual crimes of premeditated rape, sexual molestation of a child and incest between father and daughter. Crimes against the person were the next most serious type of street crime, with kidnapping for ransom, abandoning a child under 6, armed robbery of a bank, assaulting a child under 14, assault during an argument (requiring overnight hospitalisation of the victim) and assaulting a police officer in decreasing order of seriousness.
Table 10. Rankings of Means for Logarithmic Transformations of Seriousness Ratings for Crimes.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Crime*</th>
<th>Mean**</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Killing someone during an argument</td>
<td>3.31</td>
<td>0.70</td>
</tr>
<tr>
<td>2</td>
<td>Premeditated rape</td>
<td>3.29</td>
<td>0.76</td>
</tr>
<tr>
<td>3</td>
<td>Sexual molestation of a child</td>
<td>3.29</td>
<td>0.73</td>
</tr>
<tr>
<td>4</td>
<td>Knowingly selling a dangerously faulty product which causes a death</td>
<td>3.18</td>
<td>0.68</td>
</tr>
<tr>
<td>5</td>
<td>Incest between father and daughter</td>
<td>3.18</td>
<td>0.85</td>
</tr>
<tr>
<td>6</td>
<td>Knowingly selling contaminated food which causes a death</td>
<td>3.17</td>
<td>0.71</td>
</tr>
<tr>
<td>7</td>
<td>Kidnapping for a ransom</td>
<td>3.10</td>
<td>0.59</td>
</tr>
<tr>
<td>8</td>
<td>Causing death of an employee through faulty equipment</td>
<td>3.09</td>
<td>0.66</td>
</tr>
<tr>
<td>9</td>
<td>Abandoning a child under 6</td>
<td>3.02</td>
<td>0.62</td>
</tr>
<tr>
<td>10</td>
<td>Armed robbery of a bank</td>
<td>3.00</td>
<td>0.57</td>
</tr>
<tr>
<td>11</td>
<td>Assaulting a child under 14</td>
<td>2.96</td>
<td>0.61</td>
</tr>
<tr>
<td>12</td>
<td>Failing to reveal serious side effects of pharmaceuticals</td>
<td>2.88</td>
<td>0.72</td>
</tr>
<tr>
<td>13</td>
<td>Knowingly releasing toxic chemicals into the environment</td>
<td>2.85</td>
<td>0.62</td>
</tr>
<tr>
<td>14</td>
<td>Knowingly selling a dangerously faulty product which may cause injury</td>
<td>2.80</td>
<td>0.60</td>
</tr>
<tr>
<td>15</td>
<td>Assault during an argument. Victim was hospitalised overnight</td>
<td>2.66</td>
<td>0.52</td>
</tr>
<tr>
<td>16</td>
<td>Embezzlement of $5000</td>
<td>2.65</td>
<td>0.47</td>
</tr>
<tr>
<td>17</td>
<td>Failing to provide a safe working environment</td>
<td>2.63</td>
<td>0.59</td>
</tr>
<tr>
<td>18</td>
<td>Assaulting a police officer</td>
<td>2.62</td>
<td>0.59</td>
</tr>
<tr>
<td>19</td>
<td>Knowingly selling worthless stocks as valuable investments</td>
<td>2.59</td>
<td>0.60</td>
</tr>
<tr>
<td>20</td>
<td>Looting goods during a riot</td>
<td>2.44</td>
<td>0.51</td>
</tr>
<tr>
<td>21</td>
<td>Carrying an offensive weapon</td>
<td>2.43</td>
<td>0.57</td>
</tr>
<tr>
<td>22</td>
<td>Driving while disqualified</td>
<td>2.41</td>
<td>0.62</td>
</tr>
<tr>
<td>23</td>
<td>Selling cannabis</td>
<td>2.35</td>
<td>0.59</td>
</tr>
<tr>
<td>24</td>
<td>Assault during an argument. No medical treatment was necessary</td>
<td>2.34</td>
<td>0.56</td>
</tr>
<tr>
<td>25</td>
<td>Offering a bribe to secure a contract</td>
<td>2.34</td>
<td>0.77</td>
</tr>
<tr>
<td>26</td>
<td>Fixing prices on a product like petrol</td>
<td>2.23</td>
<td>0.89</td>
</tr>
<tr>
<td>27</td>
<td>Falsely inflating claims on an expense account</td>
<td>2.22</td>
<td>0.51</td>
</tr>
<tr>
<td>28</td>
<td>Anti-competitive practices inhibiting entry of competitors into an industry</td>
<td>2.21</td>
<td>0.98</td>
</tr>
<tr>
<td>29</td>
<td>Overcharging for credit in selling goods</td>
<td>2.19</td>
<td>0.56</td>
</tr>
<tr>
<td>30</td>
<td>Making false statements in advertising</td>
<td>2.19</td>
<td>0.82</td>
</tr>
<tr>
<td>31</td>
<td>Knowingly using inaccurate scales in weighing meat for sale</td>
<td>2.19</td>
<td>0.63</td>
</tr>
<tr>
<td>32</td>
<td>Intentionally failing to include income on tax return</td>
<td>2.13</td>
<td>0.64</td>
</tr>
<tr>
<td>33</td>
<td>Using company resources for unauthorised personal use</td>
<td>2.12</td>
<td>0.50</td>
</tr>
<tr>
<td>34</td>
<td>Accepting a kick back from a contractor for purchasing their product</td>
<td>2.11</td>
<td>0.75</td>
</tr>
<tr>
<td>35</td>
<td>Refusal to make essential repairs to a rental property</td>
<td>2.05</td>
<td>0.77</td>
</tr>
<tr>
<td>36</td>
<td>Receiving stolen property worth $100</td>
<td>1.98</td>
<td>0.48</td>
</tr>
<tr>
<td>37</td>
<td>Theft of $100</td>
<td>1.87</td>
<td>0.47</td>
</tr>
<tr>
<td>38</td>
<td>Possession of cannabis</td>
<td>1.75</td>
<td>0.77</td>
</tr>
<tr>
<td>39</td>
<td>Non-payment of a $100 parking fine</td>
<td>1.38</td>
<td>0.64</td>
</tr>
<tr>
<td>40</td>
<td>Defacing a coin</td>
<td>0.67</td>
<td>0.86</td>
</tr>
</tbody>
</table>

*Grey denotes street crimes and white denotes white-collar crimes.
**Means denotes the mean ranking for the seriousness of the crimes which have been logarithmically transformed.
These street crimes were intermixed with white-collar crimes of a range of types. White-collar crimes causing death were the most serious type of white-collar crime. The most serious white-collar crime was knowingly selling a dangerously faulty product which causes a death, which received a rank of forth. Knowingly selling contaminated food which causes a death and causing death of an employee through faulty equipment received respective ranks of sixth and eighth. The next most serious white-collar crimes were those which have the potential for physical harm. They were failing to reveal harmful effects of pharmaceuticals, knowingly releasing toxic chemicals into the environment and knowingly selling a dangerously product which may cause an injury. Their respective ranks were twelfth, thirteenth and fourteenth. The two white-collar crimes of embezzlement of $5000 and knowingly selling worthless stocks as valuable investments were separated by the least serious white-collar crime which involved physical harm (failing to provide a safe working environment).

The crimes ranked twentieth and below were a mixture of street and white-collar crimes. All of the street crimes except receiving stolen property were crimes without direct victims. The rest were crimes against the order and victimless crimes. Looting goods during a riot, carrying an offensive weapon, driving while disqualified, selling cannabis and assault during and argument (not requiring medical treatment) received the respective ranks of twentieth through to twenty-fourth.

Below these street crimes was a large block of white-collar crimes occupying the twenty-fifth through to thirty-fifth ranks. They were (in decreasing order of seriousness) offering a bribe to secure a contract, fixing prices on a product like petrol, falsely inflating claims on an expense account, anti-competitive practices inhibiting entry of competitors into an industry, overcharging for credit in selling goods, making false statements in advertising, knowingly using inaccurate scale in weighing meat for sale, intentionally failing to include income on tax return, using company resources for unauthorised personal use, accepting a kickback from a contractor for purchasing their product and refusal to make essential repairs to a rental property.
The five least serious crimes were all street crimes. The order from most to least serious was receiving stolen property worth $100, theft of $100, possession of cannabis, non-payment of a $100 parking fine and finally, defacing a coin.

4. DISCUSSION

4.1 Hypotheses

H1 was not supported by the data. There was a difference between respondents from competitive and noncompetitive organisations for their ratings of the seriousness of the crimes, but it was in the opposite direction to that predicted. Respondents from competitive organisations consistently rated the white-collar crime categories of white-collar crime involving injury and white-collar crime for personal gain as significantly more serious that respondents from noncompetitive organisations.

H2 was also not supported by the data. While significant differences were found for the less serious white-collar crime category of white-collar crime for personal gain, there were also significant differences for the more serious white-collar crime category of white-collar crime causing injury and the street crime category of victimless crimes. Thus, as predicted, significant differences were found between respondents from competitive and noncompetitive organisations in their ratings of seriousness for minor white-collar crimes, but contrary to predictions, significant differences were also found for more serious white-collar crimes and minor street crimes.

The failure to support H1 poses more of a challenge to the theoretical underpinnings of the hypotheses than the failure to support H2. At least part of the failure to support H2 may have been due to methodological short comings rather than unsound theoretical underpinnings. H2 will be addressed first, and a more lengthy analysis of potential reasons for the failure to support H1 will then be described.
There are reasons to question the failure to support H2. The category for white-collar crimes involving injury used examples of crimes which were not as serious as they could have been. The five crimes in the category were knowingly selling a dangerously faulty product which may cause injury, failing to reveal serious side effects of pharmaceuticals, knowingly releasing toxic chemicals into the environment, failing to provide a safe working environment and refusal to make essential repairs to rental property. These crimes only had the potential to cause injury, they were not described as actually causing injury. The potential to cause injuries may or may not result in injuries. Accordingly, these crimes may be rated as less serious than crimes which are described as actually causing injuries. Research has found that strong agreement between groups is most common for the most serious crimes (Sellin & Wolfgang, 1964; Rossi, Waite, Bose & Berk, 1974; Cullen, Link & Polanzi, 1982; Goff & Nason-Clark, 1989). The examples of crime in the current study may not have been sufficiently serious to attract strong agreement between the sample groups on their seriousness. It should also be noted that the difference for white-collar crimes involving injury was barely significant (p = 0.046), implying only a small difference.

A similar explanation can be made for the significant difference between the two sample groups in their ratings for victimless crimes. While it was predicted that similarities in the social environment of all white-collar workers would result in similar ratings of seriousness for all categories of street crimes, research findings suggest that if differences were found to exist (as they were) they would be more likely to be in the less serious crimes (Sellin & Wolfgang, 1964; Rossi, Waite, Bose & Berk, 1974; Cullen, Link & Polanzi, 1982; Goff & Nason-Clark, 1989).

There are four possible reasons for the failure to support H1. These are random chance, the questionnaire lacking in validity, problems with sampling, and deficiencies in the theory underpinning the hypotheses. This is especially relevant to the current research because of its small sample size.
4.1.1 Random Chance

Random chance may have been the cause of the failure to support H1 in a number of ways. It may have resulted in a disproportionately large number in the competitive sample who perceived the minor white-collar crimes as more serious than the noncompetitive sample. Or the reverse may have happened for the noncompetitive group.

The validity of all findings of research using statistical analysis can be questioned on the basis of random chance. Random chance is an inherent part of statistical analyses. Traditional methods for addressing this problem apply as much to the current research as they do for all other statistical research. Replication of research, especially with larger samples reduce the risk of random chance having a statistically significant impact on the results.

4.1.2 Problems with the Questionnaire

The validity of the questionnaire used in the current research has significant implications for the failure to support H1. The instrument needs to be able to elicit ratings which validly represent the respondent’s perceptions of the seriousness for the examples of crimes given. Moreover, it needed to be sensitive to differences in perceptions of seriousness between the crimes described. If the instrument did not have these requirements, it would not be able to divine attitudes towards the seriousness in a valid or meaningful way, and accordingly any test of the hypothesis would be compromised.

The questionnaire’s validity can be assessed by analysis of the methodological issues underlying its structure and comparison with the findings of other research on similar topics. Methodological issues will be addressed first.
4.1.3 Methodological Issues

4.1.3.1 Magnitude Estimation

There are many methods which could be used to measure attitudes towards the seriousness of crime. Magnitude estimation was chosen instead of the alternatives of Likert scale and category scaling. The rationale for this choice is given below.

While Likert scales are easy for the researcher to administer, and for the respondent to use, they suffer from several weaknesses that make them unsuitable for the present research. First, Likert scales suffer from ceiling effects. Some crimes, especially the more violent and harmful ones, are rated with very high seriousness scores reflecting the high degree of social disapproval which these acts receive (Davis & Kemp, 1994). While respondents should be free to rate these acts as seriously as they wish, Likert scales place an artificial upper limit on their ability to do so. Magnitude estimation places no such upper bound on responses.

