Moral Disengagement in Manufacturing: A Malaysian Study of Antecedents and Outcomes

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This thesis is presented for the Degree of Doctor of Philosophy of Curtin University

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DECLARATION

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material, which has been accepted for the award of any other degree or diploma in any university.

Signature:

Date: 2\textsuperscript{nd} March 2012
ACKNOWLEDGEMENTS

‘Faith is taking the first step even when you don’t see the whole staircase’
-Martin Luther King Jr

Life as a PhD student, a wife to a PhD student, a mother of three children, living in a foreign country with limited sources of income has never been easy. Thus, the completion of this thesis has been made possible only through the encouragement and support of many individuals. First, special thanks go to my beloved husband, Nadzri Ab Ghani. Despite being a PhD student himself and facing with similar problems and challenges, he has always been there whenever I need support. I could certainly not have completed this journey without him.

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DEDICATION

In loving memories

_Haji Saidon Haji Jaafar_

And

With love and respect

_Hajjah Siti Rahmah Taib_
ABSTRACT

The premise of this research is that in a normal situation people may not involve in any inhumane, unethical conduct unless they can successfully justify to themselves the rightness of their action. According to social cognitive theory, individual behaviour could be explained through a self-regulatory system. Individuals are believed to have control over their own thoughts and behaviour through the self-regulatory processes. However, an individual’s self-regulatory system will only operate if it is activated because this system can be activated and deactivated selectively. Moral disengagement is a construct that explains possible keys to deactivation of an individual’s self-regulatory system. Once the system is deactivated, an individual will be freed from psychological feelings of discomfort in performing unethical behaviour.

Applying social cognitive theory and supported by social exchange and transformational leadership theories, this research attempts to investigate the antecedents and outcomes of moral disengagement of employees in large manufacturing companies in Malaysia. Although much has been done to investigate various outcomes of moral disengagement, none has related moral disengagement to workplace deviance. Further, little is known about the antecedents of moral disengagement. On top of that, this research incorporates transformational leadership style as a variable, which possibly constrains the likelihood that moral disengagement leads to workplace deviance.

A two-stage sampling technique was applied to randomly collect data from 669 employees in large electrical and electronic manufacturing companies in Malaysia. A structural equation modelling software (Analysis of Moment Structures or AMOS) was applied to examine the direct and mediating effects hypotheses. Hierarchical regression was used to test the moderating hypotheses. AMOS, a more recent approach in analysing moderating effects was applied as an alternative analysis and to further extend the body of knowledge.

Results failed to support hypothesized relationships between the two personality traits (extraversion and conscientiousness) and moral disengagement.
Only organisational ethical climate was confirmed to have a significant negative relationship with moral disengagement. Moral disengagement was also found to partially mediate the relationships between organisational ethical climate and interpersonal as well as organisational deviance. Findings confirmed that moral disengagement is associated with both types of deviance. In addition, transformational leadership style was found to moderate the relationship between moral disengagement and interpersonal deviance. Also, interpersonal deviance was found to be associated with organisational deviance.

This research makes several theoretical contributions and provides further insights on the antecedents and outcomes of moral disengagement particularly in Malaysia, a country categorised as having a high degree of power distance and collectivism. Methodological and practical implications were discussed and several potential avenues for future research were identified and proposed. In short, this research helped to produce a segment in a more inclusive global picture of the antecedents and outcomes of moral disengagement.
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CHAPTER 1: INTRODUCTION

1.1 Background

Understanding individual psychological processes has long been argued as the best way to explain unethical behaviour in organisations (Barsky 2011; Daboub et al. 1995; Diefendorff and Mehta 2007; Ferris, Brown, and Heller 2009; Ferris et al. 2009; Messick and Bazerman 1996; Tenbrunsel and Messick 2004; Vazsonyi and Li 2010). A possible reason behind this argument is that little evidence is found to support the effectiveness of rule enforcement in handling unethical behaviour in organisations (Sackett and DeVore 2002). Although ethical codes of conduct commonly have been established to curb unethical behaviour in organisations, the effectiveness of this approach is still inconclusive (Kaptein and Schwartz 2007; Weeks and Nantel 1992) with only 35 percent of studies reported that codes are effective in deterring unethical behaviour (Kaptein and Schwartz 2007). According to Robinson and Bennett (1995), several behaviours which are considered deviant also could be considered unethical, since the only difference between these two types of behaviour is that ethics concentrates on behaviour that is right or wrong, based on justice, law, or other societal guidelines, whereas deviance focuses on behaviour that violates significant organisational norms.

Due to an increasing trend toward the occurrence of deviant behaviours in organisations and also because of the costs associated with such behaviours (Peterson 2002a) studies on workplace deviance are currently at the heart of organisational research (Berry, Ones, and Sackett 2007; Cohen-Charash and Mueller 2007; Colbert et al. 2004; Dilchert, Ones Davis, and Rostow 2007; El Akremi, Vandenberghe, and Cameraman 2010; Henle 2005; Henle, Giacalone, and Jurkiewiez 2005; Levy and Tziner 2011; Robinson and Bennett 1995; Robinson and Greenberg 1998). Recently, the Association of Certified Fraud Examiners (2008) reported that businesses in the US lose approximately 7 percent of their annual revenues to various forms of unethical behaviour. In other studies, workplace deviance has been considered as a pervasive problem in the US, with annual estimated costs ranging
between $6 billion to $200 billion (Greenberg 1997; Vardi and Weitz 2004). Workplace deviance may also have negative impacts such as increase psychological distress, diminished psychological well-being and work satisfaction of employees targeted by such behaviours (Andersson and Pearson 1999; Cortina et al. 2001).

In Malaysia, no official statistic reports the impact of workplace deviance on businesses. However, bribery, absenteeism, industrial accidents and poor work attitude are among the common forms of deviance reported in local newspapers and other media, indicating the occurrence of such behaviour among the Malaysian workforce. The Social Security Organisation (SOCSO), the Malaysian Labour Department and the National Institute of Occupational Safety and Health (NIOSH) have admitted to having received reports on various deviant behaviours among employees (Abdul Rahim and Mohd Nasurdin 2008; SOCSO 2007). Indeed, Malaysia Industrial Law Reports confirmed the existence of various deviant behaviours among employees in Malaysia (Abdul Rahim and Mohd Nasurdin 2008).

The problem of workplace deviance becomes more alarming because studies revealed that the majority of people who are involved in wrongdoing in the workplace are not necessarily inherently bad (Bersoff 1999). Anand, Ashforth and Joshi (2005) argued that most of the unethical practices in the workplace were committed by ethical individuals. In fact, offenders of white-collar crimes were psychologically normal individuals (Colman 1987). To further complicate the situation, a higher percentage of workplace deviance is reported to have occurred unnoticed (Mayer, Kuenzi, and Greenbaum 2010). Thus, what makes these apparently good, ethical and psychologically normal people engage in deviant workplace behaviour?

Social cognitive theory (Bandura 1986, 1990, 1991, 1999, 2002) provides a promising explanation through a notion known as moral disengagement. Previously, psychological theories of moral agency has been claimed to focus more on moral thought such as ethical reasoning rather than moral conduct (Bandura et al. 1996). As a result, moral disengagement is developed to fill this gap and explain

To date, moral disengagement has been evidenced as a predictor of various antisocial and unethical behaviours in both child and adult populations (Bandura et al. 1996; Bandura et al. 2001; Barsky 2011; Moore 2008b; Osofsky, Bandura, and Zimbardo 2005; Pelton et al. 2004; White, Bandura, and Bero 2009), but none so far relates moral disengagement to workplace deviance. Further, little is known about the antecedents of moral disengagement (Detert, Trevino, and Sweitzer 2008) and studies on moral disengagement beyond western countries appear to be virtually unknown. Apart from understanding the link between moral disengagement and deviant workplace behaviour, gaining understanding on the role of transformational leadership in such relationship has potential for finding ways to reduce the occurrence of workplace deviance.

Applying social cognitive theory and supported by social exchange and transformational leadership theories, this research intends to fill the aforementioned gaps. Investigating the genesis of moral disengagement may advance understanding of employees’ tendency to disengage and provide plausible explanation to the occurrence of deviant behaviours at the workplace. Thus, this doctoral research on the antecedents and outcomes of moral disengagement may shed light on finding answers to the alarming statistics regarding the amount of deviant behaviour that occurs within organisations.

1.2 Rationale and Research Questions

Several gaps have prompted this research including the lack of non-western perspectives in the moral disengagement literature. Whilst most theories have been developed in the western tradition, this research argued for the need to investigate how well the theories apply in other countries and cultures. For instance, cultural factors may limit the generalization of the theory. Culture is claimed to play a pivotal role in the manifestation of human feelings and behaviours (Hofstede 1980, 1997, 2001; Hofstede and Hofstede 2005; House et al. 2004;
Triandis 2004). Therefore, in an attempt to bridge the gap in the literature, this research investigated the concept of moral disengagement in Malaysia. Malaysia is an Asian country that differs substantially in various aspects such as society, culture, politics and economic system from its western counterparts (Ahmad and Aafaqi 2004). Malaysia is a multi-cultural country where Malays, Chinese and Indians form the main ethnic groups. Although Malaysia has been considered as one of the most culturally complex nations in the Asia Pacific (Udin and Ahmad 2000), there is general agreement that Malaysian workforce members share certain common and distinctive workplace values (Abdullah 1996).

According to social cognitive theory, several interrelated cognitive mechanisms collectively named moral disengagement help to explain why certain people are able to engage in inhumane conduct without apparent distress (Bandura 1986, 1990, 1991, 1999, 2002). Further, this theory assumes that in a normal situation people will not involve in any inhumane conduct unless they can successfully justify to themselves the rightness of their actions (Bandura 1999, 2002).

Although several individual (Douglas and Martinko 2001; Salgado 2002) and situational (Greenberg 1990) factors have been confirmed as predictors of workplace deviance, a solid understanding of the process underlying this relationship is still unclear. Employees’ cognition could be a plausible explanation to this relationship (Lee and Allen 2002). Following this suggestion, this research examines moral disengagement methods, which could be used by employees as a strategy to cognitively reframe their detrimental conduct so that they are able to perform such conduct in a moral light. Accordingly, this research explores the following questions:

1. Is moral disengagement driven by employee’s personality and organisational ethical climate?

2. Is moral disengagement related to employee’s deviant workplace behaviour?
3. Does moral disengagement mediate the relationship between the antecedent factors and workplace deviance?

4. Does transformational leadership style moderate the relationship between moral disengagement and deviant workplace behaviour?

1.3 Research Objectives

Based on the above research questions, this research is designed to accomplish the following specific objectives:

1. To investigate the influence of personality and organisational ethical climate as antecedents of moral disengagement.

2. To ascertain any relationship between moral disengagement and deviant workplace behaviour.

3. To ascertain any relationship between interpersonal deviance and organisational deviance.

4. To examine the mediating role of moral disengagement in the relationship between the antecedent factors and deviant workplace behaviour.

5. To examine the moderating role of transformational leadership style in the relationship between moral disengagement and deviant workplace behaviour.

1.4 Significance of the Research

This research contributes to the growing body of knowledge in social cognitive theory specifically on the antecedents and outcomes of moral disengagement. First, this research extends Detert et al. (2008) work on finding the possible antecedents of moral disengagement. While moral disengagement is a consistent predictor of various antisocial behaviours, little is known about the antecedents of moral disengagement. As mentioned by Detert et al. (2008,p.374) ‘while it is logical to assume that individuals may differ in their propensity to morally disengage, extant research has focused on simple demographics (age, nationality) as antecedent’. Motivated by their work, this research proposes
personality and organisational ethical climate as possible antecedents of moral disengagement. Generally, individual differences are believed to influence a person’s cognitive component, which influences how they behave (Loch and Conger 1996; Trevino 1986). Similarly, organisational factors are known to influence the behaviour and attitudes of employees (Buss 1991; Epstein 1979; George 1992; Trevino 1986; Victor and Cullen 1988). Thus, by studying these two variables as antecedents, this research expands knowledge on what influences employees to engage in unethical or deviant conduct at the workplace and how these influences relate to moral disengagement.

Secondly, moral disengagement has been a consistent correlate and predictor of antisocial and unethical behaviour in various contexts (Bandura et al. 1996; Bandura et al. 2001; Barsky 2011; Gini 2006; Jackson and Gaertner 2010; McAlister 2000; McAlister, Bandura, and Owen 2006; Osofsky, Bandura, and Zimbardo 2005; Vollum, Buffington-Vollum, and Longmire 2004). However, moral disengagement has so far been neglected as having a plausible explanation to the problem of workplace deviance. Workplace deviance is a pervasive problem (Greenberg 1997; Vardi and Weitz 2004) experienced by organisations around the globe. Thus, in an attempt to provide further understanding regarding this phenomenon this research pushes the current frontier by linking moral disengagement with workplace deviance. Also, this research proposes that moral disengagement acts as a mediator between the antecedent factors and workplace deviance. Without doubt, this effort will provide further explanation on how the relationship between the antecedent factors and workplace deviance occurs.

Thirdly, this research incorporates transformational leadership theory in an attempt to find ways to reduce the occurrence of workplace deviance. The four factors of idealised influence, inspirational motivation, intellectual stimulation and individualised consideration (Bass 1985) exhibited in transformational leadership style could, it is believed, raise the level of moral maturity among followers (Avolio and Bass 2002) and consequently reduce the occurrence of workplace deviance. This doctoral research moves ahead to empirically test this proposition. Results are
expected to reflect the suitability of applying this type of leadership as a means to control workplace deviance in manufacturing companies in Malaysia.

Fourthly, following suggestions made in the literature (Berry, Ones, and Sackett 2007; Hershcovis et al. 2007), workplace deviance is analysed separately as individual and organisational deviance. This is done with the aim to provide further understanding of the pattern of interrelationships among different forms of deviance. In addition, this research employs structural equation modelling (SEM) to examine all hypothesized relationships. By applying SEM, this research is able to demonstrate the joint impact of antecedent variables and the outcomes of moral disengagement. Moreover, SEM takes into account the measurement error variances, thus, the relationships between the factors in the hypothesized model are more accurate (Bollen 1989).

In addition, this research is also significant as it extends the theory of moral disengagement to a new geographical region that is characterised as a collectivistic and high power distance country (Hofstede 1998). All previous studies on moral disengagement have been carried out in the western contexts (Bandura et al. 1996; Bandura et al. 2001; Barsky 2011; Gini 2006; Jackson and Gaertner 2010; McAlister 2000; McAlister, Bandura, and Owen 2006; Osofsky, Bandura, and Zimbardo 2005; Vollum, Buffington-Vollum, and Longmire 2004). An intensive review of literature was unable to locate any studies on moral disengagement within the Malaysian context. Therefore, it is possible to argue that previous findings may reflect individualistic western values. Hence, this research is expected to bring about a new dimension of findings from a perspective of collectivistic culture.

Finally, findings of this research could indicate factors that lead to the employees’ tendencies to be morally disengaged. Having this knowledge, perhaps, organisation could then target their resources more effectively in trying to control or improve their employees’ tendencies to be morally disengaged. According to Litzky, Eddleston and Kidder (2006), it is the responsibility of the organisation to create an ethical climate which helps to prevent normally honest employees from
performing dishonest behaviours. Findings of this research could also assist organisations to reduce occurrences of deviant workplace behaviour by overcoming issues related to moral disengagement in a more effective manner. ‘Preventing deviant behaviours from cropping up is the most cost-effective way to deal with employee deviance’ (Litzky, Eddleston, and Kidder 2006, p 100).

1.5 Definitions of Terms

In order to avoid any potential confusion in interpretation of the concepts employed in this research, the definitions of terminologies used in this research are presented below. These definitions are used as guidelines in discussing the findings of the tested hypotheses.

*Moral Disengagement*

An individual’s propensity to evoke cognitions which restructure one’s actions to appear less harmful, minimise one’s understanding of responsibility for one’s action, or attenuate the perception of the distress one causes others (Bandura 1990, 1999, 2002).

*Workplace Deviance*

Voluntary behaviour that violates significant organisational norms and in doing so threatens the well-being of the organisation, or its members or both (Robinson and Bennett 1995).

*Personality*

Spectrum of individual attributes that consistently distinguish people from one another in terms of their basic tendencies to think, feel, and act in certain ways (Ones, Viswesvaran, and Dilchert 2005). In this doctoral research, only two traits (conscientiousness and extraversion) were selected for the conceptual model as a subset of personality.
Extraversion

Extraversion refers to outgoingness, talkativeness, feeling comfortable and seeking out social situations (Barrick and Mount 1991).

Conscientiousness

Conscientiousness is conceptualised as dutifulness, dependability, consistency and perseverance (Barrick and Mount 1991).

Organisational Ethical Climate

Employees’ perceptions of those practices, procedures, norms and values that govern ethical decision in their organisations (Martin and Cullen 2006).

Transformational Leadership Style

A leader’s ability to influence and motivate followers to achieve a holistic change or transformation of context and vision (Burns 1978).

1.6 Structure of the Thesis

The current chapter introduces the context of the research covering issues such as the background, objectives and significance in order to give an overview idea of this research. To explain the further insight of this research, the remaining sections of the thesis are as follows:

Chapter Two: The literature review chapter examines the main theories and identifies gaps, which formulate the conceptual framework of this research. This chapter also provides a review of the previous literature on the constructs incorporated in this research.
Chapter Three: The theoretical framework and hypotheses development chapter describes the conceptual framework developed in this research and explains the development of hypotheses.

Chapter Four: The research method chapter starts with a discussion on the research paradigm and the choice of paradigm that has been employed. This chapter also describes the research process, research design, pilot study, instrument development and data collection procedures.

Chapter Five: The analysis and results chapter explains structural equation modelling (Analysis of Moment Structures or AMOS) which is used to analyse the data and presents the results of the statistical analysis of the data.

Chapter Six: The discussion, implications and conclusion chapter summarizes the findings, discusses the implications, describes the limitations of the research and offers suggestions for future research.
CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature on moral disengagement and other selected constructs relevant to this research. The chapter begins with a detail explanation of social cognitive theory and moral disengagement in order to provide a clear understanding of the main theory underpinning this research. The second section highlights gaps in the literature including an illustration of the conceptual framework of this research. Reviews of relevant literature pertaining to the selected constructs (personality, organisational ethical climate, workplace deviance and transformational leadership) are presented in the next four sections. A short summary concludes this chapter.

2.2 Social Cognitive Theory

Social cognitive theory (Bandura 1977, 1986) provides a framework for understanding and predicting changes in human behaviour. This theory emphasizes that cognition plays an important role in an individual’s capability to construct reality, self regulate, encode information and perform behaviours (Pajares 2002). Differences in individuals’ behaviour in a given situation are because individuals differ in their cognitive processes. According to Bandura ‘people are self-organizing, proactive, self-reflecting and self-regulating, not just reactive organisms shaped and shepherded by external events’ (Bandura 1999, p. 154).
This theory identifies human behaviour as an interaction of personal factors (which could be in the form of cognitive, affective and biological events), behaviour and the external environment. This interaction is also known as triadic reciprocal determinism (Bandura 1986). Figure 2.1 illustrates the concept of triadic reciprocal determinism, which views that behaviour (B), cognitive and other personal factors (P), and environmental influences (E) all operate interactively as determinants of each other. It is worth to note that reciprocal causation does not mean that the different sources of influence are of equal strength and the reciprocal influences may not occur simultaneously. In addition, according to Davis and Luthans (1980), personal factors (P) include the characteristics that employees bring with them to the workplace; while environmental influence include influences encountered at the workplace.

The reciprocal causation between personal factors (P) and behaviour (B) refers to the interaction between thought, affect and action. The way people think, believe and feel affects how they behave (Bandura 1986). On the other hand, the extrinsic effects of their actions, in turn, partly influence their thought patterns and emotional reactions. According to Greenough et al. (1987) sensory systems and brain structures are modifiable by behavioural experiences.
The reciprocal causation between environmental influences (E) and personal factors (P) involves human beliefs and cognitive competencies that are developed and modified by social influences and structures within the environment. In other words, human expectations, beliefs and cognitive competencies are developed and modified by social influences that transfer information and activate emotional reactions through modelling, instruction and social persuasion (Bandura 1986). Snyder (1981) believes that social reactions affect the recipients’ conceptions of themselves and others which then could either strengthen or alter the environmental bias.

The third reciprocal causation between behaviour (B) and environmental influences (E) involves a person’s behaviour determining the aspects of his/her environment and as a result, the behaviour is modified by that environment. According to Bandura (1986) most aspects of the environment do not operate as an influence until they are activated by appropriate behaviour and as such people are both products and producers of their environment. In short, behaviour determines which of the many potential environmental influences will take effect and environmental influences, in turn, determine which forms of behaviour are developed and activated.

Triadic reciprocal determinism as explained above acts as guideline in determining all variables in the hypothesized model of this research. Applying this concept, this research posits that an employee’s personality traits and organisational ethical climate may influence an employee’s cognitive aspect, specifically moral disengagement, which in turn affects an employee’s deviant behaviour.

2.2.1 Social Cognitive Theory and Self-regulation

According to social cognitive theory, a self-regulation system explains individual behaviour (Bandura 1991). Individuals are said to have control over their own thoughts and behaviours through a self-regulatory process (Bandura 1986, 1991). A self-regulation system operates through three major sub-functions, that is,
self-monitoring, self-judgment and self-reactive (Figure 2.2). In general, within the self-regulatory system, behaviour is first observed by the self and then evaluated according to various internal and external standards, which, in turn, have been developed through a history of social interaction. Finally, an individual’s future behaviour is likely to be contingent upon the self-judgments made in the second phase of the system. Favourable judgments will result in positive self-reactions, while unfavourable judgments will invoke negative self-reactions.

![Figure 2.2: The Self-regulatory Process](image)

Based on Figure 2.2, self-monitoring is a first step towards exercising control over one’s conduct. Individuals vary in their self-monitoring orientations. Some apply personal standards and others tend to apply social standards of behaviour (Snyder 1987). Individuals with a strong sense of personal identity, who also tend to apply their personal standards illustrate a high level of self-directedness (Bandura 1991). Those who tend to apply social standards adopt a more instrumental approach, behaving in ways that seem appropriate for the situation.

An individual’s conduct will give rise to self-reactions through a judgmental function. Social cognitive theory assumes that most people have developed internal personal standards of moral behaviour, which guide good behaviour and prohibit bad behaviour. Hence, an individual’s conduct will be evaluated against the internal personal standards of moral behaviour, which serves a self-regulatory role. According to social cognitive theory, immoral conduct is regulated by both social sanctions and internalized self-sanctions (Bandura 1991). Usually individuals’ actions will be consistent with their internal moral standards because a contradictory action will result in self-censure.

However, an individual’s self-regulatory function will only operate if it is activated, as this function can be activated and deactivated selectively (Bandura
Moral disengagement is the key to deactivating the process (Bandura 1999). Moral disengagement is a way to justify deviant conduct (Bandura et al. 1996). This cognitive mechanism allows an individual to be freed from self-sanctions and the accompanying psychological feeling of discomfort when performing unethical or deviant behaviour. According to Bandura (1999), people do not ordinarily involve themselves in reprehensible conduct unless they have justified to themselves the rightness of their actions. Once morally justified, the conduct is perceived as personally and socially acceptable. Findings from previous studies, which suggest that most wrongdoers see themselves as fair, moral and honest, appear to be in line with Bandura’s arguments (Allison, Messick, and Goethals 1989; Bierbrauer 1976; Epley and Dunning 2000).

The moral disengagement construct is controversial and although the literature in the main suggests a link between high levels of self-regulatory capacity and moral engagement (Bandura 1990; Bandura et al. 1996), nevertheless it needs to be borne in mind that in an individual with a high level of self-regulatory capacity, self-regulation can also cause that individual to be morally disengaged. The design of this study allowed this negative relationship to emerge. The researcher was careful not to make assumptions that high regulatory capacity necessarily resulted in moral engagement.