The ceiling effects imposed by Likert scales are especially relevant for research which assesses attitudes towards the seriousness of crimes. Research on this topic has tended to use Likert scales (Meithe, 1982). This research has found a high degree of agreement across a wide range of population groups on the seriousness of the most serious types of crimes. Meithe (1982) suggested that this agreement was in part due to the ceiling effect imposed by the Likert scales used. People tend to agree that crimes like murder are the most serious crimes. Accordingly, they rate these crimes at the most serious end of the Likert scale. However, agreeing that a crime is the most serious is not the same as agreeing on the magnitude of the most serious crimes. The ceiling which Likert scales impose on ratings of seriousness force respondents to agree on the seriousness of the most serious crimes.
Second, Likert scales do not yield ratio data (Stevens, 1975). At best they yield interval data. Ratio data is the only data suitable for the current research because it is interested in the absolute perceived seriousness of crimes, as well as the relative perceived seriousness of crimes. Magnitude estimation techniques yield data on a ratio scale, although not all agree that this is the case when magnitude estimation techniques are applied to subjective stimuli (more on this later, for the moment assume that magnitude estimation does yield ratio data). Magnitude estimation yields ratio data because the magnitude of the comparison stimuli is estimated as a ratio of the magnitude of the standard stimuli.

Category scaling is another technique used by some researchers for assessing attitudes towards crimes. It was not chosen for the current research because category scaling only yields interval data, not ratio data (Stevens, 1975). In category scaling, each stimuli is rated relative to each other only in terms of one being bigger than the other, the magnitude of the difference is not specified. In reality, category scaling yields very similar results to magnitude estimation (Sellin & Wolfgang, 1964; Walker, 1978), but it is not the most suitable for the current research on theoretical grounds.

Some scholars question the validity of magnitude estimation techniques when they are applied to subjective stimuli (Dawson, 1982). Magnitude estimation techniques were developed for the assessment of perceptions of the magnitude of physical stimuli. Because the magnitude of physical stimuli is objectively measurable, the relationship between perception of magnitude and the physical magnitude of the stimuli can be objectively described. However, when the stimuli can only be measured in subjective terms, the ability to objectively validate perceptions of the stimulus' magnitude is lost. For example, perceptions of the weight of a rock can be assessed by weighing the rock, but perceptions of how funny a joke is cannot be compared to any objective measure of the humour of the joke. Despite these criticisms, even the early practitioners of magnitude estimation realised that it could be applied to subjective stimuli (Stevens, 1975).
The application of magnitude estimation to subjective phenomena, such as attitudes towards the seriousness of crimes, rests on the assumption that the objective and subjective characteristics of stimuli are cognitively processed in much the same way. There are a myriad of objections that can be made to the assumption. Despite this, psychophysical techniques remain widely used for investigating the perception of subjective phenomena. This has occurred for two reasons. The first is that responses to objective and subjective stimuli are remarkably similar (Dawson, 1982; Walker, 1978), more so than would be expected given the presumably different cognitive processing the two types of stimuli are subjected to. For example, Gescheider, Catlin and Fontana (1982) demonstrated good levels of validity for perceptions of the seriousness of crimes when they were matched against objective criteria such as the length of the sentence prescribed by law for the crime. Thus, the application of perceptual psychophysical techniques to subjective phenomena has acceptable face validity. The second appeal of magnitude estimation is that it produces a common metric for the perceptions of relatively disparate stimuli, even if the stimuli themselves cannot be measured on a common metric (Stevens, 1975). For example, this common metric allows a number to be assigned to the perceived difference between the seriousness of theft and murder, the aesthetic value of the Monalisa and a Picasso, and infinite other comparisons. All that is required is that the stimuli have an unidimensional characteristic in common, such as seriousness or aesthetic value. This second characteristic of psychometric methods has obvious appeal to the social sciences. Admittedly, vast improvements could be made to the theoretical validity of applying perceptual psychophysical techniques to subjective social phenomena, and any new technique to do so will be readily accepted. Objections to using psychophysical techniques are convincing on theoretical grounds, but these criticisms do not eventuate in the data. Until a better technique is invented that has superior theoretical validity, psychometric techniques will continue to be used because of their appealing and useful features.
Some researchers in perceptual psychophysics have recently stopped using a standard stimuli against which other stimuli are compared (Gescheider, 1988). Instead the respondent assigns a value with a magnitude of their choosing to the first stimulus presented. The first stimulus is used by the respondents as their own standard. This newer technique was adopted in response to emerging concerns with the use of standard stimuli. Some respondents did not seem to cope with assigning magnitudes to comparison stimuli that were smaller than the standard (Parton, Hansel & Stratton, 1991). This may be because some people have trouble with the concept of fractions and cannot reliably work with them. Other research suggested that there was a natural magnitude for responses, thus assigning an arbitrary value to the standard stimuli may bias responses in unknown ways. Put another way, respondents may be forced to use values for magnitudes that they are not naturally comfortable with.

Despite these concerns the use of no standard has not caught on for researchers applying magnitude estimation to subjective stimuli. Few scholars who study perceptions of subjective phenomena have even acknowledged this potential source of bias. Standard stimuli remain popular. The current research also uses a standard stimuli. The principle reason for this is that comparable research uses standard stimuli, and a similar method for the current research was necessary to preserve the comparability of results.

Some precautions were taken to lessen the potential biasing effect of using a standard modulus for the standard stimuli. The standard offence was not very serious relative to the other offences. If respondents do have trouble working out fractional amounts for comparison crimes that they perceive to be less serious than the standard crime, at least this will be only for a minority of comparison offences. 100 was chosen as the arbitrary value for the stimulus because it is an easy number to divide, yet it is not so small that respondents may feel restricted in the magnitude of their fractional responses.
To summarise, many researchers who investigate attitudes towards social phenomena find magnitude estimation a useful technique. While it has faults, magnitude estimation is the "pick" of the available methods because it places no upper bound on ratings and it yields ratio data. Magnitude estimation has been successfully used for many years to investigate attitudes towards subjective stimuli. Although it may be counterintuitive to suggest that subjective and objective stimuli are cognitively processed by similar mechanisms, the considerable similarities in the response characteristics of people appraising objective and subjective stimuli gives strong support for applying magnitude estimation to subjective stimuli.

4.1.3.2 Seriousness

"Seriousness" is recognised as a useful and versatile construct for evaluating attitudes towards crimes (Rossi & Henry, 1980). For example, Erickson and Gibbs (1979) suggested that if the punishment of crimes is to be guided by public sentiment, then the public's perception of the seriousness of crimes must be understood. The growing influence of labelling theory (Wheeler, 1975) has also accentuated the relevance of seriousness, because the process of socially labelling crimes has become as important as the characteristics of the criminal act itself (Simmons, 1965). Society's perception of crime has been recognised as an important contributor to the phenomenon of crime. Other constructs are also used to investigate perceptions of crime, but they have not achieved the ascendancy of seriousness. Judgements of publicly preferred punishments for crimes are an alternative construct that has achieved a degree of popularity (for example Gibbons, 1969; Erickson & Gibbs, 1979; Warr, Meier & Erickson, 1983). However the ultimate utility of this construct is questionable because perceptions of the seriousness of crimes would probably be the primary dimension contributing to judgements of publicly preferred punishments. The same could be said for measures of "moral indignation" towards crimes (Broadhurst & Indermaur, 1982).

The popularity of seriousness began with Sellin and Wolfgang (1964). They found a high degree of consensus between different groups for their ordering of offences on the
basis of their seriousness. The agreement is strong enough to extend across countries and cultures (Figlio, 1975). There is especially strong agreement between American, Canadian and English studies (Figlio, 1975). This agreement is not total, but it is much greater than would be predicted by subcultural theory, which accentuates the differences in normative values between groups. Such high levels of agreement were for many years believed to validate the use of "seriousness" as the predominant measure of attitudes towards crime.

As is the case with many other reified beliefs in psychology, cracks have began to appear in the support for seriousness. Warr (1989) criticised researchers for failing to explicitly define seriousness in their published works (Warr, 1989), and judging by the number of different ways in which it was operationalised, very few agreed on the definition. It is surprising that such an important construct was not clearly defined for over two decades (Parton, Hansel & Stratton, 1991), although Hansel (1987) suggested that there had been whispers of discontentment for many years.

Research since 1980 has also cast doubt on their assumption that seriousness is uniformly defined by the population. Findings suggested that multiple factors contribute to perceptions of seriousness (Howe, 1988; Forgas; 1980; Rossi et al, 1974). Far from the original assumption of a unitary phenomena, seriousness appears to have many contributing factors which may interact with each other and the environment in complex and not well understood ways.

Opinions of what factors contribute to perceptions of serious are divided. Theorists and researchers have suggested a variety of factors. Warr (1989) suggested that seriousness can be divided into two types of harms. The first is the moral gravity of the crime. The second is the harm of the crime such as physical injury or loss of property. Only one type of harm is used as a basis for judgements of seriousness. The choice of which type of harm to use for judgements was decided by which type of harm was most severe, the more severe harm being used. Forgas (1980) studied factors which
contribute to perceptions of crime. He found four factors: the respondents personal concern with the crime, the amount of violence involved in the crime, how common the crime was, and the intentionality with which the crime was conducted. All four factors were moderately correlated with perceptions of seriousness, but none were dimensions that uniquely reflect seriousness. Economic and physical harm are two other factors contributing to perceptions of the seriousness of crimes (Parton & Stratton, 1984; Schrager & Short, 1980).

Research on attitudes towards crime is presented with a significant problem by the non-uniform definition of seriousness in the population suggested by some researchers. When different people are asked to rate crimes for their seriousness they may not be comparing them in the same basis. One person may concentrate on the amount of violence of the crime and another may be more influenced by it's moral harms. In effect, they are not comparing the same features of crimes. Accordingly, the validity of research which uses seriousness as a measure of attitudes towards crime can be questioned.

Yet more doubt is cast on the use of seriousness by suggestions that the consensus across groups and populations is a methodological artefact. Meithe (1982) suggested how three factors may artificially inflate consensus. First, consensus is calculated by comparing the mean scores of different groups. Averaging scores across a group ignores the variance between individual respondents. Second, very serious offences are over represented in the surveys. There is considerable evidence suggesting that consensus is greatest for the most serious crimes, but that it is less for more moderate crimes. For example, almost every one agrees that murder is very bad and that swearing in public is a minor offence, while most people will disagree on the seriousness of a moderate offence such as stealing a car. Over representation of very serious offences will inflate consensus. Third, that agreement on the rank ordering of offences says nothing about agreement on the absolute value of offences.
Cullen, Link, Travis and Wozniak (1985) tested Meithe’s suggestions. They used the data from Cullen, Link and Polanzi (1982) study which found substantial consistency in perceptions of the seriousness of crimes. By using a different measure of agreement than used in the original Cullen et al. study, they found that consensus was not as pervasive as originally found. Differences between the different methods in seriousness ratings were about 10%.

Related to this criticism is the observation that while many studies have found considerable agreement on the relative seriousness of different crimes, there is far less agreement on the absolute values of the particular crimes (Cohen, 1988). While people may agree that murder is more serious than theft, there is far less agreement on how many times murder is more serious. Cullen et al. (1985) suggested that if researchers want to generalise their results to the population then the absolute, rather than relative magnitude of differences should be ascertained.

Despite these criticisms, seriousness was used as the dimension for measuring attitudes towards crimes. While the criticisms of seriousness are noteworthy, they are not convincing for many reasons.

First, while it is clear that seriousness is not unidimensional because several factors contribute to it, it has qualities which allow it to be used as if it were an unidimensional construct. Parton et al. (1991) observed that a fundamental assumption of magnitude estimation was that the scale attribute is unidimensional. Thus, it would be best to reduce seriousness to unidimensional factors which contribute to the perception of seriousness and to use these factors. Unfortunately there is little consensus on what unidimensional constructs contribute to perceptions of seriousness. Hansel (1987) took a broad approach to the total set of perceptions that contribute to perceptions of crime, seriousness included. He noted other multidimensional studies of the perceptions of crimes (Sherman & Dowdle, 1974; Mistretta, 1976; Hansel, 1975) which found different factors contributing to perceptions of crime, but all found seriousness as a central
concept in the interpretation of crime. Later work by Howe (1988) made similar findings. Hansel suggested that seriousness appears to be either "a separate dimension or is highly correlated with the overall structure". Simply put, whatever the contributing factors may be, most people agree on what seriousness means and most people use it when evaluating crimes. Even though seriousness may not be unidimensional, it behaves as if it is. Seriousness can be used for the current research because no convincing alternatives exist, and that it can be used in a manner consistent with methodological requirements for unidimensionality, even if it does not strictly meet them.

Second, even though Meithe (1984) and Cullen et al. (1985) convincingly criticise the methodology used for most studies of seriousness, they do not suggest that consensus on the relative seriousness of crimes does not exist. Meithe only found weak but significant support for some of his criticisms. Cullen et al., while finding a decrease in consensus on seriousness, did not find that it was reduced to a degree where there was no apparent consensus at all. They only found that consensus was moderately strong, rather than very strong as did the other studies. Alternative methodologies have provided some support for the consensus in the relative ordering of crimes in terms of seriousness. Cohen (1988) defined the seriousness of crimes in terms of their economic impact, rather than human perceptions of seriousness. This approach yielded rankings very similar to those found in surveys of human perception. Thus, the subjective appraisal of the seriousness of crimes is mirrored by more objective appraisals.

To conclude, the use of seriousness as a measure of human perceptions of crime is open to criticism. These criticisms should always be borne in mind by the researcher but to date, the criticisms have failed to cast significant doubt on its use. Perhaps the biggest endorsement for the use of seriousness is the sheer number of studies using a variety of methods which have found that people generally agree on the relative seriousness of crimes. If the subjects in all this research could not agree on what was meant by seriousness, it is unlikely that such a high degree of agreement would be
found. Perceptions of crime are complicated, and seriousness, being a perception of crime, is inevitably caught up in this complexity. These complications place limits to how far the meaning of seriousness can be interpreted, but the robustness of findings on the perception of the seriousness of crime itself mean that within these limitations, it is a useful concept capable of useful findings.

4.1.3.3 The Logarithmic Transformation of the Data

One of the more significant problems with magnitude estimation is that it yields data which is difficult to interpret with existing statistical techniques because of its inherently high heterogeneity of variance. Davis and Kemp's solution to this problem was to use median estimates of crime seriousness, a technique which is common for the analysis of magnitude estimations (Lodge, 1980; Wegener, 1982). This method was one among many alternative ways of dealing with the data which were investigated.

The first alternative method evaluated was the ranking of crime seriousness estimates. This approach was rejected for two reasons. First, respondents tended to repeat the same value for a variety of crimes. This would have resulted in tied ranks for several crimes. While statistical analyses can cope with this, the overall resolution of the data was reduced. Second, rankings yield ordinal data which is insensitive to the magnitude of differences between the ranks. Accordingly, it would be possible to have differences in the magnitude of crime ratings which would not result in different rankings for the crimes. The insensitivity of rankings to the absolute magnitude of ratings would potentially lead to the failure to detect interesting differences between sample groups.

The second method investigated required that all seriousness ratings be transformed into a ratio of the highest rating, standardising the value of all crimes relative to the most serious crime. The most serious crime was assigned a value of one and all other crimes were assigned a ratio value between zero and one. The majority of respondents gave their highest rating to the crime of killing someone during an argument.
Subsequent analysis suggested that this approach was not viable. When the data was transformed into the ratios, the data showed a high heterogeneity of variance, rendering it unsuitable for the ANOVA procedures used in the analysis. This variance could be explained by different rating behaviours of the respondents. Some respondents rated crimes in an arithmetic progression while others rated crimes in a more exponential manner. While the seriousness ratings would have the same maximum value of one, the distribution of scores within the standardised range would be different for exponential and geometric ratings. Less serious crimes for exponential raters showed a much greater tendency towards smaller values than geometric raters. Thus, while ratings now had a standardised range, their distribution within the range was untenably variable. The option of ratio transforming the data was discarded.

The next alternative was the relatively simple method of using the geometric mean of the ratings of seriousness. There were two problems with this approach which discounted its use. First, the minority of respondents who chose to use very large numbers had a disproportionately inflationary effect on the means. Second, the differences in rating behaviours of the respondents resulted in a high heterogeneity of variance, rendering the data unsuitable for the ANOVA procedures used in the analysis.

The final alternative method for treating the data was to logarithmically transform the data, and to use the geometric means of the transformed data. A primary advantage of the logarithmic transformation of the data was that it significantly reduced the heterogeneity of the data (to a degree acceptable for ANOVA) by reducing the differences between respondents who rated crimes in an exponential manner and those who rated in a geometric manner. The effect of the logarithmic transformation on geometrically rated data was far less than for exponential ratings, thus greatly reducing the degree of difference between the two rating styles and increasing the homogeneity of variance.
While medians are a popular treatment for magnitude estimation data, they have a significant shortcoming. Medians are insensitive to the considerable numbers of ratings which are not the same as the median, thus potentially masking important features of the data. An advantage that logarithmic transformations have over medians is that they allow for the use of means, which are more sensitive to the total form of the data set. The logarithmic transformation was chosen over medians as the treatment for the data primarily because they allowed for the use of means.

| Table 11. Bivariate Correlation's for Means of Logarithmic Transformations, Means for the Untreated Data and Medians for all Forty Crimes in Task Four. |
|---------------------------------|---------------------------------|---------------------------------|
| Means for the Logarithmic Transformations | Means for the Untreated Data | Medians |
| Means for the Logarithmic Transformations | **** | **** | **** |
| Means for the Untreated Data | $r = 0.6268$ | **** | **** |
| $p = 0.0001$ | | | |
| Medians | $r = 0.8857$ | $r = 0.7520$ | **** |
| $p = 0.0001$ | $p = 0.0001$ | | |

There is evidence to suggest that the differences between medians and the means of logarithmic transformations are not great. Table 11 gives the correlation for all forty crimes in Task Four between the means of the logarithmic transformations, the means for the untreated data and the medians. The correlation between the medians and the means of the log transformations suggested a close relationship ($r = 0.8857$, $p = 0.0001$).

4.1.3.4 The Categories of Analysis

Analysis of the data required that the crimes be aggregated into different categories. There were many ways in which the data could have been categorised. The choice of categories for street crimes was relatively simple. They were divided into the three categories of crimes against the person, crimes against property, and victimless crimes. These categories are common in the literature. Studies have consistently found that crimes against the person are perceived as more serious than crimes against property,
and that these crimes are perceived as more serious than victimless crimes (Sellin & Wolfgang, 1964; Rossi, Waite, Bose & Berk, 1974; Cullen, Link & Polanzi, 1982; Goff & Nason-Clark, 1989).

The choice of categories for the white-collar crimes was not as simple. Cullen, Link and Polanzi (1982) stressed the importance of dividing white-collar crime into different categories because not all white-collar crimes share the same features. They used the six categories of:

1) violent white-collar crime
2) crimes against a business organisation
3) governmental corruption
4) price fixing
5) defrauding consumers
6) income tax fraud

While their general argument was convincing, they went on to suggest that alternative categories may also have been used. There are many ways in which white-collar crime is characterised in the literature, with varying emphasis on different features. The particular choice of categories would vary depending on which features of white-collar crime were of interest to the researcher. The categories used for the current analysis were chosen for a number of reasons. White-collar crime causing death and white-collar crime involving injury were chosen because of the expectation that these crimes would be perceived as more serious than the other types of white-collar crime. This expectation was based on research on attitudes towards the seriousness of crimes which has found that crimes causing physical harm and death are consistently rated as the most serious category of crime, and that this was especially so for the crimes resulting in death (Sellin & Wolfgang, 1964; Rossi, Waite, Bose & Berk, 1974; Cullen, Link & Polanzi, 1982; Goff & Nason-Clark, 1989). The reliability of findings for the serious crimes which cause death and injury suggest that most people agree on what these crimes are and that they are quite serious. These categories of crime provide a
good conceptual anchor against which to compare the seriousness of other categories of crime.

The three categories of anti-competitive practices, dishonesty of organisational gain and dishonesty for personal gain were chosen for more esoteric reasons. Analysis of the written responses to Task Two suggested that dishonesty for personal gain was a feature central to most of the respondents characterisations of white-collar crime, and accordingly may have some relationship with ratings of seriousness. Hence the two contrasting categories of dishonesty of organisational gain and dishonesty for personal gain were chosen. The anti-competitive practices category was chosen because there have been some prominent examples of this type of crime in the media recently.

Exploration of the literature suggests many different ways in which attitudes towards white-collar crime can be categorised, so many that no single research effort can come close to using a representative cross section. Freed from the possibility of meeting such lofty goals, the categories in the current research were chosen for their relevance to other findings in the study and their compatibility with the examples of crime in the questionnaire.

4.1.3.5 Review

The analysis of the methodology has presented the rationale for the questionnaire. Four aspects of the methodology were examined. Magnitude estimation was the first. It was chosen as the method for rating the seriousness of the crimes because it does not impose an upper bound to seriousness ratings. Accordingly, the methodology was expected to be free from ceiling effects, unlike other research which used Likert scales. Seriousness was the second aspect of the methodology to be discussed. Seriousness was the dimension on which attitudes towards crimes were investigated. There have been suggestions that seriousness is not a unidimensional construct. This has implications for the use of magnitude estimation because magnitude estimation requires that the construct being judged is unidimensional. Further analysis of seriousness
suggested that while other dimensions contribute to judgements of seriousness, in practice seriousness is the dominant dimension of judgements of crime and can be treated as if it was unidimensional. The logarithmic transformation of the next feature of the methodology to be discussed. The heterogeneity of responses elicited by magnitude estimation required transformations to reduce the variance of responses to a level acceptable for statistical analysis. When compared to the alternative treatments, magnitude estimation had the most attractive combination of benefits and costs and was the most effective method for reducing heterogeneity. Finally, the categories for analysis were examined. Cullen, Link and Polanzi (1982) suggested that while white-collar crimes should be categorised because of their differing characteristics, there are many alternative ways in which this can be done. The choice of categories for the current research was made for several reasons. The three street crime categories chosen are commonly used in research, and are clearly differentiated in seriousness. The two most serious white-collar crime categories were chosen because the reliability of the seriousness rating which they attract offered a good basis for comparison with the three other less serious white-collar crime categories.

The above analysis of the methodology described choices which were made because they were expected to result in the greatest validity. These expectations will now be tested by comparisons with the findings of other studies in the literature.

4.1.4 Comparison with the Findings of Other Research

While there are no directly comparable studies, there are many whose results have relevance to a variety of aspects of the current study. The ability of the current study to find results comparable to those of other studies is a good test of its validity. Several aspects of the results will be compared.
4.1.4.1 The Form of the Data

The crimes in Davis and Kemp's (1994) research formed the basis of most of the street crimes used in the current research, albeit with modifications following feedback from pre-trials. Their research was used for comparison with the current research because of the similarities with aspects of their work. They investigated attitudes towards the seriousness of crime, they used magnitude estimation to assess attitudes, and they conducted their research in New Zealand. However, their research differed from the current research by not including examples of white-collar crime, they only investigated street crimes. Accordingly, comparisons with Davis and Kemp will be restricted to street crimes.

The chief area of similarity between the results is in the basic form of the results. Davis and Kemp's description of their data applied well to the current research:

"...interquartile ranges ... suggest considerable individual variation in seriousness estimates".

They go on to note that:

"... the interquartile ranges increase with the median of the seriousness of the crime, indicating that the estimates were generally positively skewed..."

Like Davis and Kemp's data, the current data showed a wide range in the magnitude of ratings of seriousness, and a marked positive skew. Correlation of the median estimates of crime seriousness between the current study and Davis and Kemp's study for the 19 comparable street crimes suggested that they are similar to a highly significant level (r = 0.94, p = 0.001). The maximum median estimates of seriousness were also the same at 1000 (Table 12).

While the basic form of the data was similar between the two studies, Davis and Kemp's comments relating to the wide range in the magnitude of responses and the strong
Table 12. Comparison of Median Ratings for Crime Seriousness Between Davis and Kemp’s (1994) Study and the Current Study.