2.2.2 Moral Disengagement

The notion of moral disengagement (Bandura 1999) is developed as an extension of social cognitive theory. This theory helps to explain why certain people are able to engage in inhumane conduct without apparent distress (Bandura 1990, 1999, 2002). The theory proposes eight interrelated moral disengagement mechanisms (Bandura 1986). Figure 2.3 illustrates how an individual’s self-regulatory system can be disengaged from detrimental conduct.
An individual would use: 1) a disengagement mechanism that results from a cognitive reconstruction of behaviour (moral justification, euphemistic labelling, and advantageous comparison; 2) a disengagement mechanism that obscures or minimizes an individual’s active role in damaging behaviour (displacement of responsibility, diffusion of responsibility, and disregarding or distorting the consequences; 3) a disengagement mechanism that focuses on the favourable acts of traits of those whom the harm is being perpetuated (dehumanization and attribution of blame).

The first group of disengagement mechanisms (moral justification, euphemistic labelling and advantageous comparison) help individuals to justify their detrimental conducts as not immoral (Bandura 1986). The basic assumption in this mechanism is that individuals do not ordinarily engage in harmful conduct unless they have justified to themselves the morality of their actions (Bandura 1999). These three disengagement mechanisms involve cognitive reconstruction of the behaviour itself. Under these mechanisms, detrimental conduct is made personally and socially acceptable by displaying the conduct as morally justified.
For example, through moral justification, hiring young children as labourers may be justified by portraying that the action is taken with the aim of providing those children with an alternative from other dangerous or degrading forms of employment. Bandura (1990) explained this strategy by referring to the action of killing others in war. Soldiers are believed to have applied this strategy so that they are able to cognitively justify to themselves that killing others is a worthy action in order to pursue freedom, preserve peace or protect democracy. According to Bandura (1996) this strategy usually takes the form of protecting one’s honour or reputation.

Euphemistic labelling could take place by using technical language to label inhumane conduct. For instance, while doing business, lying to one’s business competitors may be called strategic misrepresentation (Safire 1979); and while engaged war, killing civilians may be referred to as collateral damage (Bandura 1999). A more recent study on computer hackers by Young et al. (2007) revealed that most hackers believed that they were helping companies to improve the computer system. As such, most of the hackers labelled themselves as modern-day Robin Hoods (Rogers 2001). In short, by using euphemistic language the detrimental action may appear benign (Moore 2008a).

Advantageous comparison involves comparing one’s own behaviour to the more reprehensible behaviour of others to exonerate one’s own conduct so that one’s own behaviour then appears as benevolent by comparison (Bandura 1986). In other words, the strategy helps one to cognitively restructure perceptions of reprehensible conduct so as to appear acceptable. Bandura (1999,p.196) gives an example of how ‘the massive destruction in Vietnam was minimized by portraying the American military intervention as saving the populace from Communist enslavement’. In an organisation, an employee might be prompted to say, ‘I know that it is wrong to purposely come late, but at least I am better than others who do not come at all’. This strategy helps to weaken one’s self-deterrent against harming others while providing self-approval for the behaviour (Bandura 1999).
The second disengagement group (displacement of responsibility and diffusion of responsibility) helps to distribute blame across members of a group rather than placing blame on an individual (Bandura 1999). Individuals are more likely to disengage their moral controls if they can pass the responsibility of their actions to other parties or circumstances such as management orders or peer pressure. Under displacement of responsibility, a common remark may be made by employee in organisation; ‘I was made to do it by my boss’ (Moore 2008a,p.130). As for the diffusion of responsibility, responsibility is diffused in a situation where many people are involved in the wrongdoing. Individual responsibility is reduced as many others are also involved in the reprehensible conduct. For instance, in organisations, diffusion of responsibility could be done through group decision making (Beu and Buckley 2004); when everybody is responsible then nobody is liable.

Finally, the last group (distortion of consequences, dehumanization and attribution of blame) results from minimising the outcomes of the deviant conduct or minimising the perception of distress that the conduct may cause to others (Bandura 1990). Disregarding or distorting the harmful consequences of one’s actions can further weaken one’s own moral control. According to Bandura (2002,p.108) ‘as long as the harmful result of one’s conduct is ignored, minimised, distorted or disbelieved there is little reason for self-censure to be activated’. Bandura (2002) further explains that harming others will be easier if the suffering is not visible and where the damaging actions are physically and temporarily distant from the injurious effects as these conditions may prevent self-censure to function as a self-restrainer. Bandura (2002), believes that this is the reason the military banned cameras and journalists from battlefield areas.

The strength of moral self-censure is also depends on how individuals treat the people they mistreat. Bandura (1990) claimed that dehumanization of the victim is a common strategy applied by soldiers to enable them to continue killing their enemy without feeling guilt. Self-censure for detrimental conduct could also be disengaged by attributing the blame to the victim. For instance, the tobacco
industry has denied nicotine addiction as a factor, which caused the increased number of cigarettes consumed. One of the tobacco companies claimed that ‘the choice of number of cigarettes smoked rests with the consumer and we do not directly influence the decision in either direction’ (White, Bandura, and Bero 2009, p.52).

According to Bandura (1991), it is possible to use multiple mechanisms of moral disengagement simultaneously. The used of multiple mechanisms will reduce the individual’s self-censure drastically and therefore that individual will have a higher tendency to engage in detrimental conduct. Executioners have been found to apply multiple moral disengagement mechanisms in performing their work (Osofsky, Bandura, and Zimbardo 2005). It is worth to note that moral disengagement is a gradual process (Bandura 1990). Repeated reliance on the mechanisms might lead to repeated performance of the detrimental actions and finally increase the degree of tolerance for such behaviour. For instance, in the same study by Osofsky et al. (2005, p.386) the executioners mentioned ‘no matter what it is, it gets easier over time. The job just gets easier’.

2.2.3 Moral Disengagement – A Review of Literature

Based on an extensive review of literature, it appears that empirical studies on moral disengagement could be classified into three main categories (Table 2.1).

Table 2.1: Classification of Literature on Moral Disengagement

<table>
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<th>Category</th>
<th>Contents</th>
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<tr>
<td>1</td>
<td>Explanation on the mechanisms of moral disengagement. Relationship between moral disengagement and aggression among children.</td>
</tr>
<tr>
<td>2</td>
<td>Moral disengagement and its applicability across context.</td>
</tr>
<tr>
<td>3</td>
<td>Antecedents of moral disengagement.</td>
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*Category 1*

The first category concerns empirical studies undertaken to investigate on the mechanisms of moral disengagement and relates moral disengagement to aggression among children. Most of the studies in this category were carried out by Bandura himself or with colleagues with the aim to provide a clear understanding
on the concept of moral disengagement (Bandura, Underwood, and Fromson 1975; Bandura 1990, 1991; Bandura et al. 1996; Bandura 1999; Bandura et al. 2001; Bandura 2002; Pelton et al. 2004).

Applying experimental research approach and using 72 paid male volunteers from junior colleges, Bandura et al. (1975) investigated the relationship between self-disinhibiting processes and punitiveness. They found that dehumanization developed self-absolving justifications that were finally associated with increased punitiveness. In addition, findings indicate that reducing personal responsibility heightens aggressiveness through social than personal sources of disinhibition. In short, diffusion of responsibility appears to increase aggression and dehumanization is conducive to aggression.

Bandura (1990, 1999, 2002) explains thoroughly how self-sanctions can be disengaged through the mechanisms of moral disengagement. He asserts that the mechanisms of moral disengagement operate not only in the perpetration of inhumanities under extraordinary circumstances but also in everyday situations. He noted that moral actions are the products of the reciprocal interplay of personal and social influences. He suggests that to function humanely, societies must establish effective social safeguards against moral disengagement practices that help in developing exploitive and destructive conduct. Social systems should uphold compassionate behaviour and renounce cruelty.

In addition, as most human behaviour is purposive and regulated by forethought, Bandura (1991) discusses in detail the self-regulatory system. He proposes that an individual self-regulatory process is a multifaceted phenomenon operating through a number of subsidiary cognitive processes including self-monitoring, self-judgment and self-reaction. He concluded that ‘the human capacity for forethought, reflective self-appraisal, and self-reaction gives prominence to cognitively based motivators in the exercise of personal agency’ (Bandura 1991,p.282). Discussion on the self-regulatory process is presented in subsection 2.2.1.
Bandura et al. (1996) examined the mechanisms of moral disengagement in the exercise of moral agency. 799 Italian participants from fifth through eighth grade were recruited from four public schools. The average age of the participants was 11.8 years and there were 438 males and 361 females. The participants completed the 32-item Multifaceted Scale of Mechanisms of Moral Disengagement, to assess proneness to moral disengagement in the context of physical and verbal aggression. Data regarding the variables of interest were also obtained from parents, teachers and peers of the participants.

The results indicated that moral disengagement was unrelated to both familial socioeconomic status and age. However, interesting gender differences were found where boys reported higher moral disengagement than girls, including the mechanisms of moral justification, euphemistic labelling, minimizing consequences and dehumanization of victims. The most commonly used disengagement mechanisms in this age group were found to be construing injurious behaviour as serving righteous purposes, disowning responsibility for harmful effects and devaluing those who are maltreated. In addition, results indicated that children who were more likely to apply moral disengagement reported feeling less guilty, less likely to apologize for harmful behaviour and more likely to engage in overt aggression.

A total of 564 Italian children were involved in a longitudinal study with the aim to examine children's use of self-regulatory mechanisms in relation to physical and verbal aggression (Bandura et al. 2001). This study provides similar findings to the earlier study by Bandura et al. (1996). Results of this study indicate that boys expressed a higher proneness for moral disengagement as compared to girls. In fact, a more recent study by McAlister et al. (2006) also indicate gender differences in the tendency to utilize moral disengagement among adults. Furthermore, Bandura et al. (2001) found that moral disengagement significantly contributed to the prediction of aggressive and delinquent behaviours. In addition, findings indicate that children with high pro-social behaviours such as helping others and sharing were also low in self-reported use of moral disengagement mechanisms.
Bandura et al. (2001) concluded that children who are most prone to moral disengagement are also more aggressive than children who are less prone to moral disengagement.

Pelton et al. (2004) extended the work of Bandura (1996) by examining moral disengagement in a sample of 245 nine to fourteen year-old African-American children. The average age of the respondents was 11.40 years. Moral disengagement was found to be positively related to self and parent-reported aggressive behaviour, and self-reported delinquent behaviour. A negative relationship was found between moral disengagement and parent-reported social competence. Moreover, results indicated no significant gender or age differences in moral disengagement among the respondents.

Category 2

Acknowledging the importance of advancing understanding the concept of moral disengagement, researchers started to investigate the applicability of moral disengagement in various contexts as well as relating moral disengagement with various outcomes (category 2, Table 2.1). McAlister (2000) made an interesting exploratory research to investigate attitudes related to moral disengagement regarding military actions against Iraq in February 1998. Telephone surveys were conducted in English or Spanish. The respondents were selected using random digit dialling from sampling frames of listed residential telephone numbers in Texas. An individual was randomly selected from each of the households that were reached. The results indicate that moral disengagement stimulates public support for war. There appear to have gender and Anglo/minority group differences in support of military action, which were mainly due to the differences in their justification on the necessity of having war. McAlister (2000) concluded that Anglo and male respondents supported an attack on Iraq because they accepted the mechanisms of moral disengagement. On the other hand, female respondents opposed an attack because they resisted the mechanisms of moral disengagement.
In general, the findings of this exploratory study were found to be similar to another study by McAlister (2001). In his 2001 study, attitudes of moral disengagement have been shown to be related to opinions about the NATO bombing of Yugoslavia among young people in the USA and Finland. A more recent study (McAlister, Bandura, and Owen 2006), using a total of 1,499 respondents and applying a similar research method as the above two studies indicates that the September 11 terrorist strikes raised the level of moral disengagement for the use of military force compared to the pre-strike level. Moral disengagement is found to completely mediate the effect of socio-demographic factors in support of military force against terrorist sanctuaries and partially mediates the effect on military force against Iraq.

Aquino et al. (2007) further investigate how moral identity and mechanisms of moral disengagement influence cognitive and emotional reactions to war. In the first study, 104 participants from a Northeastern (USA) university were involved in this study and an on-line survey approach was applied. Results show that individuals who believe in rationalized retaliatory aggression were more likely to believe that killing those responsible for the September 11 attacks was a more moral option than non-lethal responses. Aquino et al. (2007) then applied an experimental approach in their second study, using 69 undergraduates, administrative staff and community members residing in Northeastern in the US. The results suggest that making an individual’s moral identity cognitively salient can emotionally reconnect the self to the moral consequences of war on others.