<table>
<thead>
<tr>
<th>Davis and Kemp Study Crime</th>
<th>Median*</th>
<th>I-Q Range**</th>
<th>Current Study Crime</th>
<th>Median*</th>
<th>I-Q Range**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder</td>
<td>1000</td>
<td>1000</td>
<td>Killing someone during an argument</td>
<td>1000</td>
<td>2900</td>
</tr>
<tr>
<td>Rape</td>
<td>800</td>
<td>550</td>
<td>Premeditated rape</td>
<td>1000</td>
<td>2287.5</td>
</tr>
<tr>
<td>Child molestation</td>
<td>700</td>
<td>600</td>
<td>Sexual molestation of a child</td>
<td>1000</td>
<td>3750</td>
</tr>
<tr>
<td>Incest</td>
<td>650</td>
<td>600</td>
<td>Incest between father and daughter</td>
<td>1000</td>
<td>2375</td>
</tr>
<tr>
<td>Assaulting a child under 14</td>
<td>500</td>
<td>600</td>
<td>Assaulting a child under 14</td>
<td>775</td>
<td>600</td>
</tr>
<tr>
<td>Abandoning a child under 6</td>
<td>500</td>
<td>400</td>
<td>Abandoning a child under 6</td>
<td>725</td>
<td>1525</td>
</tr>
<tr>
<td>Kidnapping</td>
<td>500</td>
<td>500</td>
<td>Kidnapping for a ransom</td>
<td>950</td>
<td>1500</td>
</tr>
<tr>
<td>Armed robbery</td>
<td>500</td>
<td>500</td>
<td>Armed robbery of a bank</td>
<td>800</td>
<td>1125</td>
</tr>
<tr>
<td>Aggravated assault of a police officer</td>
<td>400</td>
<td>450</td>
<td>Assaulting a police officer</td>
<td>400</td>
<td>850</td>
</tr>
<tr>
<td>Aggravated assault</td>
<td>400</td>
<td>450</td>
<td>Assault during an argument. Victim was hospitalised over night</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Common assault</td>
<td>300</td>
<td>300</td>
<td>Assault during an argument. No medical treatment was necessary</td>
<td>200</td>
<td>300</td>
</tr>
<tr>
<td>Carrying an offensive weapon</td>
<td>210</td>
<td>380</td>
<td>Carrying an offensive weapon</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Driving while disqualified</td>
<td>100</td>
<td>150</td>
<td>Driving while disqualified</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Selling cannabis</td>
<td>100</td>
<td>200</td>
<td>Selling cannabis</td>
<td>200</td>
<td>400</td>
</tr>
<tr>
<td>Receiving property dishonestly obtained worth $100</td>
<td>100</td>
<td>50</td>
<td>Receiving stolen property worth $100</td>
<td>90</td>
<td>50</td>
</tr>
<tr>
<td>Theft of $100</td>
<td>100</td>
<td>50</td>
<td>Theft of $100</td>
<td>77.5</td>
<td>50</td>
</tr>
<tr>
<td>Possession of cannabis</td>
<td>80</td>
<td>176</td>
<td>Possession of cannabis</td>
<td>50</td>
<td>56.25</td>
</tr>
<tr>
<td>Non-payment of $100</td>
<td>50</td>
<td>80</td>
<td>Non-payment of $100 parking fine</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>Defacing a coin</td>
<td>10</td>
<td>50</td>
<td>Defacing a coin</td>
<td>1</td>
<td>20.25</td>
</tr>
</tbody>
</table>

* Median estimate of crime seriousness
** Inter quartile range
positive skew are even more applicable to the current research than their own. The interquartile ranges for Davis and Kemp's data tended to be of a comparable magnitude to the median serious estimates. This trend contrasts with the current data where interquartile ranges in the majority of cases were considerably larger than the median serious estimates. This suggested an even greater variability in responses and an even greater positive skew for the current research. It is notable that while Davis and Kemp found that median ratings for the crimes of murder, rape, child molestation and incest were progressively less serious, comparable crimes in the current study all received the same median seriousness rating. Median estimates of seriousness suggested that the sexual crimes were perceived to be equally as serious as murder, however this trend was not as apparent in other data. Only 23.0% of respondents rated sexual crimes as the most serious type of crime, the remainder (77.0%) of respondents rated murder as the most serious crime. This pattern of results was more in keeping with the findings of Davis and Kemp.

The differences in the median estimates of seriousness for the two studies may at least in part be accounted for by differences in the wording of the offences. It was originally intended for the examples of street crimes in Task Four in the current study to be the same as Davis and Kemp instead of more lengthy and detailed vignettes because Davis and Kemp reported a very strong correlation \((r = 0.96)\) between the labels and vignettes. They concluded that uniform stereotypes of the crimes held by respondents were markedly similar to the vignettes and accordingly, that vignettes were not necessary. During pre-trials for the current research many respondents reported discomfort with the degree of assumptions which the crime labels required. Discussion with the pre-trial group suggested that elaboration into vignette form was required for some street crime labels. Davis and Kemp only published their labels and not their vignettes. Accordingly, it was not possible to compare the details of the vignettes used in the current study with theirs. Details in the vignettes of the current study may have been different, portraying the crimes in a more serious manner which may account for the more serious ratings for some of the crimes in the current study.
Differences between the median ratings of Davis and Kemp’s research and the current study may also be explained by socioeconomic differences between the two studies. Significant socioeconomic differences could be expected to be accompanied by other differences between the samples, such as education and experiences of crime. It is possible that the Davis and Kemp sample was of lower SES than the white-collar sample in the current study, because of the relatively high SES of people working in white-collar positions. While this is possible, Davis and Kemp’s data suggests that this was not likely. Their sample was also above normal SES because of under representation of the two lowest SES groups in the Elley-Irving socioeconomic index (Elley & Irving, 1985).

Another potential source of differences between the studies may be due to the differences in the line length estimation tasks (found in Task Three). Both studies used this type of task to assess the respondents general ability to perform magnitude estimation tasks. Feedback from pre-tests for the current questionnaire suggested the use of longer line lengths than those used by Davis and Kemp. The increased challenge of the longer lengths necessitated the use of a more inclusive criteria for inclusion of subjects than that used by Davis and Kemp. Perhaps this more liberal criteria allowed a greater proportion of respondents with less reliable rating behaviour into the data. This would account for the greater interquartile range of the current results.

The differences between the two studies were most likely to be the use of different standard crimes. Davis and Kemp’s was:

“The offender enters a house and steals furniture worth $1000.”

Where as the current study used:

“Goods to the value of $500 are stolen from a residential property”
Both were assigned the arbitrary value of 100 seriousness units. The lower monetary value of the of the goods stolen in the current study was likely to have accounted for the higher median ratings given to the more serious crimes in the current study. The use of Davis and Kemp's standard crime would have enhanced the comparability of their results with those of the current study, although the similarities in results are noticeable.

To summarise the comparisons between Davis and Kemp's data and the current studies data, the basic distribution of crime seriousness estimates were similar. The median seriousness estimates for the crimes compared between both studies were strongly correlated. Both studies found that the magnitude of the estimates varied widely, with a strongly positively skewed distribution. However, there were differences. The respondents in the current research showed greater variability in their distribution of ratings. Differences between the two studies in seriousness ratings can most likely be attributed to differences in the wording of crimes and the standard crime. Overall, the similarities between the current study and Davis and Kemp were more notable than the differences. This is exemplified by the very significant correlation for median estimates of seriousness for comparable crimes.

4.1.4.2 The Seriousness of White-Collar Crime Relative to Other Types of Crime

A series of studies which examined attitudes towards the seriousness of white-collar crime offer good comparisons with the current study (Rossi, Waite, Bose & Berk, 1974; Cullen, Link & Polanzi, 1982; Goff & Nason-Clark, 1989). They were based on an earlier study by Sellin and Wolfgang (1964). While Sellin and Wolfgang were not specifically interested in white-collar crime, their list of 140 offences contained many white-collar crimes. Rossi et al. noted that most of the white-collar crimes were ranked among relatively minor crimes. They replicated Sellin and Wolfgang's work to investigate whether highly public white-collar crime scandals since the study had increased perceptions of the seriousness of white-collar crimes relative to other types of crime. Cullen et al. and Goff and Nason-Clark replicated Rossi et al.'s work at later stages in
order to detect any subsequent trends and changes in the relative seriousness of white-collar crime. A key difference between these studies and the current study was that they used nine point Likert rating scales instead of magnitude estimation.

A notable similarity between the current study and the others was that (Table 10) white-collar crimes which cause deaths were rated as the most serious, and are in the company of other very serious crimes. For example Cullen et al. found that knowingly selling contaminated food which causes a death was the most serious white-collar crime, receiving a rank of 13th out of the 140 crimes. White-collar crimes with the potential to cause physical harm also receive high rankings, albeit less serious than white-collar crimes which cause deaths. The other key similarity was that the rest of the white-collar crimes were rated with notably less seriousness. For example, Goff and Nason-Clark found that white-collar crimes were ranked 10th out of the eleven classes of crime. In the current study, white-collar crimes such as fixing prices on a product like petrol and making false statements in advertising are ranked similarly to minor street crimes like assault during an argument (no medical treatment was necessary) and receiving stolen property worth $100.

The similarity of findings between the current study and those of Rossi et al., Cullen et al., and Goff and Nason-Clark are particularly striking when the methodological differences are considered. This suggests that Likert scales and magnitude estimation are capable of yielding substantially similar findings for attitudes towards the seriousness of crimes, which implies considerable convergent validity.

4.1.4.3 Age

The six age groups used in the questionnaire were reduced to two for the statistical analysis because there were too few respondents in each of the six categories for meaningful analysis. Davis and Kemp divided their sample into the age groups of 15 to 35, 36 to 55, and 56 years and older. Their sample had a wider distribution of ages. 15 respondents in Davis and Kemp's study were 66 and older while there were no
respondents in this age group in the current study. They also had many more in the 56 to 65 years old category (4 versus 10). With a smaller sample and a more restricted age range, it was decided that Davis and Kemps age groups could not be used in the current research. Instead, two groups of 15 to 35 years old and 36 and over were chosen. An unfortunate consequence of this decision was that direct comparison of age categories with Davis and Kemp was not possible.

Despite differences in age groups, Davis and Kemps results concur substantially with the current study. Both found high levels of agreement for the most serious crimes, with less agreement for the less serious crimes. Davis and Kemp found a high degree of consensus between all three age groups, especially for the more serious crimes. For example, the oldest age group's ratings of crime seriousness correlated highly with the sample as a whole \( r = 0.79 \). They found significant age differences for the nine relatively minor crimes of selling cannabis, blackmail, driving while disqualified, rioting, fraud, possession of cannabis, receiving stolen property dishonestly obtained worth $100, non-payment of $100 and defacing a coin. The oldest age group perceived all of these crimes except defacing a coin as most serious and the youngest age group perceived them as least serious.

The current research made similar findings. The two age group's differences in their perception of the seriousness of street crimes were restricted to the younger group perceiving victimless crimes as less serious than the older group. There were no significant differences between the age groups for any other classes of crime.

Other studies have also found similar patterns of agreement across age groups. Cullen Link and Polanzi (1982) divided their respondents into three age categories. All age groups were substantially in agreement for the seriousness of crimes, with correlation coefficients ranging from 0.93 to 0.97. Rossi et al. (1974) also found that seriousness ratings were highly significantly correlated \( r = 0.94 \).
4.1.4.4 Gender

No significant differences were found between the two sexes for the current research. The lack of any significant gender differences in the results was also found by Rossi, Watie, Bose and Berk (1974). They found a highly significant overall correlation between the sexes in their attitudes towards a variety of street and white-collar crimes ($r = 0.94$, $p<0.01$). The only sex difference found by Davis and Kemp was that males perceive the crime of rioting as more serious than women. Cullen, Link and Polanzi (1982) also found a very strong correlation between the sexes for ratings of seriousness ($r = 0.95$), suggesting predominantly similar attitudes towards the seriousness of crimes.

Against this trend, other research has found significant gender differences. Walker (1978) found that males perceived violent crimes to be more serious than females. Gebotys, Roberts and DasGupta (1988) found that females rated crimes against the person more seriously. These results are apparently contradictory because violent crimes are part of the category of crimes against the person. These differences aside, they illustrate that not all studies have found universal agreement between the sexes on the seriousness of crimes, but the majority of have found substantial agreement.

4.1.4.5 Review

Comparison with other studies has shown patterns of similarities with the current study. Direct comparison of the current study was not possible because of the absence of another study on the same topic (attitudes towards the seriousness of white-collar crime) using the same methodology (magnitude estimation). However, aspects of a number of other studies were suitably similar to the current research allowing for meaningful comparisons. Davis and Kemp's (1994) study allowed for analysis of the basic form of the data. The current study yielded substantially similar magnitude ratings to those of Davis and Kemp for street crimes. The studies of Rossi, Waite, Bose and Berk (1974), Cullen, Link and Polanzi (1982) and Goff and Nason-Clark (1989) allowed for the comparison of findings for the ranking of white-collar crime relative to street crimes. These results showed a similar pattern of rankings with the current study. The
findings of other studies were also useful for analysis of the relationship between the respondent's age, gender and their seriousness ratings for different crimes. Like the other studies, no substantial differences between age groups were found in the current study.

The results of the questionnaire compared favourably with other studies in a number of ways, making many similar findings. Collectively, they suggest that the questionnaire is capable of yielding data consonant with the literature. Simply put, the questionnaire behaved as it would be expected to. Accordingly, it appears to have an acceptable degree of validity, and that the questionnaire and the analysis of the data did not contribute to the failure to support H1.

4.1.5 Problems with Sampling

Problems with sampling may have been of two types.