A more recent study by Jackson and Gaertner (2010) examines mechanisms of moral disengagement as a medium through which right-wing authoritarianism (RWA) and social dominance orientation (SDO) promote support for war. Using a total of 707 undergraduates from the University of Tennessee, results indicate that minimising consequences and moral justification mediate the effect of right-wing authoritarianism and social dominance orientation on approval of war. RWA is found to be strongly associated with moral justification whilst SDO is strongly associated with dehumanizing-blaming victims. This study again manages to
demonstrate that moral disengagement apparently acts as a stepping-stone in the perpetration of inhumanities.

Another interesting study (Osofsky, Bandura, and Zimbardo 2005) investigate the application of the mechanisms of moral disengagement by prison personnel in carrying out the death penalty. Data were collected from 246 prison personnel from three maximum-security penitentiaries where the state executions are performed. The prison personnel include the execution teams, which carry out the executions, the support teams, which provide emotional support to the families of the victims as well as the condemned inmate, and prison guards who have no involvement in the execution process. Findings indicate that executioners exhibit the highest level of moral, social and economic justifications, denial of personal responsibility and dehumanization. The support teams disavowed moral disengagement, so did the prison guards but to a lesser degree than the support teams.

Recently, White et al. (2009) analyse the use of the mechanisms of moral disengagement by industries whose products or production policies are harmful to human health. Internal corporate documents and notes from tobacco, lead, vinyl chloride and silicosis-producing industries were reviewed. Findings indicate the application of moral disengagement mechanisms by these industries to mitigate the moral consequences of harmful corporate activities. Different modes of moral disengagement were enlisted by each of the industries with minimization and denial of harmful effect as the most frequently used mechanisms. These industries were also found to apply other mechanisms such as social, moral and economic justifications. In short, these industries were found to apply a moral disengagement mechanism to make their activities personally and socially acceptable and they tended to create a shared belief with the public in the morality of their work.

In the field of leadership study, Beu and Buckley (2004) provide a discussion on how political skills are used to lead employees to commit crimes of obedience through the application of moral disengagement mechanisms. They assert that
leaders can cognitively re-construe the conduct to convince the employees that the behaviour is morally justified and thus create crimes of obedience in organisations. The political skills of leaders can be used to frame unethical behaviours so that employees believe such behaviours have no negative consequences and no victims. Several recommendations such as re-examination of vision, mission and norms of the organisation and implementation of ethics programs were proposed with the aim to control the occurrence of crimes of obedience in organisations.

Moral disengagement also has been applied to explain computer hackers’ illegal behaviour. Computer hackers employ the mechanisms of moral disengagement as a means of reducing self censure (Chntler 1996; Parker 1998; Young, Zhang, and Prybutok 2007). Generally, hackers have been reported to justify their activities by stating that such activities are purely intellectual activities and information should be freely available to everybody (Chntler 1996; Young, Zhang, and Prybutok 2007). It is common for them to minimize the consequences of hacking. Also, they tend to dehumanize their victims by referring them as multinational corporations, networks or systems. Furthermore, the most outstanding mechanism used by hackers appears to be blaming the victim. In doing so, hackers commonly criticised the system administrators or programmers for lax security and thus the victims deserved to be attacked (Chntler 1996; Parker 1998).

The growing body of research on moral disengagement has also extended into investigating several social problems in children and youths such as development of antisocial behaviour (Hyde, Shaw, and Moilanen 2010), bullying among children (Almeida, Correia, and Marinho 2009; Gini 2006; Menesini et al. 2003) and youth (Hymel, Rocke-Henderson, and Bonanno 2005), delinquency (Kirikiadis 2008) as well as alcohol consumption and gambling in youth (Barnes et al. 1999, 2005). For example, Gini (2006) reported a positive relationship between moral disengagement and each of the aggressive roles among 204 Italian students aged 8 to 11 years old. Roles were described as Bully, Assistant, Reinforcer, Defender, Outsider and Victim. Moreover, Bullies were found to demonstrate a higher mean level of moral disengagement than children in all other roles. Similar
findings were found in an earlier study by Menesini et al. (2003). They made a cross-national comparison of differences between bullies, victims and outsiders among 296 children from three European cities (Seville, Florence and Cosenza). In this study, bullies were reported to possess a main profile of egocentric reasoning and children from the south of Italy (Cosenza) attributed the highest disengagement to the bullies.

The concept of moral disengagement is not only applied to examine various aggressive behaviours as discussed above but also has been linked with violence towards animals (Vollum, Buffington-Vollum, and Longmire 2004). Based on 821 completed surveys from households throughout the state of Texas, they found that forty percent of variance concerning animal cruelty is explained by moral disengagement and attitudes reflecting dehumanization account for the highest proportion. Further, dehumanization also has the greatest impact on punitiveness toward animal cruelty. Vollum et al. (2004) concluded that individuals who exhibit mechanisms of moral disengagement in regard to the treatment of animals may have less concern about the violence against animals, also may be less punitive in their attitudes towards such acts.

In organisational contexts, Moore (2008a) argues that moral disengagement plays an important role in processes of organisational corruption. Moral disengagement is hypothesized to initiate organisational corruption by easing and expediting an individual’s unethical decision-making, which advances organisational interests. In addition, moral disengagement is predicted to facilitate organisational corruption by suppressing an individual’s awareness of the ethical content of the decisions. Finally, moral disengagement is posited to perpetuate organisational corruption because an individual who exhibits a high level of moral disengagement is usually more likely to make decisions, which advance organisational interests without giving any concern on the ethicality of the decisions, and that individual may be rewarded in terms of organisational advancement.
Similarly, Barsky (2008) in a review and theory development to examine the relationship between attributes of goals and goal-setting practices to unethical behaviour posits that moral disengagement is believed to increase the use of rationalizations to act unethically. In his recent work, Barsky (2011) developed a measure of moral disengagement (moral justification and displacement of responsibility) for organisational setting. This new measure was then used to test several hypothesized relationships between moral disengagement and unethical behaviour. Barsky (2011) also proposed that participation in goal setting might serve to constrain such relationships. In summary, findings indicated that the two mechanisms of moral disengagement (moral justification and displacement of responsibility) were significantly related to unethical behaviour. In addition, individuals who involved in goal setting were less likely to involve in unethical behaviours at workplace. Nevertheless, participation in goal setting was found to have a moderating effect only on the relationship between moral justification and unethical behaviour.

These two studies (Barsky 2008, 2011), together with the work by Moore (2008a) paved way to integrate the concept of moral disengagement in investigating issues relating to organisational contexts. Furthermore, based on a survey data from 307 business and education undergraduate students, Detert et al. (2008) found that moral disengagement is positively related to unethical decision making. Results of this study provide partial support for the mediating hypotheses of the relationship between individual differences and unethical decision-making.

**Category 3**

Realising that little is known about the antecedents of moral disengagement, Detert et al. (2008) in the same study as above, make the first attempt to investigate this aspect (category 3, Table 2.1). So far, to the best knowledge of the author, this is the only empirical study that investigated the possible antecedents of moral disengagement (Baker, Detert, and Trevino 2006; Detert, Trevino, and Sweitzer 2008). They investigated six individual differences, namely, empathy, trait cynicism, locus of control (internal, chance and power) and moral identity as the
antecedents of moral disengagement. Results indicate that empathy and moral identity are negatively related to moral disengagement whilst trait cynicism and chance locus of control are found to be positively related. On the other hand, chance and power locus of control are not significantly related to moral disengagement.

2.3 Gaps in the Literature

Figure 2.4: Summary of Gaps in the Literature

After reviewing the literature pertaining to moral disengagement, four main gaps were identified as illustrated in Figure 2.4. First, it is obvious that little is known about the antecedents of moral disengagement. With the exception of Detert et al. (2008), the majority of studies either focused on the outcomes of moral disengagement or on the application of the mechanisms of moral disengagement in various contexts. According to Detert et al. (2008) individual differences affect how individuals see others, events and themselves. In addition, literature suggests that individual differences could influence an individual’s cognitive component, which can than lead to how the individual is likely to behave (Loch and Conger 1996; Trevino 1986). As a result, different individuals are predicted to have different tendencies towards being morally disengaged.
Detert et al. (2008) focused on examining individual differences which are previously related to moral cognition and action. Motivated by their work, this research intends to expand the work of Detert et al. (2008) by investigating individual differences of personality as the possible antecedents of moral disengagement. Personality is believed to have some influence on decision behaviour (Chenhall and Morris 1991; Dole and Schroeder 2001; Foran and DeCoster 1974; Sankaran and Bui 2003). To achieve a better understanding on the antecedent factors, this doctoral research expands further the work of Detert et al. (2008) to include an environmental factor, namely, organisational ethical climate as another antecedent of moral disengagement. The selection of these two variables is aligned with the concept of triadic reciprocity in social cognitive theory. In addition, most researchers agree that apart from personality, environment influence could also affect an individual’s behaviour (Epstein 1979; George 1992). For example, Buss (1991,p.461) states that ‘all observable behaviour is the product of mechanisms residing within the organism, combined with environmental and organismic inputs that activate those mechanisms’. Similarly, Hershcovis et al. (2007) highlighted the importance of assessing individual and situational or organisational variables simultaneously in their recent meta-analysis. By studying these antecedents, this doctoral research expands knowledge on what influences individuals to be morally disengaged; a mechanism, which eases their psychological feeling of discomfort when performing unethical behaviour.

Secondly, although much has been done to investigate the applicability of moral disengagement in various contexts, very few studies (Barsky 2008, 2011; Detert, Trevino, and Sweitzer 2008; Moore 2008a) have investigated moral disengagement in organisational settings. Nevertheless, these few prior studies provide a promising ability of moral disengagement in explaining various organisational unethical issues such as corruption and unethical decision-making. As moral disengagement could be the reason for unethical behaviour in organisations (Barsky 2008, 2011; Detert, Trevino, and Sweitzer 2008; Moore 2008a) and it could be used as a predictor of future behaviour (McAlister, Bandura, and Owen 2006; Vollum, Buffington-Vollum, and Longmire 2004), this research
intends to apply moral disengagement in investigating workplace deviance among employees in organisational contexts. Issues on workplace deviance are currently at the heart of organisational research (Berry, Ones, and Sackett 2007; Cohen-Charash and Mueller 2007; Colbert et al. 2004; Dilchert, Ones Davis, and Rostow 2007; El Akremi, Vandenberghe, and Camerman 2010; Henle 2005; Henle, Giacalone, and Jurkiewicz 2005; Levy and Tziner 2011; Robinson and Bennett 1995; Robinson and Greenberg 1998) because of the increasing trend toward the occurrence of deviant behaviours in organisations and the costs associated with such behaviours (Coffin 2003; El Akremi, Vandenberghe, and Camerman 2010; Ferguson and Barry 2011; Levy and Tziner 2011; Lutgen-Sandvik, Tracy, and Alberts 2007; Peterson 2002a). The application of moral disengagement to the domain of workplace deviance would be an ideal extension of investigating the outcomes of this construct because moral disengagement so far, has been applied to account for observed inconsistencies between moral beliefs and moral behaviour. Likewise, Bandura (1986, 1990, 1999) proposed moral disengagement to predict situations in which behaviour is not expected to follow an individual’s professed moral principles.

Also, realising that almost all studies on moral disengagement were carried out in western-countries, this doctoral research moves the frontier to investigate moral disengagement in a non-western country, namely, Malaysia. Findings of previous studies were based on western data and therefore might not be transferable or applicable to Malaysian society which is based on collectivist and high power distance values (Ahmad and Aafaqi 2004; Hofstede 1998). An extensive literature review failed to locate any studies on antecedents and outcomes of moral disengagement within the Malaysian context. Thus, this research intends to provide new findings, which reflect non-western values and might broaden the generalisability of moral disengagement.