First, the nature of the research may have caused a bias in the competitive organisations which agreed to participate. The topic of the research may have been aversive to organisations with histories of unethical and illegal conduct. These organisations may have feared that they could be identified for having employees with permissive attitudes towards white-collar crime. Organisations with good records of ethical and legal conduct would not have this disincentive for allowing their employees to participate. Pride in their good history may even have encouraged the organisation to allow employees to participate. Accordingly, there would be a tendency for the sample of competitive organisations to "self select" those which had strong ethical and law abiding cultures. This style of culture would be expected to reflect in employee attitudes towards white-collar crime.

The potential for this sample bias became apparent to the author when many organisations which were approached about letting their employees participating in
research showed sensitivity to the reasons why their organisation was selected for the research. While the author explained that the organisations were randomly selected, representatives of these organisations were notably sensitive to the possibility the organisation was selected because of its conduct.

White-collar crime is a delicate issue for organisations whose members have an above average tendency to commit it. While it is desirable for researchers to be able to sample from these organisations, it is likely that many would be hesitant to participate. In these situations considerable efforts should be made to assure the organisations that they were not being judged and that their anonymity will be predicted. It is difficult to predict whether these reassurances would be sufficient to satisfy the concerns of the organisation. If not, the reluctance of these organisations to participate in research may be an enduring source of bias.

Second, the two sample groups may not have been sufficiently differentiated in their exposure to the culture of competition. The competitive sample was taken from profit making organisations which operate in sectors of the economy where there is strong competition for business. The noncompetitive sample was taken from non-profit organisations such as charity organisations and state sector organisations. The assumption was that these populations would be significantly different in the degree which they were exposed to the culture of competition. This may not be the case. Truly noncompetitive organisations are rare in today's economy. Accordingly, "less competitive" organisations were sought for the sample. This lesser criteria for selection introduced the potential for similarities between the competitive environments of the "competitive" and "noncompetitive" organisations from which the samples were taken.

In summary, there was substantial potential for the current research to have problems with its sample. Two potential sources of bias were identified. The first was the potentially aversive nature of the research for organisations with poor records of ethical and legal conduct. The second was the failure to differentiate the two sample groups in
their exposure to the culture of competition. These problems would reduce the validity of the findings and render the disprooof of the hypothesis meaningless because it was tested on unrepresentative samples.

4.1.6 Problems with the Theory

The failure to support the hypotheses brings the theory which underlies them into question. It does not necessarily follow that Coleman’s culture of competition would manifest in attitudes towards the seriousness of white-collar crime in the manner predicted by the hypotheses.

Coleman (1987) suggested that the culture of competition creates sufficient need for material gain or the prevention of material loss that some people are willing to violate social norms and the law in order to satisfy these needs. The author extended this theory by suggesting that because the culture of competition was a social phenomenon, its effect on attitudes towards the commission of white-collar crime should be able to be measured in the social environment. The impetus which the culture of competition creates for material success was suggested to minimise attitudes towards the seriousness of white-collar crimes. Further, it was suggested that people who work in highly competitive business environments would be especially likely to minimise the seriousness of white-collar crimes because they are most exposed to the culture of competition. This may not be the case.

Studies of business ethics have found that managers frequently have to put aside personal values in order to achieve organisational goals (Simpson, 1992). These people may perceive white-collar crime with equivalent seriousness to people who do not work for competitive organisations. The culture of competition may not change the attitudes towards the seriousness of crimes for people who work in competitive organisation, instead it may motivate these people to temporarily set aside these attitudes in order to achieve organisational goals. This situation may even serve to increase a persons
attitudes towards the seriousness of white-collar crime. They are in a first hand position to see its harms, and accordingly rate white-collar crime as more serious than people who do not work for competitive organisations. This effect of increasing attitudes towards the seriousness of unethical practices and white-collar crimes may occur not just for the people who commit them, but also those who observe them committing them. This explanation accounts for the finding that people from competitive organisations rate white-collar crimes as more serious than people from noncompetitive organisations.

Alternatively, the assumption that the level of competition which an organisation faces is the prime determinant of the attitudes of its members towards the seriousness of white-collar crime may be too simplistic. Coleman suggested three other influences on an organisation's culture. First, within the organisation the attitudes of individuals in key positions, such as senior management, can have a significant effect on their employee's attitudes towards deviant and illegal occupational behaviour. Second, the culture of the industry within which the organisation operates can also be influential. Third, the occupational culture of members of the organisation may also be influential. While the culture of competition may be an influence on an organisation's culture, it is not the only one, and it may not be valid to suggest that it is the most influential one.

The culture of the industries which were sampled for the research may have had a significant effect on the non-competitive sample group. A substantial number of the non-competitive organisations which agreed to participate in the research were from the state sector. There are characteristics of state organisations which may be conducive to white-collar crime. The extensive restructuring of state agencies since the 1984 Labour Government placed considerable demands on organisations and employees. Increased workloads, perceptions of insufficient wages, and poor relations with management are among many factors which may contribute to attitudes which justify white-collar crimes. Workers may feel that they are "getting back" at the organisation, or that their illegal gains compensate for poor working conditions and remuneration. Managers of these
organisations commented to the author that their employees on occasion do commit white-collar crimes. The attitudes of workers in the state sector towards white-collar crime are worthy of further investigation.

The examples above are intended to illustrate how the culture of competition may not manifest in attitudes towards the seriousness of white-collar crime in the manner predicted. They are not intended to provide an exhaustive list. While the culture of competition is a strong influence on society and social attitudes, it is only one among many social influences. Attributing white-collar crime and attitudes towards white-collar crime primarily to the culture of competition is at the peril of ignoring the myriad of influences which cause the variation in beliefs and values between members of society.

### 4.2 Tasks One, Two and Three

The hypotheses were analysed using data which was gathered by Task 4 in the questionnaire. Accordingly, analysis of the hypotheses has concentrated on Task 4. While this data was of most central relevance to the research, the data of Tasks 1 to 3 needs to be examined to assess their relevance to the findings.

The response rate of 38.4% to the questionnaire was fair. However, the manner in which the questionnaire was presented to the respondents may have increased the participation rate. Approval by management for employees to be approached about participation in the research may have provided tacit encouragement by management for employees to participate. The implications of any tacit encouragement are difficult to predict. For example, encouragement may have provided differential motivations for different employees depending on their positive or negative attitudes towards management and the organisation. Alternatively, encouragement may have provided a more equal motivation for participation in organisations with a strong esprit de corps. Either suggestion had the potential to cause biases in the results.
A less speculative explanation of the response rate was offered by experience gained when pretesting the questionnaire. Many respondents stated that they enjoyed the tasks in the questionnaire, especially Task Four, for their intellectual challenge and for what respondents considered an interesting topic area. This is supported by several notes included with the returned questionnaires requesting a synopsis of the findings.

4.2.1 Task One: Demographic Data

Task One in the questionnaire dealt primarily with the demographic characteristics of respondents. While there was the same number of males and females for the 15 to 25 and 26 to 35 year old groups, the ratio steadily increased in the favour of males to the degree where in the oldest age group, 56 to 65 years old, there were no women and four men. It appeared that females who were 35 years old or younger had far more equality with men for employment opportunities than older women.

The dominance of males in the older age groups had the potential to cause biases in the age by sex interactions, however the results suggested otherwise. No significant differences existed between males and females in the sample group across all categories of crime. The results suggest that young women, young men, and older men employed in white-collar positions have similar attitudes towards the seriousness of a variety of street and white-collar crimes. The views of older women in white-collar positions were numerically under represented. If this sample group has different patterns of perceptions of the seriousness of crime, greater representation of this group may have affected the results. This is an area worthy of further research. It could be argued that samples aiming for true overall representativeness of white-collar workers should have a relatively small number of older women because this reflects the realities of employment patterns.
The age composition of the sample was what would be expected for people working in white-collar positions, with a bias towards older age groups. As stated elsewhere, white-collar positions require considerable education and/or experience, precluding most young people from gaining white-collar employment. The nearly five year difference in mean ages between the sexes reflects the dearth of females in the older age groups, however, even in the case of women the mean age is relatively senior.

The levels of educational attainment for the respondents, like age, were what would be expected for people working in white-collar positions. 69.1% of respondents had under graduate or post graduate university qualifications. All of the 15 to 25 year old group had university qualifications, adding support to the assertion that experience or a high level of education are necessary to gain white-collar employment. The only way the youngest age group could achieve white-collar employment without substantial job experience was with a tertiary qualification.

Respondents were allowed to tick more than one box indicating their educational qualifications. This was done because it was recognised that people can have several qualifications, and that it was better for the researcher rather than the participant to decide which single qualification was most relevant to the research. For the sake of consistency, it was necessary to develop a hierarchy for ranking qualifications. University qualifications were given precedence over polytechnic qualifications as higher educational achievements, and polytechnic qualifications were given precedence over trades qualifications. School qualifications were at the bottom of the hierarchy. The ordering of the hierarchy is open to debate. The "superiority" of university qualifications over some of the more intensive polytechnic qualifications is questionable. However, the integrity of the research was not seriously threatened by this uncertainty because the education (along with the occupation) was used to double check the respondents white-collar status, and not for substantial statistical analysis.
To summarise the demographic data gathered in Task One, respondents tended to be well educated, most likely by a university, they were most likely to be middle aged and they were more likely to be male (but this difference was due to the dominance of men over 36 years old). These characteristics were what would be expected for white-collar workers, and accordingly provides validation of the white-collar status of the sample.

4.2.2 Task Two: Understanding of White-Collar Crime

In Task Two of the questionnaire respondents were asked to write down what they understood white-collar crime to mean. Responses were both quantitatively and qualitatively analysed. While it was appealing to choose an exhaustive collection of concepts in order to characterise all possible responses, this approach would have required an impractically large number. Instead, responses were evaluated for their correspondence with eleven concepts commonly found in the academic literature. They are listed below. Not all are compatible with each other, and many of them are strongly debated in the literature. The aim of such an approach was to investigate any favour the sample group may have had for particular concepts.

1. **White-collar crime involving the violation of the trust of another party**: this concept is based on Shapiro's (1990) influential paper, in which she suggested that this was the central feature of all white-collar crime.

2. **White-collar crime requires powers, privileges and/or information inherent to the white-collar offender's occupational position**: originates in the debate over the use of offender characteristics versus offence characteristics as the basis of definitions of white-collar crime (Weisburd, Wheeler, Waring, & Bode, 1991).

3. **Fraud**: frequently mentioned in reports of white-collar crime, both in case studies and in the news media.

4. **Theft**: frequently mentioned in reports of white-collar crime, both in case studies and in the news media.
5. *Embezzlement:* frequently mentioned in reports of white-collar crime, both in case studies and in the news media.

6. *White-collar crime is committed by people with elevated social status:* relates directly to Sutherland's assertion that this is a central feature of white-collar crime.

7. *White-collar crime is committed for personal gain:* included on the basis of Clinard and Quinney's (in Geis, 1991) differentiation between the two types of white-collar crime.

8. *White-collar crime is committed for organisational gain:* included on the basis of Clinard and Quinney's differentiation between the two types of white-collar crime.

9. *White-collar crime can be committed by people of blue-collar status:* while this concept may appear to be an oxymoron, there is considerable disagreement on this issue relating to the debate on offender versus offence based definitions of white-collar crime (for example Edelhertz, 1983).

10. *White-collar crime is inherently non-violent:* a frequently noted feature (for example Edelhertz, 1983).

11. *White-collar crime is an inherently sophisticated type of crime:* this was included because of Weisburd, Wheeler, Waring, and Bodes (1991) influential finding that this characterisation of white-collar crime is not always applicable, and even possibly an exception, although white-collar crime is frequently stereotypes as sophisticated.

The concepts used for the quantitative analysis may not have been optimal for elucidating the most salient features of the respondent's descriptions of white-collar crime. For example, the harms caused by white-collar crime were not included. Future research should examine other concepts given in descriptions of white-collar crime.
Only one rater was used, and ratings were only made once. Accordingly, there was no way to assess the reliability of ratings between raters over time. While this was less than ideal, the decision was made to conduct a less thorough analysis on this data because it was not of primary importance to the research. The expenditure of time and resources was better spent elsewhere. Task Two was only intended to provide extra data to "flesh out" the findings from Task Four, possibly providing extra insight.

While descriptions of white-collar crime were diverse, they had two broad themes. The most notable was the observation by 73.2% of the respondents that white-collar crime is committed for personal gain. It would appear that this was a strong stereotype of white-collar crime among white-collar workers. Crimes committed for organisational gain were seldom mentioned. This differentiation between crime committed for personal gain and for organisational gain can be explained by two opposing theories. Perhaps respondents consciously differentiated white-collar crime from crimes committed for organisational gain, such as corporate crime, environmental crime, and anti-competitive practices. This suggestion requires that respondents have a relatively comprehensive knowledge of white-collar crime. Alternatively, respondents may not have been aware that many academics include crimes committed for organisational gain in their definitions of white-collar crime. This absence of knowledge may be explained by media portrayals which focus on white-collar crimes committed for individual gain. Crimes committed for organisational gain are seldom described by the media as "white-collar crime".