Finally, to the best knowledge of the author, none of the previous studies has integrated transformational leadership theory in investigating moral disengagement. Although moral disengagement has been associated with unethical
behaviour in various contexts, it is logical to predict that the transformational leadership style may serve to constrain or moderate the relationships because leaders transform values, behaviours and goals of organisations through warmth, encouragement and inspiration (Sweeney and McFarlin 2002). Using similar arguments, Daft (2008,p.356) asserts that transformational leadership can ‘bring about significant change in both followers and organisations’. Mindful of this, transformational leadership is hypothesized to moderate the relationship between moral disengagement and workplace deviance in this doctoral research.

In short, this doctoral research is carried out with the aim to fill the gaps in Figure 2.4, and seeks to make a significant contribution to the literature. The above discussion led to the development of the conceptual framework of this research as illustrated in Figure 2.5.
2.4 Personality

Personality has been described in many ways in the literature. For instance, personality has been defined as ‘dynamic mental structures and coordinated mental processes that determine individuals’ emotional and behavioural adjustments to their environment’ (James and Mazerolle 2002, p.1). A more detailed description about personality is given by Funder (2001b, p.2) as ‘an individual’s characteristics patterns of thought, emotion, and behaviour, together with the psychological mechanisms-hidden or not-behind those patterns’. Following Ones et al. (2005, p.390), this research defines personality as ‘spectrum of individual attributes that consistently distinguish people from one another in terms of their basic tendencies to think, feel, and act in certain ways’. In general, all the given definitions acknowledge that personality is seen as the totality of an individual’s behavioural and emotional tendencies, which distinguishes that individual in terms of character traits, attitudes or habits.

Personality has been an extensively researched topic in the literature. More than 80 years ago, Allport (1931), recognising that human personalities were complex with potentially thousands of descriptors. He and colleagues worked to categories traits into as cardinal traits, central traits and secondary traits. After decades of study, he set eight criteria as a foundation to define a trait of personality. In summary, according to Allport (1931) a trait is believed to be a mechanism, which produces habits and as such, a trait is more generalised than a habit. He further explained that a trait appears to have the capacity to powerfully influence human actions and asserted that the existence of a trait might be demonstrated empirically. In addition, traits are claimed to be only relatively independent of each other because human action is a result of integration of several traits. He mentioned that ‘when concrete acts are observed or tested they reflect not only the trait under examination, but also simultaneously other traits; several traits may thus converge into a final common path’ (Allport 1931, p.370). Moreover, individuals’ traits of personality should not be assumed to represent their moral quality (and in this study, the charismatic traits of transformational
leaders are a case in point). Allport (1931) further reminded that in a case where inconsistencies are evidenced between human actions and an observed trait, it is wrong to conclude the non-existence of that particular trait. One should remember that ‘what is a major trait in one personality may be a minor trait, or even non-existent in another personality’ (Allport 1931, p. 371). Finally, he concluded the possibilities of having universal traits, which could be scaled in the population at large and comparison could be made between individuals in respect to it. The criteria outlined by Allport (1931) left an indelible mark on personality psychology.

Recently, Cullen and Sackett (2003) asserted that personality construct could be used to predict or understand individuals’ behaviour. Along the way, there has been a debate as to whether personality as a construct is stable. Researchers appear to advocate that personality is to be fairly stable (Myers 1998) especially in adulthood (Ryan and Kristof-Brown 2003). Earlier, examining data from a six year longitudinal study, Costa and McCrae (1988) found support for the stability of personality over time. They reported that neuroticism, extraversion and openness to experience had retest correlations above .80. Similarly, Buss (1991, p. 478) concluded that personality is ‘reasonably consistent over time’. One of the reasons for the stability is because personality is partly genetic (Bouchard 1997; Digman 1990).

Trait theory (Allport 1931) is the most predominant theory applied in personality research. According to Myers (1998) traits refer to dimensions of individual differences in tendencies to show consistent patterns of thoughts, feelings and actions. In the early study by Allport and Oldbert (1936), they proposed 4500 different personality traits. They categorised them as cardinal traits, central traits and secondary traits. Cardinal traits are those that dominate personality to the point that people are famous for them. For instance, Mother Theresa’s cardinal trait would be humanitarianism. Central traits refer to common traits such as shy and anxious that makes up individuals personalities. As for secondary traits, these traits are only present under certain conditions and circumstances. An example of a secondary trait would be getting nervous before attending an interview. Later, to
make sense of thousands of traits, researchers started to cluster the traits. For example, Cattell (1943) proposed a sixteen factor model of personality. As the research pertaining to personality progressed, the number of factors representing personality traits decreased. To date, the Big Five personality factor model also known as the Big Five or Five Factor Model (FFM) is the most applicable personality theory in the literature.

2.4.1 The Five-Factor Model of Personality (FFM)

Originating from the early work of Cattell (1943), the FFM proposes that personality can be explained by the five traits of extraversion, emotional stability, agreeableness, conscientiousness and openness to experience (Barrick and Mount 1991). Extraversion refers to outgoingness, talkativeness, feeling comfortable and seeking out social situations (Barrick and Mount 1991). Hogan (1986) describes this trait as consisting of two components, ambition (initiative, ambition and impetuous) and sociability (sociable, exhibitionist and expressive). Emotional stability indicated by self confidence, calmness and an individual remaining unflustered in emotionally demanding situations (Barrick and Mount 1991). Agreeableness is associated with tolerance, friendliness and the ability to put other at ease (Barrick and Mount 1991). This trait seeks to measure whether an individual has a pro-social and cooperative orientation or acts with antagonism towards others. Conscientiousness is conceptualised as dutifulness, dependability, consistency and perseverance (Barrick and Mount 1991). According to Hergenhahn and Olson (1999) this trait involves the control of impulse which facilitates tasks and other goal-oriented behaviours. Finally, openness to experience is often associated with imagination, liberalism, original thinking, innovation and creativity (Barrick and Mount 1991).

Of all the five traits, extraversion and conscientiousness were closely linked to job performance. For instance, Barrick and Mount (1991) confirmed that these two traits were predictors of overall job performance. Other meta-analyses (Mount and Barrick 1995; Salgado and Rumbo 1997) added support of the predictive abilities of conscientiousness on performance. Similarly, Behling (1998) suggested that conscientiousness is only second to general intelligence as a valid predictor of
In short, extraversion (a conscious desire to interact positively) and conscientiousness (a moral leaning towards accepting and pursuing organisational goals) would reflect positively, moral engagement.

Evidence in the literatures indicates that FFM is the dominant approach to examine personality (Costa and McCrae 1992a; Costa and McCrae 1992b; Goldberg 1993; Lounsbury, Loveland, and Gibson 2003; Viswesvaran and Ones 2004; Zweig and Webster 2004). For instance, the big five factor structure of personality has been referred as ‘the most widely influential personality model of the past two decades’ (Saucier and Goldberg 2003,p.7). Likewise, in a meta-analysis of 163 studies, the five factors has been concluded as being the measurement of the ‘most salient aspects of personality’ (Judge, Heller, and Mount 2002,p.530). In addition, FFM shows very little variation across age, sex and culture (Costa and McCrae 1992b; Rose et al. 2002).

Based on the positive evidence and promising recognition of the applicability of the five components of FFM in the literature, this doctoral research applies this framework to examine the relationship between two personality traits (extraversion and conscientiousness) and moral disengagement in organisational settings. The decision is also supported by the suggestion made by Salgado (2003) that using FFM based inventories is a better way to assess personality compared to the non-FFM based inventories especially in making personnel selection decisions for practitioners. Nevertheless, it is worth to note that, only two personality traits (extraversion and conscientiousness) from the FFM are examined in this doctoral research. The selection of these two traits was based on the reason that both traits are associated with work performance (Barrick and Mount 1991; Hough 1992; Salgado 1997; Tett, Jackson, and Rothstein 1991). Conscientiousness is important in predicting success across jobs (Mount, Barrick, and Strauss 1994). They state that ‘the preponderance of evidence shows that individuals who are dependable, reliable, careful, thorough, able to plan, organized, hardworking, persistent, and achievement-oriented tend to have higher job performance in most if not all occupations’(Mount, Barrick, and Strauss 1994,p.272). As for extraversion, this trait
correlates with success in sales and management jobs as well as with training performance (Barrick and Mount 1991, 1993). Although Mount, Barrick and Strauss (1994, p.272) found that ‘individuals who are dependable, reliable, careful, thorough, able to plan, organised, hardworking, persistent, and achievement-oriented’ the assumption that this also manifests in terms of moral engagement is something to be ascertained in this study.

Despite the overwhelming recognition on the applicability of FFM in assessing personality, some researchers argue that five factors are insufficient to summarize all individual differences in personality (Rothstein and Goffin 2006; Wood and Beckmann 2006). The five factors have been criticised as failed to exhaust the description of personality and merely represent the highest hierarchical level of trait description (Rothstein and Goffin 2006; Wood and Beckmann 2006). In proving arguments against the usage of FFM in assessing personality, Paunonen and Jackson (2000) have re-run factor analysis using the same data used by Goldberg. The results confirmed the existence of different factor structures by using different rules for determining when an item is included in a factor. Earlier, Rust (1999) criticised that some traits such as extraversion and openness as well as conscientiousness and agreeableness have some overlap. There are also arguments on the fact that personality could differ along the cultural lines (Church 2000; Katigbak et al. 2002; McCrae 2000) and FFM is not wholly applicable in the non-western contexts (Cheung et al. 2001; Cheung 2004; Katigbak et al. 2002). In a similar vein, McCrae and Costa (1997) cautioned that the FFM may be limited only to modern, literate and industrialised cultures. Therefore, this doctoral research is expected to provide interesting findings concerning the applicability of FFM among employees in manufacturing companies in Malaysia, a society that differs substantially from western countries on various aspects such as culture, society, politics and economic system (Ahmad and Aafaqi 2004).

2.4.2 Personality and Work Contexts

In general, personality is believed to influence behaviour. Robertson and Callinan (1998, p.322) mentioned ‘a person’s personality profile will provide
predictions about his or her behaviour across a variety of different situations’. Support was also found for the assertion that personality traits could strongly predict individuals’ motivation, performance, advancement and attitudes (Barrick, Mount, and Judge 2001; Hough 1992; Judge, Heller, and Mount 2002; Ones et al. 2007; Poropat 2009). Given the great influence of personality on human judgement and action, a few meta-analyses have been carried out and confirmed that personality is a valid predictor of job performance in various occupational groups (Barrick and Mount 1991; Hurtz and Donovan 2000; Judge and Ilies 2002; Salgado 2002).

Barrick and Mount (1991) in their meta-analysis investigate the relation of the Big Five personality factors to three job performance criteria: job proficiency, training proficiency and personal data. All available trait research from 1952 to 1988 was categorized into the five-factor model. The results were also categorized into five occupational groups: professionals, police, managers, sales and skilled/semi-skilled. Barrick and Mount found that conscientiousness was positively related to all three categories of job performance and for all occupational groups. Extraversion was found to be a valid predictor for two occupations, managers and sales. Finally, extraversion and openness were positively related to training proficiency for all five occupations. Tett, Jackson and Rothsein (1991) conducted a meta analysis after viewing the results from Barrick and Mount (1991) using a confirmatory approach. Unlike the earlier results reported by Barrick and Mount (1991), they found that agreeableness and openness to experience were most highly related to job performance.

A meta-analysis conducted by Hurtz and Donavan (2000) examined the ability of the Big Five factors to predict job performance and contextual performance and the implication being a desire to conform rather than deviate from work tasks. Although having low to moderate magnitude of relationship, they concluded that personality is a significant predictor of job performance. Further, of the five factors, conscientiousness was found to be the best predictor. Judge, Heller and Mount (2002) further examine how well the Big Five factors predict job
satisfaction. In their meta-analysis of 163 studies, they concluded that the Big Five factors taken together had a multiple significant correlation of .41 with job satisfaction. Conscientiousness was positively related and neuroticism was negatively related. In another job performance study, Schell and Reilley (2004) found that extraversion and conscientiousness were positively related to error detection performance in stable work environments.

Judge and Ilies (2002) in their meta-analysis of 65 studies, examined the relationship between the five factors of personality and performance motivation. All the selected studies applied theories of goal setting, expectancy or self-efficacy for assessing performance motivation. They found that neuroticism was negatively correlated with performance motivation whilst conscientiousness was positively correlated. This meta-analysis reported that the five factors model of personality has a moderate correlation with performance motivation criteria.

Personality has also been associated with career success. For instance, Judge et al. (1999) investigated the Big Five factors and general mental ability with career success. In this longitudinal study, career success was divided into intrinsic and extrinsic career success. Intrinsic career success was operationalised as job satisfaction. On the other hand, extrinsic career success referred to income and occupational status. Conscientiousness was found to have the highest positive relationship with both, intrinsic and extrinsic career success. In addition, neuroticism was found to be negatively related to extrinsic career success. Interestingly, they concluded that personality was associated with career success when controlling for general mental ability. This conclusion may indirectly indicate the conformity of personality specifically conscientiousness with moral engagement.

From a slight different perspective, Salgado (2002) carried out a meta-analysis to investigate the impact of personality on counterproductive behaviours. Counterproductive behaviours include behaviours such as absenteeism, turnover, accidents and deviant behaviours. In this meta-analysis, conscientiousness was
reported to be negatively related with deviant behaviours and turnover. A significant relationship was also reported between turnover and extraversion, openness to experience, agreeableness and neuroticism. However, no significant relationships were reported between the Big Five factors and absenteeism or accidents.

The aforementioned studies are among the most cited studies in personality research within work contexts. All the above studies able to produce evidence as to what traits influence job performance, considered here as productive behaviour or counterproductive behaviour. These studies, however, are not able to provide insight on how different personality traits affect the way an individual reacts to work situations, which could then affect his/her behaviour or performance within work contexts. For instance, conscientiousness was found to have a negative relationship with deviant behaviour (Salgado 2002) but no further evidence was given on how this relationship occurs or what deters conscientious individuals from acting deviantly at their workplaces. Thus, this doctoral research tries to provide evidence by linking personality to moral disengagement and hypothesized that moral disengagement mediate the relationship between personality traits and workplace deviance.

Moral disengagement is a result of deactivation of an individual’s self-regulatory function (see subsection 2.3.1). Unlike personality which is generally viewed as relatively stable across time and situation (Buss 1991; Costa and McCrae 1988), an individual’s self-regulatory function may vary significantly across situations (Carver and Scheier 1998; Higgins 1998). Thus, this doctoral research posits a relationship between personality and moral disengagement. Although, virtually no prior research has directly examined this relationship, few researchers in the field of self-leadership have indirectly suggested the link between personality and self-regulation (Stewart, Carson, and Cardy 1996; Williams 1997).

For example, Williams (1997) proposes the moderating effects of personality traits on the effectiveness of self-leadership interventions. He explained in his
article that self-leadership incorporates the principle of self-management and self-regulation. In effect, self-regulation is the foundation of self-leadership. He then argues that an individual personality does affect individual self-regulation or self-management processes. As a result, there is a great tendency for an individual personality to affect an individual’s self-leadership. For instance, he proposes extraversion and conscientiousness to have a positive association with self-leadership metaskills prior to and after training. He further asserts that personality traits such as locus of control and general self-efficacy tend to moderate an individual’s self-regulation processes, which in turn have a moderating effect on an individual’s self-leadership. Although no empirical confirmations were made, his proposals provide minor support to the hypothesized relationships in this doctoral research. Hence, this doctoral research will address the gap in relating the two selected personality traits to moral disengagement, using a widely used and well-validated Big Five measure to assess the selected traits.

2.5 Organisational Ethical Climate

There have been arguments among researchers as to whether an individual’s personality or environment has more influence on an individual’s behaviour. In general, most researchers come to the agreement that both factors play important roles in influencing an individual’s behaviour (Epstein 1979; George 1992). To highlight this agreement, Buss (1991,p.461) mentioned ‘all observable behaviour is the product of mechanisms residing within the organism, combined with environmental and organismic inputs that activate those mechanisms’. Advocates of this view and based on triadic reciprocity in social cognitive theory, this doctoral research proposes organisational ethical climate as a variable to represent environmental influence in the hypothesized relationships.

Similarly, Victor and Cullen (1988) stressed that individual characteristics cannot be wholly relied upon to explain the outcome of ethical decisions in organisations. They introduced the concept of ethical climate that refers to the perceptions of employees on the extent of the organisation's commitment in
relation to ethical issues towards its employees and management. Organisational ethical climate tends to differ from one organisation to another because ethical climate is created by the shared perceptions among employees regarding the ethical conditions in their organisations (Victor and Cullen 1988). Perceptions of employees could include various aspects such as organisation’s practices, procedures, expected behaviour, also, the way management handles ethical problems.

The Ethical Climate Questionnaire (ECQ) is the most common measure used to assess organisational ethical climate in the literature. Originated from the work of Victor and Cullen (1988), the 26-item instrument identifies organisational climate to consist of five types: caring, rules, law and code, independence and instrumental. In 1993, Cullen et al. (1993) introduced a revised version of ECQ which has a total of 36 items. Subsequent researches using ECQ has empirically reported seven to nine theoretical climate types (Cullen, Victor, and Bronson 1993; Fritzsche 2000). Peterson (2002b) compared five studies that used 36-items ECQ and concluded that all the studies failed to reach agreement on the number of ethical climate items that exist within organisations.

Despite being tested (Victor and Cullen 1988) and retested by a number of researchers using samples from various organizations (Cullen, Victor, and Bronson 1993; Fritzsche 2000; Trevino, Butterfield, and McCabe 1998), this research does not apply ECQ to measure organisational ethical climate construct. The decision is based on two main reasons. Firstly, in this doctoral research, the aim is to tap a general perception of employees regarding their organisational ethical climate. No hypothesized relationships are developed to examine any specific types or dimensions of climates as conceptualised in ECQ. Vaicys et al. (1996,p.120) assert that ECQ ‘appears to be a useful tool that can be used to assess various dimensions of the perceived ethical climate within organisations’. Secondly, the 26-items ECQ (Victor and Cullen 1988) is considered too long to be applied in a research employing a survey approach. The length of the survey and time taken to answer the survey are among the crucial factors to be considered in designing a survey.
(Frazer and Lawley 2000; Hoinville and Jowell 1978). Thus, a more general instrument (Schwepker 2001), which is reasonably short (Mulki, Jaramillo, and Locander 2008) and has acceptable reliability and validity (Schwepker, Ferrell, and Ingram 1997) is used to assess organisational ethical climate in this doctoral research.

A more important issue to highlight is that the realities of an organisation are only understood in accordance to the perceptions given by its members (Forte 2004). Therefore, the perceptions of employees regarding ethical issues such as the presence and enforcement of codes of ethics, corporate policies on ethics and top management actions related to ethics are used to assess organisational ethical climate in this doctoral research. The perception about ethical climate is very important because organisational ethical climate creates and infuses ethical beliefs among employees and consequently influences their behavioural decisions (Fang 2006). Similarly, other researchers believe that organisational ethical climate may modify personal values, attitudes and behaviours of members in organisations (Hansen 1992; Hofstede 1998) as well as facilitate both positive and negative organisational outcomes (Martin and Cullen 2006). A perception of having a positive or good ethical climate may shape employees to display expected ethical behaviours. On the other hand, having a negative ethical climate may stimulate higher tendency for moral deficiencies and unethical behaviour to grow among employees (Tsalikis and Fritzsche 1989). To conclude, a sound ethical climate perceived by members will inspire them in making ethical judgments and decisions as well as lead them to act in an ethical manner.

2.5.1 Organisational Ethical Climate and Behaviour

The significant influence of organisational ethical climate on behaviour in various contexts such as large organisations (Kang, Stewart, and Kim 2011), education (Shapira-Lishchinsky and Rosenblatt 2010), marketing (DeConinck 2010) and accounting (Shafer 2008) is well established in the literature. A classical view that ‘organisations are social actors responsible for the ethical or unethical behaviours of their employees’ (Victor and Cullen 1988,p.101) could be used as a
basis to describe the link between organisational ethical climate and behaviour. Further, researchers have expanded investigation of organisational ethical climate to include examining relationships with employees’ job attitudes such as job satisfaction (Jaramillo, Mulki, and Solomon 2006; Schwepker 2001; Vitell and Davis 1990), person-organisation fit (Lopez, Babin, and Chung 2009), organisational commitment (Cullen, Parboteeah, and Victor 2003; Schwepker 2001), role stress (Jaramillo, Mulki, and Solomon 2006; Mulki, Jaramillo, and Locander 2008) and turnover intentions (Jaramillo, Mulki, and Solomon 2006).

The incidence of unethical behaviour in organisations is staggering (ERC 2007; Henle, Giacalone, and Jurkiewicz 2005). A review of literature indicated that during the last five years, few studies have found support for the relationship between organisational ethical climates with such behaviour. Mayer et al. (2010) examined the mediating role of ethical climate in the relationship between ethical leadership and employee misconduct. Three hundred units/departments in a variety of organisations formed a sample in this study. Responses were gathered from employees and supervisors in these organisations. Using structural equation modelling, results indicated that ethical climate was negatively related to employee misconduct. Support was also found on the mediating role of ethical climate in the relationship between ethical leadership and employee misconduct. They concluded that it is crucial for organisations to create a sound ethical climate in the effort to reduce the level of misconduct among their employees.

Work absence has been a crucial problem in educational institutions (Bowers 2001). Acknowledging this problem, Shapira-Lishchinsky and Rosenblatt (2010) investigated the relationship between school ethical climate and teachers’ voluntary absence in Israel. They described voluntary absence as absences ‘which are normally under the direct control of the employee and are frequently utilized for personal issues, such as testing the market for alternative prospects of employment’ (Shapira-Lishchinsky and Rosenblatt 2010,p.165). Total of 1,016 schoolteachers from 35 high schools were involved in this study. Results showed that caring and formal ethical climates are both negatively related to absence
frequency. Both types of climates help to increase teachers’ attachment to their schools and in turn have less frequency to be absent. This supports that, creating an ethical climate which focuses on the value of caring accompanied by clear rules and procedures is important in combating the problem of voluntary absence in schools.

Smith et al. (2009) investigated whether organisational ethical climate influences misreporting by project team members. Surveys were distributed to the team members in state governmental projects in an Eastern U.S. Based on 47.6 percent response rate (228 usable responses), results revealed that project members who perceived their organisation to be dominated by rules and codes tend to misreport less. In short, they concluded that perceptions of a rules and code environment would lead to less misreporting. On the other hand, a caring, team spirit environment appear not to have any influence on misreporting behaviours. They suspected that the existence of a lack of trust on the part of a respondent toward a project manager might cause this result. They suggested that future research might want to investigate any possible mediating or moderating factor that might influence this relationship.

Prompted by many media-exposures about corporate scandals that are rooted from some form of deception, Stawiski et al. (2009) examined the effects of ethical climate (honesty, competitive or control) on group and individual level deception in negotiation. They employed an experimental design and 426 undergraduate students from two private colleges participated in their study. Participants were either assigned to the role of buyer or seller. Those assigned to the seller role either negotiated individually or as a three-person group. A simulated negotiation task about selling or buying of a new car through an instant messenger program was used to determine whether the seller(s) disclosed information about a possible defect. Results revealed that participants in the honesty climate were most likely to be honest compared to those in other climate types. Participants in the competitive climate were found to be the least likely to be honest. Further, groups were found to be less honest than individuals in the
negotiation situations. They concluded that although their study provided statistically less convincing results compared to previous study, it did provide additional support for the view that organisational ethical climate may have impact on ethical decision-making outcomes.

Andreoli and Lefkowitz (2009) investigated the relative contribution of personal versus organisational influences on organisational misconduct. One hundred and forty-five employed graduate and undergraduate students formed a heterogeneous survey sample of for profit, non-profit and government employees. Results indicated that only organisational factors were significant antecedents of misconduct and job satisfaction. Organisational compliance practices and ethical climate were the independent predictors of misconduct. Additionally, compliance practices moderated the relationship between ethical climate and misconduct as well as between pressure to compromise ethical standards and misconduct. This study illustrates the primacy of organisational factors such as ethical climate as antecedents of misconduct in organisation. Thus, they concluded organisational variables should be considered in any study pertaining to organisational deviance or misconduct because the absence of this type of variable could be a serious omission.