The "absence of knowledge" was preferred as the explanation for the tendency of respondents to characterise white-collar crime as crimes committed for personal gain. The vast majority of responses were not technical or legalistic in tone, rather offering looser descriptions of general impressions, implying a lack of certainty and precision in the respondents underlying knowledge of white-collar crime. It was unlikely that typical respondents had sufficient knowledge to make a conscious distinction between white-collar crimes committed for personal gain and for organisational gain.
The next most noticeable theme in the responses was more contentious. 62.2% of respondents mentioned at least one crime out of the three crimes of theft, fraud and embezzlement. The validity of combining the three crimes for the purpose of analysis can be disputed because each has a unique legal definition. If respondents had such a legal perspective the combination of the three crimes would constitute an unrepresentative aggregation of the data. However, as noted above the vast majority of responses were more general and imprecise in character than what would be expected from legalistic descriptions of white-collar crime. The analysis of Task Two suggests that theft, fraud and embezzlement were used to allude to a more general concept which could be loosely described as the "commission of theft by means of dishonesty".

The finding that white-collar crime was believed to involve theft, fraud and embezzlement was not surprising. However, while these behaviours do constitute white-collar crime, academics include many others. The respondent's descriptions of white-collar crime reflected media portrayals of white-collar crime, which concentrated on a restricted set of perpetrators and their crimes.

Beyond the two broad trends, descriptions of white-collar crime were far less coherent. The majority of responses described features of white-collar crime which were compatible with components of academic portrayals, but descriptions tended to be far from comprehensive. Respondents showed varied patterns of emphasis on some points while ignoring others. Apart from the broad trends, individual stereotypes of white-collar crime appeared to vary.

Descriptions of white-collar crime in Task Two were strikingly similar to media portrayals. Both focus on crimes committed by individuals who take possession of another party's money or assets for their own gain. This characterisation is much narrower than those given by academics who study white-collar crime. While the findings suggest a strong relationship between the media portrayals of white-collar crime and stereotypes of white-collar crime in the population, the author is unaware of
any research specifically on the topic. The connection between media use and stereotypes of white-collar crime is potentially very significant for the current research. It would be reasonable to expect high media usage in the sample because of its high level of education and high socio-economic status. They want to understand the social and business environment they live and work in. Accordingly, white-collar workers may be especially sensitive to media portrayals of white-collar crime.

The relationship between media coverage and perceptions of white-collar crime should not be underestimated. Media coverage of specific cases is likely to be the sole source of knowledge of white-collar crime for most people. The growth in public disapproval of white-collar crime in the USA, beginning with the Watergate scandal in the seventies, has in part been attributed to increased media coverage of white-collar crime (Katz, 1980; Cullen, Link and Polanzi, 1982). Other studies have detected increases in the perceived seriousness of white-collar crime over similar periods (Cullen, Link & Pollanzi, 1982). There is a clear need for research on stereotypes of white-collar crime and their relationship with media coverage.

4.2.3 Task Three: Line Length Estimation

Task Three was based on a similar task to the one used by Davis and Kemp (1994). Both tasks were intended to detect respondents who were unable to reliably perform magnitude estimation tasks. Davis and Kemp used a standard line of 20mm in length and ten comparison lines ranging from 2.5 to 60 mm in length. When lines of the same range of lengths were tested in pre-trials for the current research, respondents suggested that the task was undemanding. It was decided to use a wider range of line lengths for the questionnaire, with a standard line 10mm in length, and comparison lines ranging from 5mm to 80 mm in length.

Davis and Kemp used a rule where respondents were excluded from the data when they were “greatly deviant” from the median response for two or more lines. The precise
nature of "greatly deviant" was not given. The current research used a more transparent operational rule where respondents were excluded if they were more than 25% deviant from the correct length for three or more lines. Assuming that "greatly deviant" was approximately equal to a 25% deviation, the current research used a more inclusive decision rule where respondents remained in the sample with up to two out of eight lines being "greatly deviant", as opposed to Davis and Kemp who allowed only one line out of ten to be "greatly deviant". Again assuming that "greatly deviant" was approximately equal to a 25% deviation, 94% of the sample in the current research satisfied Davis and Kemp's criteria for inclusion. 7 out of 89 respondents (7.9%) were excluded from the current research for substandard performance on the line length estimation task whereas 12 out of 127 were (9.5%) excluded from Davis and Kemp's sample. These rates are comparable.

The data suggests that respondents did find the task more challenging than they would have for shorter line lengths. While respondents were not completely accurate, the data suggested that they could tell which lines were longer and shorter than each other. The majority of respondents understood the magnitude estimation task, but they were not perfect in estimating the lengths of the lines.

The choice of the difference in size between the standard line and the comparison lines appears to be important. The magnitude of errors in estimates increase out of proportion to increases in the difference, suggesting that the use of relatively large differences would cause higher error rates in estimates of length than smaller differences. Greater differences result in a greater proportion of respondents being excluded from the data. Many respondents would be excluded despite having an acceptable level of comprehension of the requirements of magnitude estimation tasks. They understand the task, but they have trouble estimating lengths with a high degree of accuracy when the difference between the comparison line and the standard line is relatively large. The best choice of line lengths appears to be some where between those used in the current research and those used by Davis and Kemp.
The distinction between people who can successfully perform magnitude estimation tasks and those who cannot is not as clear as the above discussion implies. Only one respondent gave estimates of the lines length which had no apparent relationship to the line's actual length. It is reasonable to assume that this respondent had little or no understanding of the task. The remainder of the excluded respondents gave estimates which recognisably approximated the magnitude of the comparison lines, albeit with great inaccuracy. It may not be valid to suggest that these respondents had no comprehension of the task or no ability to perform it. There is no clearly apparent level at which the criteria for exclusion should be set. More research is necessary on this subject.

4.2.4 Summary of Tasks One, Two and Three

Task 1 addressed the demographic characteristics of the sample. The respondent's named occupation and their educational qualifications were used to double check the respondents white-collar status. Data gathered by this part of the task was strongly suggestive that the sample was of people with white-collar status. The other part of Task 1 gathered data on the respondent's gender and age. Age and gender have been found by some researchers to be significant factors in differing attitudes towards the seriousness of crimes. While the analysis found no significant differences between the sexes or the two age categories, the statistical control of the variability introduced by these factors to the model allowed for significant differences to be found between respondents from competitive and noncompetitive organisations. It appears the age and gender are factors that should be accounted for in research on attitudes towards the seriousness of white-collar crime.

Task 2 investigated the respondent's understanding of the meaning of "white-collar crime". Two main features of the respondent's understanding were found. First, most respondents (73.2%) mentioned that white-collar crime is committed for personal gain.
Second, a slightly smaller majority of respondents (62.2%) mentioned that white-collar crime involved at least one of the crimes of theft, fraud and embezzlement. Beyond these two features, the descriptions offered by respondents were varied, emphasising different features. This data suggested that while respondents understood a few of the features of white-collar crime, the extent of their knowledge is restricted. The two most salient features mentioned about white-collar crime fitted well with media coverage of white-collar crime. This suggested that the media is the primary source of knowledge of white-collar crime in the general population, and that media portrayals concentrate on the same two features of white-collar crime which respondents most frequently mentioned, although more research is necessary on this topic.

Task 3 served two purposes. The first was to give respondents practice performing magnitude estimation tasks and the second was to identify respondents who cannot reliably perform the task in order to remove them from the data. Comparison with the data from a similar study by Davis and Kemp (1994) suggested that the performance of respondents deteriorates with increases in the difference between the length of the standard line and the length of the comparison lines. This implied that there is an optimal range of practice line lengths. The vast majority of respondents could perform the line length magnitude estimation task with acceptable levels of accuracy.

4.3 Review

A variety of explanations for the failure to support H1 and H2 have been offered. While each explanation is worthy of attention, they need to be examined collectively in order to ascertain their relative significance to the failure to support the hypotheses. This will be done below.

The failure to support H2 was more in detail than substance. H2 predicted that differences between competitive and noncompetitive respondents will be restricted to the less serious white-collar crimes. The two white-collar crime categories of white-
collar crimes causing death and white-collar crime involving physical harm were suggested to be sufficiently serious for both respondent groups to agree on their seriousness. Agreement only occurred for the most serious category of white-collar crimes involving death. The failure to find agreement for white-collar crimes involving physical harm can most likely be attributed to the examples of white-collar crime in the category only describing the potential to cause physical harm, and not actually causing physical harm.

Moreover, difference between competitive and noncompetitive respondents in their ratings for the seriousness of white-collar crimes involving physical harm (p = 0.046) were only marginally inside of conventional minimum criteria for significant difference (p = 0.05). Findings in the literature suggest that people tend to agree on the seriousness of the most serious types of crimes. Perhaps the examples of crime in the white-collar crimes involving physical harm category were in a grey area between strong agreement for the most serious crimes and weak or no agreement for the least serious crimes. Moderately serious white-collar crimes (such as those in the white-collar crimes involving physical harm category) may accordingly attract moderate agreement on their seriousness.

H2 also predicted that competitive and noncompetitive respondents would agree on the seriousness of all street crimes. This prediction was based on the assumption the culture of competition only influences attitudes towards behaviours in a business context, and that white-collar respondents would have similar attitudes towards the seriousness of street crimes. This prediction was also not supported. Respondents from competitive organisations rated the street crime category of victimless crimes as more serious than respondents from noncompetitive organisations. This difference between the sample groups may not be as meaningful as it first appears because the difference was restricted to the least serious street crimes. The literature suggests that this is where most differences in opinions of the seriousness of crimes occurs.
In summary, the failure to support H2 does not seriously challenge the assumptions underlying the hypothesis. The results were likely to be due to the failure to describe the crimes in the category of white-collar crimes involving physical harm as sufficiently serious. The failure to agree on the seriousness of all categories of street crimes is slightly more problematic, but in the context of the literature the differences of opinion are found where most differences of opinion occur.

The failure to support H1 is more problematic. Respondents from competitive organisations rated white-collar crimes as more serious than respondents from noncompetitive organisations. This difference was in the opposite direction to that predicted. Four explanations were offered to account for the failure.

The first suggested that the differences were due to random chance. All statistical analysis is prone to the potential for their findings to be the result of random chance. This possibility cannot be avoided, however it can be minimised by the use of large samples and replication of research. Accordingly, this is recommended for future research.

The second explanation suggested that the failure to support H1 was due to problems with the methodology. The rationale behind the methodology was explained. This was tested against results from other research. While there was no directly comparable research, aspects of the findings could be compared with other sufficiently similar research. Davis and Kemp's (1994) research was used to assess the validity of magnitude estimation and the ratings for the seriousness of white-collar crimes. The data was of a comparable form to that of Davis and Kemp, suggesting that respondents performed the magnitude estimation task in a valid manner. Other aspects of the data also fitted well with the results of research on attitudes towards the seriousness of crimes. The studies of Rossi, Waite, Bose and Berk (1974), Cullen, Link and Polanzi (1982) and Goff and Nason-Clark (1989) made similar findings for the seriousness of white-collar crimes relative to other types of crime, and the agreement on the
seriousness of crimes across gender and age. Collectively, this analysis suggested that the questionnaire was capable of eliciting data consonant with the literature. Accordingly, the questionnaire appears to have acceptable levels of validity and cannot be attributed as a likely cause of the failure to support H1.

The third explanation suggested that the failure to support H1 was due to problems with the sample. Two potential types of problems were identified. The first suggested that the topic of the research would be aversive to organisations with poor records of ethical and legal conduct. This would result in an under representation of respondents from competitive organisations who perceive some forms of white-collar crime as relatively minor. The second suggested that the groups sample were not exposed to substantially different levels of the culture of competition, violating a requirement of the hypothesis. Problems with sampling have considerable potential to be the cause of the failure to support H1.

The forth explanation attributed the failure to support H1 to poor theory. An account was given suggesting how the differential exposure to the culture of competition may not result in the differences between the competitive and noncompetitive groups which were predicted by H1. It was also suggested that the current hypothesis' assumption of uniform influence of the culture of competition on attitudes towards the seriousness of crimes may have been simplistic. The role of the culture of competition in influencing opinions on the seriousness of white-collar crimes may have been overstated relative to other values and factors. Successful theories of attitudes towards the seriousness of white-collar crime may have to encompass a wider range of social influences than the culture of competition alone.