The above studies are some recent examples, which provide significant evidence of the function of ethical climate as a proximal antecedent to employee unethical behaviour. Nevertheless, a solid understanding of the process underlying this relationship is still unclear. Lee and Allen (2002) suggested that employees’ cognition could be a plausible factor to explain the relationship between situational factors and workplace deviance. Few recent studies reflect the attempt to acknowledge the importance of individual psychological aspects, such as self-esteem (Ferris et al. 2009; Ferris et al. 2009), self-control (Vazsonyi and Li 2010) and neurobiological motivational traits (Diefendorff and Mehta 2007) in obtaining a better understanding of deviant behaviour. Motivated by these studies, this doctoral research proposes moral disengagement in the relationship between
organisational ethical climate and workplace deviance with the aim to provide further understanding on this relationship.

2.6 Workplace Deviance

Robinson and Bennett (1995, p. 556) defined workplace deviance as ‘voluntary behaviour that violates significant organisational norms and in doing so threatens the well-being of an organisation, its members, or both’. In the literature, the word workplace deviance and counterproductive work behaviours have been used interchangeably. In short, workplace deviance could be referred to a group of behaviours that detract from the goals of the organisation (Rotundo and Sackett 2002).

Workplace deviance is not a new problem. This topic has been researched since the mid 1900s and is currently at the heart of organisational research (Berry et al. 2007; Cohen-Charash and Mueller 2007; Colbert et al. 2004; Dilchert et al. 2007; El Akremi et al. 2010; Henle 2005; Henle et al. 2005; Levy and Tziner 2011; Robinson and Bennett 1995; Robinson and Greenberg 1998). This may be due to an increasing trend toward the occurrence of deviant behaviours in organisations and because of the costs associated with such behaviours (Coffin 2003; El Akremi et al. 2010; Ferguson and Barry 2011; Levy and Tziner 2011; Lutgen-Sandvik et al. 2007; Peterson 2002a). For instance, in one particular study, three out of every four employees reported having stolen at least once from their employers (Appelbaum 2006; Coffin 2003). In addition, 95 percent of all organisations surveyed reported some type of deviant-related experience (Henle et al. 2005). Financially, reports indicate that the costs associated with employee theft in the US have been estimated at $50 billion annually (Henle et al. 2005). More recently, workplace deviance is reported to cost American organisations around $6 billion to $200 billion per year (Diefendorff and Mehta 2007; El Akremi et al. 2010).

In the case of Malaysia, the absence of any official statistics highlighting the incidence and harm caused by employee deviance to organisations does not indicate that organisations in Malaysia are free from such problems. Reviews of the
Malaysia Industrial Law reports confirmed the existence of various deviant behaviours among employees in Malaysia (Abdul Rahim 2008). Further, the Social Security Organisation (SOCSO), the Malaysian Labour Department and the National Institute of Occupational Safety and Health (NIOSH) have admitted to having received reports on various deviant behaviours among employees (Abdul Rahim 2008; SOCSO 2007).

Robinson and Bennett (1995) developed a typology of deviant behaviours in the workplace. They described the two important dimensions in workplace deviance are the target of the behaviour and the severity of the behaviour. Target of the behaviour could be classified as interpersonal and organisational deviance. Interpersonal deviance is described to include personal aggression and political deviance whilst organisational deviance includes property and production deviance. Severity of behaviour refers to the degree of harm that such behaviours caused to others or to the organisations. For instance property deviance such as sabotage of company equipment, stealing and accepting kickbacks represent the severe form of organisational deviance. The minor form of organisational deviance is categorised as production deviance, which includes behaviours such as leaving work early, taking extra breaks or deliberately working at a slow pace. Further, personal aggression such as endangering co-workers, sexual harassment and verbal abuse of others represent a severe form of interpersonal deviance. The minor form of interpersonal deviance is termed political deviance, which include behaviours such as gossiping, blaming co-workers or showing favouritism.

In this research, workplace deviance is separated into individual and organisational deviance. This decision is aligned with meta-analyses on deviance (Berry, Ones, and Sackett 2007) and workplace aggression (Hershcovis et al. 2007) which suggest that organisational and interpersonal deviance may be viewed as distinct. Bennett and Robinson (2000) developed a measure of workplace deviance. In the first process, they included a list of 314 deviant work behaviours that were reviewed and assessed by a panel of experts. They then analysed the inter-item correlations and variances. The list of deviant behaviours were dropped to 58 items
and then later refined to consist of 23 items. Using confirmatory analysis, they verify dimensionality and separate the items. Finally, there were 7 interpersonal deviance items and 12 organisational deviance items. This scale is widely used today and has been adapted in this study.

2.6.1 Social Exchange Theory

Apart from separating workplace deviance into interpersonal and organisational deviance as suggested in meta-analyses (Berry, Ones, and Sackett 2007; Hirschovis et al. 2007), this doctoral research posits that interpersonal deviance may lead to organisational deviance. Social exchange theory assumes that when an individual provides something valuable to the other person, that person benefits and desires to repay with something valuable to the giving agent in order to avoid becoming indebted to the person. This process of social exchange occurs voluntarily, which means that an individual, who feels indebted, may choose the ideal way to repay the debt.

Social exchange theory is based on the principle of reciprocity. Gouldner (1960, p.171) notes two assumptions which govern the principle of reciprocity: ‘1) people should help those who have helped them, and 2) people should not injure those who have helped them’. Although the norm of reciprocity is commonly found between individuals, it may also developed between individuals and organisations (Rousseau 1989; Shore, Sy, and Strauss 2006). According to social exchange, in a situation where someone fails to discharge a social obligation or an unjust situation, negative reciprocity may take place. For example, employees may retaliate against unsatisfactory conditions and unjust workplaces by participating in behaviours, which harm the organisation or other employees or both. Thus, social exchange theory and the norm of reciprocity formed a basis of the proposition that individual deviance may lead to organisational deviance.

2.6.2 Predictors of Workplace Deviance: Psychological and Cognitive Factors

Recent interest in the field of workplace deviance is not only on investigation of the types of deviant behaviours, but also more on finding reasons
for the occurrence of such behaviours (Berry, Ones, and Sackett 2007; Diefendorff and Mehta 2007; Stewart et al. 2009). In general, employees commit deviant behaviours because they are motivated to violate and have lack of motivation to conform to normative expectations in the workplace (Bennett and Robinson 2000; Greenberg 1990, 2002; Stewart et al. 2009). Several individual (Douglas and Martinko 2001; Salgado 2002) and situational (Greenberg 1990) factors have been found as predictors of workplace deviance. Interactive affects of personal and situational factors have also been investigated in order to gain further insight to the issue of workplace deviance (Colbert et al. 2004; Henle 2005).

Literature suggests that deviant acts could be spontaneous reactions to psychological factors such as negative affect or emotions, or they could also be the result of deliberate cognitive judgments (Judge, Scott, and Ilies 2006; Martinko, Gundlach, and Douglas 2002; Robinson and Bennett 1997). For instance, negative emotions are believed to stimulate incivility in the workplace (Andersson and Pearson 1999). Several researchers managed to provide support for the relationship between negative emotional states such as anger and hostility to workplace deviance (Judge, Scott, and Ilies 2006; Lee and Allen 2002; Spector and Fox 2002; Fox, Spector, and Miles 2001). Further, Eisenberg (2000) asserts that emotions such as guilt, shame and empathy are either associated with motivating or interfering with moral thinking and moral behaviour. Interestingly, few recent studies reflect attempts to further acknowledge the importance of individual psychological aspects in the field of workplace deviance. Several psychological aspects such as self-esteem (Ferris, Brown, and Heller 2009; Ferris et al. 2009), self-control (Vazsonyi and Li 2010), or neurobiological motivational traits (Diefendorff and Mehta 2007) have been examined in order to obtain a better understanding about deviant behaviour in organisations.

As for the cognitive factors, Trevino (1986) has long proposed that the interaction of an individual cognitive aspect such as moral reasoning with situational and individual difference factors could affect an individual’s immoral behaviour at work. In a similar vein, Greenberg (2002) found that moral reasoning is
related to an individual’s tendency to perform counterproductive behaviour at the workplace. Recently, in a meta-analyses, cognitive moral development was reported to have negative relationship with unethical choices (Kish-Gephart, Harrison, and Trevino 2010). In addition, a previous study indicates that intelligence may affect deviance through its effects on moral reasoning and decision-making capabilities (Dilchert, Ones Davis, and Rostow 2007). Dilchert et al. (2007) concluded that deviant behaviour is closely related to the ability to resolve complex moral problems.

A self-regulatory function enables individuals to self-regulate or self-control their negative emotions and thoughts, which may influence them to act in an inappropriate manner (Marcus and Schuler 2004; Vazsonyi and Li 2010). An individual with a high level of self-control is less likely to perform counterproductive or deviant workplace behaviour (Bordia, Restubog, and Tang 2008; Douglas and Martinko 2008; Marcus and Schuler 2004). Despite having this evidence on the ability of a self-regulatory function, literature suggests that the capacity of this function is limited and can be depleted by various factors (Muraven and Baumeister 2000; Muraven, Tice, and Baumeister 1998). Applying an experimental approach, a recent study (Gino et al. 2011) revealed that individuals with depletion of self-control resources are more likely to behave dishonestly. They explained that depletion of self-control reduced an individual’s moral awareness when he or she was faced with the opportunity to cheat and thus heightened the tendency of cheating. However, an individual’s moral identity helps to moderate the relationship between self-control depletion and unethical behaviour.

Motivated by previous studies, this doctoral research moves a step ahead to investigate the relationship between moral disengagement and workplace deviance. Moral disengagement is concerned with individual cognition (Pajares 2002) which could be used to deactivate a self-regulatory function in order to justify unethical behaviour (Bandura 1986). Thus, activation of moral disengagement may help an individual to act deviant in a moral light.
2.7 Leadership

Although there appears a wide range of definitions of leadership in the literature (Alas, Tafel, and Tuulik 2007; House and Aditya 1997; Yun, Cox, and Sims Jr 2006), difficulties to arrive at a concrete acceptable definition of leadership is noted: ‘an acceptable definition of leadership needs to be sound both in theory and in practice, able to withstand changing times and circumstances, and be comprehensive and integrative rather than atomistic and narrow focus’ (Avery 2004,p.7). Further, Burns (1978,p.2) comments, ‘leadership is one of the most observed and least understood phenomena on earth’.

For instance, according to Roach and Behling (1984,p.46) leadership is defined as ‘the process of influencing the activities of an organised group toward goal achievement’. In a slightly different way, Yukl (2002,p.7) defines leadership as ‘the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish shared objectives’. Earlier, Lord and Maher (1991) describe leadership to consist of behaviours, traits, characteristics and outcomes produced by leaders and these elements are interpreted by followers. Despite the fuzzy and inconsistent definitions, leadership has been considered by many to play a pivotal role in the success of any organisations. Avolio (1999) insists that the optimisation of a leadership system could improve the quality of the relationships among leaders, peers and followers, resulting in benefits for both individual and organisation.

A review of literature further suggests that leaders are claimed to be most effective when they affect people at both the emotional and rational level (Hughes, Ginnet, and Curphy 2009). Accordingly, leadership involves the skill of understanding leadership situations and influencing others to accomplish group goals (Hughes, Ginnet, and Curphy 2009). Also, leadership does not exist separately from followers’ perceptions (Drath 2001; Meindl 1998). As such, this research
applied employees perceptions of the transformational leadership style in their organisations to measure the transformational leadership construct.

2.7.1 Leadership Theories – A Brief Review

In general, literature on leadership could be clustered into three periods (Chemers and Kellerman 1984; Wren 1995): 1) the trait period, from around 1910 to World War II; 2) the behavioural period, from the onset of World War II to the late 1960s and 3) the contingency period, from the late 1960s to the present.

During the trait period, trait theory dominates research on leadership. This theory evolved from the idea that leaders have different characteristics from their followers. Advocates of this theory argue that certain personality characteristics predispose individuals as leaders (Northouse 1997). A focus of leadership research around this time was to determine the unique traits or characteristics of a leader (Mann 1959; Stogdill 1948). Characteristics such as height (Den Hartog and Koopman 2002), energy, intuition, foresight and persuasion were posited to be associated with leadership (Yukl and VanFleet 1992). In a meta-analysis Stogdill (1948) identifies six characteristics associated with leadership, namely, capacity, achievement, responsibility, participation, status and situation. However, according to Yukl (1998) none of the traits found during the trait period were sufficient for explaining leadership success.