In summary, problems with sampling and weaknesses in the hypothesis are suggested to be the most likely causes of the failure to support H1. The failure to support H2 was not considered to be especially damaging to the theory underlying it, but the same
cannot be said for H1. The findings suggest substantial deficiencies in aspects of the research.

4.4 Normative Social Approaches to White-Collar Crime

While the specifics of the theory of attitudes towards the seriousness of white-collar crime suggested in the current research may not be correct, the theory which underlies it remains compelling.

4.4.1 Implications for Research

The significance of the current theory's approach to understanding white-collar crime was that it examined the broader social environment in which it occurs. The current research is part of an approach to white-collar crime which has the potential to yield new understandings. This approach views white-collar crime as an act significantly motivated and facilitated by normative beliefs and values in the offenders social environment. Not only does the white-collar offender have attitudes conducive to white-collar crime, there are other people in their social environment who are also likely to have attitudes conducive to white-collar crime. To better understand white-collar crime, you need to understand the social environment in which it occurs. The implication of this for research is that people in the social environment of white-collar crime are also candidates for investigation. The task of the researcher is to identify these environments to gain access to the subjects.

One particularly significant implication of normative social approaches of white-collar crime is that members of this social environment are readily accessible for research, unlike many traditional sources of information of white-collar crime such as white-collar offenders and official data. Problems with access to traditional sources has significantly
contributed to the slow progress in developing an understanding of white-collar crime. The ready accessibility of normative social environments offers the prospect of much more research on a variety of social aspects of white-collar crime and new discoveries.

It is possible that the current research failed to specify a social environment conducive to white-collar crime. The failure to support the hypotheses does not imply that social environments conducive to white-collar crime do not exist, it only suggests that the hypothesis itself was incorrect. There are many social environments other than those represented in the sample which are likely candidates for research, such as organisations with high rates of civil and criminal violations of the law.

Having identified these organisations, there are many aspects of the social environment of white-collar crime which can be investigated. For example, self-report studies of unethical and illegal behaviours. The broader values of members of the organisation could be investigated, such as their emphasis on values such as cooperation and material wealth. The relationship between the values and attitude of managers and their staff could also be investigated. The values and attitudes of organisations and industries which have particularly low or high rates of ethical and legal conduct could also be studied. Other studies could present scenarios to respondents in order to investigate what combination of factors would be sufficient for them to commit white-collar crime. There are many possibilities but there are two broad areas of research. The first will centre on the values of members of the organisation and the second will examine the socialisation of these values between members. While investigations of the social environment of white-collar crime cannot substitute examinations of white-collar crime itself, they can provide a useful contrast, giving a more complete understanding of the phenomenon.

Many other theories attribute crimes to social causes, but these are social causes outside of normative culture. The difference between these theories and the later comments and theories of Coleman (1987), Weisburd et al, and Braithwaite (1991) is
that the emphasis is on values held by normative culture. White-collar offenders can get their criminogenic values from within normative culture. Researchers interested in white-collar crime do not have to look outside of normative society to observe social aspects of white-collar crime.

It should be noted that while social factors are being explicitly mentioned as determinants of white-collar crime, the discussion is not meant to imply that social factors are the only cause of white-collar crime. There are many others which may be important. They may act in isolation or interact with social causes. For example, the tendency for pathological addiction to gambling may provide the motivation to commit white-collar crime, and the social environment in which the gambler works may provide the rationalisations and neutralisations necessary to commit the crime. Opportunity is another factor which is critical to the commission of white-collar crime. Motivation and rationalisations are not sufficient to cause white-collar crime without the opportunity to commit it. Another major factor in white-collar crime which is not social is financial difficulties (Weisburd et al., 1991; Cressey, 1953). Much more research is necessary on this topic. The finding of Weisburd et al., was particularly convincing of this need. Their finding that financial hardship was a very common factor is given considerable legitimacy by the sheer size of their sample and the unprecedented quality of their data. Social factors have been accentuated because they are a potentially important aspect of white-collar crime which has until recently receive very little attention, however, they are not the only factors which encourage white-collar crime.

4.4.2 Implications for Business

The suggestion that the social environment is a significant factor in white-collar crime has considerable implications for business, both for the prevention and facilitation of white-collar crime. The people who need to be most attuned to these implications are managers. Senior managers play a pivotal role in determining the characteristics of their organisation (Croall, 1992; Daboub, Rasheed, Priem, & Gray, 1995), especially for
the ethical climate. They are a central part of the social process of developing the
culture of an organisation, including values associated with illegal and unethical
conduct. These values can facilitate or prevent white-collar crime.

Managers can create an unethical climates in their businesses in two ways. They can
set an example by being observed behaving in an unethical manner, or they can set
goals and objectives which are unobtainable by legitimate means, thereby tacitly
encouraging illegitimate behaviours. It is important to note that the organisation does
not have to explicitly require that their employees commit white-collar crimes for the
organisation to be substantially responsible for the crime. Organisations can have
cultures where employees know that certain unethical and illegal behaviours are
accepted. It is not valid for managers of organisations like these to deny responsibility
for white-collar crimes because they were not explicitly requested. Managers need to
accept responsibility for the social processes and values in their organisations which
can tacitly, as well as explicitly condone white-collar crime.

While white-collar crimes can offer considerable potential for material gains, but they
also increase the risk of the business itself being a victim of white-collar crime.
Employees in these environments may generalise the lax ethical constraints for the
organisations conduct to their own conduct.

The criminogenic effects of unethical management are broader than just the
organisation. Organisations which profit from white-collar crimes and unethical practices
gain an advantage over their competitors because these actions increase their
profitability. Unethical practices in a business can encourage similar acts in other
businesses by providing the social influence of a role model and an economic influence
by gaining a competitive advantage. A single organisation has the potential to corrupt
many of it’s competitors.
Ultimately, the implications of the above discussion for business are that management and the organisation itself can in the worst situations have a high degree of responsibility for the illegal actions of their employees. This responsibility can be direct, by specifically requiring that a white-collar crime is committed, or it can be indirect, by creating an organisational climate where white-collar crime is condoned. Either way, the organisation provides substantial impetus for the perpetration of white-collar crime. The perpetration of values conducive to white-collar crime is a social process. Responsible managers and organisations must hold themselves responsible for these social processes.

There has been a growth in concern for the lack of ethical management in business since the 70's (Enderwick, 1994; Lincoln, Pressley & Little, 1982; Longenecker, 1985; Vitell & Festervand, 1987; Posner & Schmidt, 1987). Deficient ethical management is probably one of the most significant social causes of white-collar crime. Organisations which accept their responsibility for ethical management are likely to go along way in addressing the causes of white-collar crime. This is more than a social good; it also has the potential for reducing the organisations exposure to white-collar crime. Not only are their employees less likely to commit the crimes themselves, they are also more likely to act when they observe illegal losses for the organisation at the hands of other people. An additional benefit of ethical management is the consumer good-will that it creates.

Ethical management is a key to businesses successfully meeting their responsibility for their attitudes and values conducive to white-collar crime. Ethical guides place limits on how far normative values conducive to white-collar crime can be taken, preventing the excesses which they can motivate. These values are an acceptable part of societies normative value set, and as such they cannot be removed as an influence on the business. Ethical standards control the influence of these values, keeping a balance between them and other more egalitarian social values. Not only are ethical standards in themselves useful guides for business behaviours, their very existence in an
organisation signals their employees are expected to mindful for the wider consequences of their actions.

4.4.3 Implications for Society

The social environment of white-collar crime also has considerable implications for society. The values conducive to white-collar crime come from within normative society. Should society accept at least some responsibility for the tendency of a few people to overemphasise some aspects of social values to the detriment, and eventual violation of other values? There are arguments either way. The high value placed on material gains may be a significant force in driving the economy, encouraging competition, growth and efficiencies in the economy. In this respect the culture of competition is beneficial to society. Is white-collar crime an inevitable but justifiable trade off for an economic system which confers considerable benefits on most members of society? Or does white-collar crime impose such a high cost on society that the values which encourage it should be moderated into a less criminogenic form? These questions are not well addressed in the literature. While any crime can be argued to be socially unacceptable, the pragmatist can also argue that white-collar crime is an unfortunate but necessary cost of otherwise beneficial social values.

This debate brings into the question society's willingness to act to reduce the incidence of white-collar crime. Research has shown that the public views the majority of white-collar crime as not particularly serious relative to other types of crime (Rossi, Walte, Bose & Berk, 1974; Cullen, Link & Polanzi, 1982; Goff & Nason-Clark, 1989). Accordingly, it may not feel especially motivated to act against white-collar crime or the values which contribute to it.

Because white-collar crime is motivated by normative social values, efforts to reduce white-collar crime must address these values. Their normative nature requires that much of society becomes involved in changing attitudes towards white-collar crime if
significant changes are to be made. Changing normative social attitudes towards white-collar crime is tantamount to social engineering. It requires a shift in beliefs and values by a massive number of people. Efforts towards such large scale change should be carefully executed.

There has been an increasing incidence of "moral entrepreneurship", where academics, law enforcers and political leaders take the initiative in educating the public on the wrongs of white-collar crime (Katz, 1980; Geis, 1982). There appears to be an implicit belief among advocates of this movement that the public is not aware of the extent and nature of white-collar crime and its harms. It is assumed that if the public were better informed they would automatically perceive white-collar crime as more serious and act against it more strongly. While the author shares the belief that white-collar crime is serious and should receive more public and legal scorn, there are issues which need to be resolved before aggressive moral entrepreneurship can be justified.

First, the assumption that better public information about white-collar crime will lead to greater condemnation should be tested. Many of the harms of white-collar crime are abstract, such as its damage to public faith in government and industry. The public may favour more identifiable victims and harms. In this case, even if the public were better informed, the harmful effects of some white-collar crimes for individuals may not be sufficient for the public to judge these crimes as serious. This issue is in need of research.

Second, the true scope of the harms of white-collar crime is not well understood by researchers. While the available data does suggest that white-collar crime is by far the most financially costly and physically harmful type of crime, accurate data is not available. Moral entrepreneurship efforts may be attacked for being based on incomplete data and broad assumptions. There is a clear need for better information on the harms of white-collar crime, but suitable methodologies are yet to emerge.
While some academics do suggest that capitalism is inherently criminogenic (Gordon, 1973), the vast majority do not. Their concerns are not with capitalism per se, rather particular criminal behaviours which can occur in that setting. White-collar crime has been found to be problematic in socialist societies (Los, 1982), suggesting that it is more attributable to human nature than a specific economic system. Even if it were true that capitalism is criminogenic, it could be argued that white-collar crime is an unfortunate but unavoidable cost of a system that otherwise confers considerable benefits in productivity and wealth to its members. The global success of industrialised capitalist societies gives credence to this argument. Moral entrepreneurship should be tempered with an appreciation of the considerable advantages of capitalism. While it may eventuate that capitalism is to some degree criminogenic, efforts to address this problem should not compromise capitalism's notable strengths.

These points are not intended to imply that moral entrepreneurship is not necessary or justifiable. The author supports calls for the initiative, however issues like those above should be addressed in order to strengthen efforts to reduce white-collar crime. The growing public and political profile of white-collar crime gives impetus to the need for informed and rational public debate. Written responses to Task Two in the questionnaire suggest that while respondents were aware of white-collar crime, the scope of their awareness was restricted when compared to academic understanding. A good starting point for this debate would be for the dissemination of a wider range of information on white-collar crime. The popular media has particular responsibility here, both for its currently biased coverage and its potential to present a more accurate portrayal.

Perhaps the most troubling aspect of white-collar crime is that people who are apparently strongly influenced by normative culture can commit white-collar crime. These are skilled and capable people who usually have little or no history of criminal conduct, and demonstrable histories of making positive contributions to the community. The similarities of the values of many people who commit white-collar crime to those of people who do not suggests that white-collar offenders are motivated by normative
social values. If these people cannot be relied on to behave in socially acceptable ways, who can? To question the values of the white-collar offender inevitably leads to questioning the values of normative society.
References


APPENDIX A

Research Questionnaire:
The Role of Values in White-Collar Crime.

This questionnaire is designed to study your attitudes towards the seriousness of some types of crime, especially white-collar crime. The questionnaire is set out in four tasks:
1. The first task asks for some basic non-identifying personal information.
2. In the second task you will be asked to describe a particular type of crime.
3. In the third task you get some practice with assigning numbers to how long you think some lines are.
4. In the fourth task you will indicate how serious you think a variety of crimes are using a similar method to the one practised in the third task.

This questionnaire is not a test. There are no right or wrong answers. Your answers should reflect what you think are the most appropriate responses.

*It is assumed that filling out the questionnaire implies consent. You have the right to decline to answer any particular questions.* See the information sheet for a description of the research and your rights.

If you have any more questions about the questionnaire ask for an *information sheet* or contact me, Nick Bradshaw.

Remember to place the completed questionnaire in the self-addressed and stamped envelope provided, and post it.

By Nicholas Bradshaw
Task One.

Please fill out some basic information. All questions are optional.

a) What is your age? Please tick the appropriate box.

- 15-25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 55-65 years old
- 66 and over years old

b) What is your sex? Please tick the appropriate box.

- Male
- Female

c) What is your occupation? Write in the space provided.

Occupation: ............................................................

d) What are your qualifications? Please tick the appropriate boxes?

- Did not finish secondary school
- Completed secondary schooling (finished seventh form)
- Completed undergraduate university qualification
- Completed postgraduate university qualification
- Completed trades qualification
- Completed Polytechnic qualification
Task Two.

In the lined space below please write what you think is meant by "white-collar crime". This is not a test, feel free to write whatever you think is appropriate. Write as much or as little as you think is necessary.
**Task Three.**

This is a practice task so you can get used to indicating the size of things using numbers. In the practice task you will be asked to estimate the length of some lines by comparing them to another line. A line called the *standard line* is the line which you will use to compare with the lengths of the other lines which are called *comparison lines*. The standard line is 100 units long. If a comparison line is twice as long as the standard line then you would write down that that the length of the comparison line is 200 units long. If another comparison line is half as long as the standard line then you would say it is 50 units long.

**Standard Line:** ———— 100 Units long

Please write the number that you think represents the length of the comparison lines when they are compared to the standard line.

**Comparison Lines:**

<table>
<thead>
<tr>
<th>Line Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>————</td>
<td>[ ]</td>
</tr>
<tr>
<td>———</td>
<td>[ ]</td>
</tr>
<tr>
<td>———</td>
<td>[ ]</td>
</tr>
<tr>
<td>—————</td>
<td>[ ]</td>
</tr>
<tr>
<td>—————</td>
<td>[ ]</td>
</tr>
<tr>
<td>———</td>
<td>[ ]</td>
</tr>
<tr>
<td>———</td>
<td>[ ]</td>
</tr>
<tr>
<td>———</td>
<td>[ ]</td>
</tr>
<tr>
<td>———</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

[1] Units
Task Four.

The following is a list of criminal offences. Your task is to indicate how serious you think the offences are. You do this in a way that is similar to task three. All comparison crimes are to be compared to a standard crime. The standard crime is a burglary where goods to the value of $500 are stolen from a residential home. The standard crime has a value of 100 Seriousness Units. Just like for the line length estimation task, if you think a comparison crime is twice as serious as the standard crime of burglary then you would write down the seriousness of the comparison crime as being 200 Seriousness Units. If you think another comparison crime is half as serious as the standard crime then you would write down the seriousness of the comparison crime as being 50 Seriousness Units. If you think that an act described below is not at all serious as a crime then it would have a value of 0 (zero) serious units.

Remember that the standard crime is burglary where goods to the value of $500 are stolen from a residential property, and that it's value is 100 Seriousness Units.

<table>
<thead>
<tr>
<th>Crime</th>
<th>Seriousness Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Killing someone during an argument</td>
<td>[ ] units</td>
</tr>
<tr>
<td>2. Premeditated rape</td>
<td>[ ] units</td>
</tr>
<tr>
<td>3. Sexual molestation of a child</td>
<td>[ ] units</td>
</tr>
<tr>
<td>4. Incest between father and daughter</td>
<td>[ ] units</td>
</tr>
<tr>
<td>5. Assaulting a child under 14</td>
<td>[ ] units</td>
</tr>
<tr>
<td>6. Abandoning a child under 6</td>
<td>[ ] units</td>
</tr>
<tr>
<td>7. Armed robbery of a bank</td>
<td>[ ] units</td>
</tr>
<tr>
<td>8. Assault during an argument. No medical treatment was necessary</td>
<td>[ ] units</td>
</tr>
<tr>
<td>9. Assault during an argument. Victim was hospitalised over night</td>
<td>[ ] units</td>
</tr>
<tr>
<td>10. Assaulting a police officer</td>
<td>[ ] units</td>
</tr>
<tr>
<td>11. Carrying an offensive weapon</td>
<td>[ ] units</td>
</tr>
<tr>
<td>12. Looting goods during a riot</td>
<td>[ ] units</td>
</tr>
<tr>
<td>13. Driving while disqualified</td>
<td>[ ] units</td>
</tr>
<tr>
<td>14. Receiving stolen property worth $100</td>
<td>[ ] units</td>
</tr>
<tr>
<td>15. Possession of cannabis</td>
<td>[ ] units</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>16.</td>
<td>Selling cannabis</td>
</tr>
<tr>
<td>17.</td>
<td>Non-payment of a $100 parking fine</td>
</tr>
<tr>
<td>18.</td>
<td>Defacing a coin</td>
</tr>
<tr>
<td>19.</td>
<td>Theft of $100</td>
</tr>
<tr>
<td>20.</td>
<td>Kidnapping for a ransom</td>
</tr>
<tr>
<td>21.</td>
<td>Embezzlement of $5000</td>
</tr>
<tr>
<td>22.</td>
<td>Intentionally failing to include income on tax return</td>
</tr>
<tr>
<td>23.</td>
<td>Knowingly selling a dangerously faulty product which may cause injury</td>
</tr>
<tr>
<td>24.</td>
<td>Knowingly selling a dangerously faulty product which causes a death</td>
</tr>
<tr>
<td>25.</td>
<td>Knowingly selling contaminated food which causes a death</td>
</tr>
<tr>
<td>26.</td>
<td>Making false statements in advertising</td>
</tr>
<tr>
<td>27.</td>
<td>Knowingly selling worthless stocks as valuable investments</td>
</tr>
<tr>
<td>28.</td>
<td>Failing to reveal serious side effects of pharmaceuticals</td>
</tr>
<tr>
<td>29.</td>
<td>Falsely inflating claims on an expense account</td>
</tr>
<tr>
<td>30.</td>
<td>Knowingly releasing toxic chemicals into the environment</td>
</tr>
<tr>
<td>31.</td>
<td>Failing to provide a safe working environment</td>
</tr>
<tr>
<td>32.</td>
<td>Causing death of an employee through faulty equipment</td>
</tr>
<tr>
<td>33.</td>
<td>Overcharging for credit in selling goods</td>
</tr>
<tr>
<td>34.</td>
<td>Knowingly using inaccurate scales in weighing meat for sale</td>
</tr>
<tr>
<td>35.</td>
<td>Fixing prices on a product like petrol</td>
</tr>
<tr>
<td>36.</td>
<td>Accepting a kick back from a contractor for purchasing their product</td>
</tr>
<tr>
<td>37.</td>
<td>Offering a bribe to secure a contract</td>
</tr>
<tr>
<td>38.</td>
<td>Anti-competitive practices inhibiting entry of competitors into an industry</td>
</tr>
<tr>
<td>39.</td>
<td>Using company resources for unauthorised personal use</td>
</tr>
<tr>
<td>40.</td>
<td>Refusal to make essential repairs to a rental property</td>
</tr>
</tbody>
</table>

Thank you for your participation. Please place the completed questionnaire in the self-addressed and stamped envelope provided, and post it.
# APPENDIX B

## Four Orders of Crimes in Task Four of the Questionnaire

**Structure:**
- 4 numeric orders of 40 items:
  - 2 numeric orders randomly selected from Rand Corporation (1955) tables without replacement.
  - these 2 numeric orders are counterbalanced (reversed order).

<table>
<thead>
<tr>
<th>Order</th>
<th>List A</th>
<th>List B</th>
<th>List C</th>
<th>List D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>2</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>7</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>40</td>
<td>36</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>14</td>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>33</td>
<td>1</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>26</td>
<td>10</td>
<td>27</td>
</tr>
<tr>
<td>7</td>
<td>35</td>
<td>8</td>
<td>36</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>30</td>
<td>10</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>9</td>
<td>20</td>
<td>19</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>28</td>
<td>18</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>11</td>
<td>23</td>
<td>3</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>15</td>
<td>9</td>
<td>24</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>13</td>
<td>39</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>14</td>
<td>38</td>
<td>21</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
<td>25</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>34</td>
<td>4</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>17</td>
<td>17</td>
<td>27</td>
<td>32</td>
<td>21</td>
</tr>
<tr>
<td>18</td>
<td>37</td>
<td>31</td>
<td>39</td>
<td>31</td>
</tr>
<tr>
<td>19</td>
<td>12</td>
<td>29</td>
<td>1</td>
<td>37</td>
</tr>
<tr>
<td>20</td>
<td>11</td>
<td>22</td>
<td>38</td>
<td>34</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>11</td>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>22</td>
<td>29</td>
<td>12</td>
<td>37</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>31</td>
<td>37</td>
<td>31</td>
<td>39</td>
</tr>
<tr>
<td>24</td>
<td>27</td>
<td>17</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>25</td>
<td>4</td>
<td>34</td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>26</td>
<td>25</td>
<td>24</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>27</td>
<td>21</td>
<td>38</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>28</td>
<td>39</td>
<td>13</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>29</td>
<td>9</td>
<td>15</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>30</td>
<td>3</td>
<td>23</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>31</td>
<td>18</td>
<td>28</td>
<td>33</td>
<td>13</td>
</tr>
<tr>
<td>32</td>
<td>19</td>
<td>20</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>33</td>
<td>10</td>
<td>30</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>34</td>
<td>8</td>
<td>35</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>35</td>
<td>26</td>
<td>5</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>36</td>
<td>1</td>
<td>33</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>37</td>
<td>14</td>
<td>16</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>38</td>
<td>36</td>
<td>40</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>39</td>
<td>7</td>
<td>32</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>40</td>
<td>2</td>
<td>6</td>
<td>20</td>
<td>14</td>
</tr>
</tbody>
</table>

*Order presented in questionnaire in Appendix A.*
APPENDIX C

The Role of Values in White-Collar Crime.

INFORMATION SHEET

Background.
My name is Nick Bradshaw and I am studying for my Masters in Industrial Psychology. My research aims to investigate the role that beliefs and values play in white-collar crime. White-collar crimes are crimes committed by people who are managers or professionals. I have a theory that white-collar offenders think that values associated with business practices are much more important than people who do not commit white-collar crime. The research which you are being asked to participate in aims to test a part of this theory. This is only a brief description of my research. If you have any further questions, do not hesitate to phone or write to me or my supervisor. Information on how to do this is at the end of this sheet.

Participation in this research is voluntary. You do not have to fill out the questionnaire if you do not want to. Your employers do not require you to participate.

Confidentiality Guarantee.
All of the information which the questionnaire asks for is confidential. The questionnaire and the way you return it to me when it is completed is designed to make it impossible for anyone to find out who filled it out. Your employers will not have access to the completed questionnaires and they also will not know if you filled one out. The questionnaire does not ask for any information that will identify you, such as your name, address or who you work for. No other identifying information will be recorded in the course of the research. As an added precaution only people directly involved in this research will see what the participants write, and these people will have signed a contract which requires them to keep the information in the questionnaires confidential. All completed questionnaires will be securely stored in a locked building as another precaution.

Confidentiality of Quotations.
In one section of the questionnaire there is a question asking what you think "white-collar crime" means. Parts of what you write in this section may be quoted in the published summary of the research if you choose to fill out the questionnaire. These quotes will be used to give examples of what people who filled out the questionnaire think "white-collar crime" means. Quotes which contain any information that may identify the person who made them will not be included in the published summary.

What is involved in filling out the questionnaire.
If you agree to participate, you will be asked to fill out a written questionnaire. This takes 15 to 30 minutes. There are four parts to the questionnaire. In the first you are asked for some non-identifying information about who you are. In the second you are asked to write what you think "white-collar crime" means. In the third you practice how to do the fourth task. Finally, in the fourth you show how serious you think some crimes are.

Your Rights.
Everyone who fills out the questionnaire has several rights. If you decide to fill out the questionnaire:
1. you can change your mind at any time and not fill out the questionnaire.
2. you can refuse to answer any questions and "skip" them.
3. you can ask any questions about the study at any time, before, during or after you fill out the questionnaire. Phone numbers and addresses are provided at the end of this information sheet so you can contact me or my supervisor and get your questions answered.
4. you can read a summary of the studies findings when the research is finished.
It is assumed that filling in the questionnaire implies consent. You have the right to decline to answer any particular questions.

How You Were Approached.
I asked your managers if I can come to your work and explain what I am doing in my research, answer any questions that you may have about the research or the questionnaire, and to ask you if you want to fill out the questionnaire.

How to Contact Me or My Supervisor.
You can contact me at: My supervisor is Doug Paton. You can contact him at:
23c Marewa Road Psychology Department
Hataitai Massey University
Wellington Private Bag 11222
(04)3864410. Palmerston North.

Thank you for your time,

Nick Bradshaw.