After the trait period, researchers diverted their focus to the study of leadership behaviour. They started to explore behaviours as determinants of leader effectiveness. For instance, few early studies investigated how employee-centred leaders and production-centred leaders differed in effectiveness (Katz, Maccoby, and Morse 1950; Katz and Kahn 1952). They concluded that leaders could either be employee or production focused but not both. Their findings differ from other studies which found that leaders could both initiate structure as well as demonstrate individual consideration (Fleishman 1953).
During this period, research indicated that leaders acted differently and applied different leadership techniques depending on the situations they were engaged in (Hollander and Offermann 1990). A relationship between leader consideration and follower satisfaction was among the topics of interest (Yukl 1989). It was found that the leader-follower relationships were not only affected by leader attributes but also by follower perceptions of those attributes. However, research on leadership applying a behavioural approach has been criticised as not consistently supported and led to little advancement on the understanding of leadership effectiveness (Yukl 1989; Yukl and VanFleet 1992).

Finally, contingency theorists posit that leader effectiveness is dependent on the interaction between the personal characteristics of the leader and the situation in which the leader is based (Fiedler and Chemers 1974; Northhouse 1997; Yukl 1998). During the contingency period, several contingency models such as the normative decision model (Vroom and Yetton 1973), the situational leadership model (Hersey and Blanchard 1969), the contingency model (Fiedler 1967) and the path-goal theory (Evans 1970) emerged onto the scene.

Generally, all the aforementioned models emphasise that leaders should make their behaviours contingent on certain aspects of the followers or the situation in order to ensure leadership effectiveness (Chemers 1984). However, in practice, different leaders may have different perceptions of the situations, which lead them to take different actions in response to such situations. Hence, according to Peters et al. (1985), the validity of contingency theories remain unproven. In addition, contingency models have been criticized of reporting conflicting findings in field settings and not taking into account how level of stress, working conditions, technology, economic conditions and types of organisational culture affect the leadership process (Hughes, Ginnet, and Curphy 2009).

To date, the three predominant leadership theories that clearly identify a moral dimension in leadership are servant-leadership theory (Greenleaf 1977), spiritual leadership theory (Fry 2003) and transformational leadership theory (Burns
In a servant-leadership theory, a strong emphasis is given on building and sustaining the element of trust among followers. The theory argues that followers will not obey the leader unless they trust the leader. In the case of spiritual leadership, this type of leadership comprises of ‘values, attitudes and behaviours that are necessary to intrinsically motivate one’s self and others so that they have a sense of spiritual survival through calling and membership’ (Fry 2003, p.711). The theory emphasises the establishment of an ethical culture of altruism and authentic care for others. Spiritual leadership is found to be related to organisational productivity and commitment (Fry, Vitucci, and Cedillo 2005). As for transformational leadership theory, the essence of this leadership style is a leader’s ability to influence and motivate followers to achieve a holistic change or transformation of context and vision (Burns 1978).

In this research, transformational leadership style is selected, based on two main reasons. First, this choice is based on the argument that transformational leadership may improve the level of moral maturity of the followers (Avolio and Bass 2002). According to Burns (1978, p.455) a transformational leader could elevate a follower’s morality to ‘more principled levels of judgment’. Transformational leaders could achieve this by influencing others to transcend personal gain and self interest by raising the level of consciousness regarding values (Bass 1985). In addition, the key construct in this research is moral disengagement and according to George (2000) transformational leadership is more connected with issues of emotion.

Therefore, it is logical to assume that having transformational leaders may restrict employees’ tendency to act deviantly because transformational leaders have the ability to establish norms in organisations, which in turn, shape the ethical conduct of subordinates. In other words, they are able to convey the expected ethical values within the organisation and inspire employees to act accordingly. Barling et al. (2002) found that transformational leadership is negatively associated with safety accidents. Similarly, charismatic leadership is negatively related to workplace aggression (Hepworth and Towler 2004); charisma is an important
element of transformational leadership (Feinberg, Ostroff, and Warner Burke 2005; McGuire and Kennerly 2006). Further, idealised influence and inspirational motivation of the transformational leadership style are found to have a positive relationship with personal commitment to change among lecturers in Malaysia (Lo, Ramayah, and Cyril de Run 2010). This result highlights the ability of transformational leaders in motivating subordinates to perform as expected in higher education in Malaysia. Although this result indicated the positive outcomes of applying transformational leadership style in Malaysia, the generalisation of such result is limited to higher educational sector in Malaysia. Thus, this doctoral research is expected to broaden understanding on the influence of transformational leadership style on employees in other work sectors, specifically manufacturing sector, which is the largest employment provider in Malaysia (FMM. 2008).

Secondly, this study views transformational leadership as being aligned with the collectivistic culture of Malaysia. Collectivistic cultures refers to ‘societies in which people from birth onwards are integrated into strong, cohesive in-groups, which throughout their lifetime continue to protect them in exchange for unquestioning loyalty’ (Hofstede 1997,p.51). The four behavioural factors of transformational leadership, namely idealized influence, inspirational motivation, intellectual stimulation and individualized consideration, are found to be connected to cultural values and norms in collectivistic cultures (Jung, Bass, and Sosik 1995). Similarly, Walumbwa and Lawler (2003) revealed that transformational leadership impacted positively with collectivistic cultures. Also, collectivism has been found to be related to leadership styles and outcomes (Agarwal, DeCarlo, and Vyas 1999; House, Wright, and Aditya 1997).

2.7.2 Transformational Leadership Theory

Transformational leadership evolved from the work of James McGregor Burns (1978) and later expanded and refined by Bass (1985). In their early work, both authors highlight the difference between transactional and transformational leadership styles. Although transactional leadership style is not a focus in this research, it is worth noting that transactional leadership operates along a
behaviour-reward paradigm. In short, the relationship between leaders and followers are based on transactional social exchange. Leaders provide benefits to the followers and in exchange, followers give leaders higher regard and are responsive to their leadership (Hollander and Offermann 1990).

On the other hand, transformational leadership involves empowering people to be change agents within the organisations, rather than using rewards to control them (Bass 1985). This type of leadership facilitates the rational thinking and problem-solving abilities of the followers. Having this type of leadership will make followers put the goals and values of the organisations ahead of their own (Shamir, House, and Arthur 1992). Followers are motivated through the inspirational vision laid out by their leaders and not through the promise of a reward. The basis of transformational leadership is leaders having within themselves principled judgement, exemplary character and high moral values in order to develop the same within their followers (Northouse 2004). On a more extreme note, Avolio and Bass (2002,p.1) assert that ‘true transformational leaders raise the level of moral maturity of those whom they lead. They convert their followers into leaders’.

According to Bass (1985), the four factors that drive success for a transformational leader are: idealised influence, inspirational motivation, intellectual stimulation and individualised consideration. Idealised influence refers to the extent to which the leader behaves in a way that allows the follower to identify with the leader. The leader provides communal design of vision, purpose, values and norms that provides meaning at work. Followers perceive leaders as their mentors. Followers expect leaders to do the right things and to demonstrate the highest standard in ethical and moral conduct (Bass and Riggio 2006). Transformational leaders need to display congruence between spoken thoughts and behaviours. They should be consistent rather than random in their behaviour (Bass 1996) because they cultivate follower trust and loyalty through behavioural integrity (Simons 1999). Hoy and Miskel (2001,p.415) summarise idealized influence as:
‘demonstrating high standards of ethical and moral conduct; sharing risks with followers in setting and attaining goals, considering the needs of others over their own desires; using power to move individuals or groups toward accomplishing their mission; conveying a vision and cause, but never for personal gain’.

The pivotal aspect of inspirational motivation is the effective communication of a vision to followers. Transformational leaders tend to use verbal and non-verbal communication with the objective to provide optimistic view of the future and the right frame of mind for the followers to get motivated. Inspirational motivation enables leaders to encourage their followers to commit themselves to organisational goals and work as a team (Bass 1985). The inspiration that causes followers to believe in and act upon leaders’ articulated visions. Idealised influence and inspirational motivation may be combined to form a dimension called charisma (Bass 1998; Bass and Riggio 2006; House and Shamir 1993).

Intellectual stimulation refers to a cognitive relationship between leader and follower that attains higher levels of awareness and consciousness. Promoting intelligence, rationality, questioning assumptions, and reframing problems are few examples of how transformational leaders could stimulate followers’ effort to be creative and innovative (Bass and Riggio 2006). Transformational leaders solicit ideas from followers and encourage their creativity. This could be done by questioning current strategies, solving problems from different perspectives and supporting new procedures for work (Hoy and Miskel 2001). Transformational leaders will ensure that followers feel free to express their opinions without being judged. Followers will not be criticised for having different ideas from leaders. In short, intellectual stimulation promotes intelligence, rationality and careful problem solving (Bass 1996).

The final component of transformational leadership is that of individualised consideration where the leaders give organisational members personal attention to
each individual follower’s need for growth by acting as a mentor and giving support to the followers (Bass 1996; Bass and Riggio 2006). Transformational leaders make efforts to know members individually and help them develop their capacity to grow as well as develop each follower uniquely. Individualised consideration is believed to have significant implications on follower morale. For instance, lack of individualised consideration is found to be strongly related to burnout among teachers (Leithwood et al. 1999). All the four components are expected to affect the effectiveness of leadership among leaders. Turner and Barling (2005,p.25) assert that ‘the leader who is most effective is one who shows what is known as transformational leadership’.

2.7.3 Empirical Studies Examining the Moderating Role of Transformational Leadership

In this research, transformational leadership style is posited to have a moderating effect on the relationship between moral disengagement and the two types of workplace deviance. In other words, this research argues that transformational leaders may reduce the likelihood that employees will morally disengage themselves in order to perform workplace deviance because such leaders work with their followers to generate creative solutions to complex problems (Bennis 2001). Transformational leaders inspire their followers to achieve a vision (Bass 1998; Bass and Steidlmeier 1999). The moderating proposition in this research is in line with the assertion that transformational leadership can ‘bring about significant change in both followers and organisations’ Daft (2008,p.356). Furthermore, a meta-analyses confirmed the positive relationship between transformational leadership and performance in various organisational contexts (DeGroot, Kiker, and Cross 2000; Lowe, Kroeck, and Sivasubramaniam 1996; Patterson et al. 1995).

Although the literature on transformational leadership has grown rapidly over the years, searches of literature on the moderating role of transformational leadership in their title since the year 2000 provide only a handful of relevant studies. In addition, most of the studies, which examine the moderating role of
transformational leadership, were in the field of teamwork research. A recent study (Ayoko and Callan 2010), investigated the moderating role of transformational leadership on the relationship between team members reactions to conflict and team outcomes. In this study, they separated team members’ reactions into two categories: productive and destructive reactions. In addition, teams’ outcomes are categorised as task performance (task outcomes) and bullying behaviour (social outcomes). They proposed that leaders who display transformational behaviours would moderate the way team members interpret and react to conflict. Using data from 97 workgroups comprising 582 respondents (97 group leaders and 485 group members) from public sector organisations in Australia, results indicate that transformational leadership behaviours moderate the relationship between productive reactions to conflict and bullying (social outcomes). Despite the significant contribution to the leadership literature, findings of this study should be interpreted with caution due to the following reasons. First, instead of separating scores from leaders’ self-rating and team members’ rating in their analysis, the authors applied aggregate scores to represent group level scores, which may contribute to bias problems in their results. Perhaps, using hierarchical linear modelling (HLM) as their analysis tool may be a better option as HLM allows researcher to do multi-level analysis, which cannot be performed with moderated regression analysis. Secondly, it is worth noting that the sample is taken from a public sector organisation and there exists considerable debate in the literature as how the practice of management differs in public and private sector organisations (Boyne, Jenkins, and Poole 1999; Boyne 2002; Rainey and Bozeman 2000; Rainey and Chun 2005).

Another study in the field of teamwork investigated the moderating role of transformational leadership in both senior team dynamic and achieving organisational ambidexterity (Jansen et al. 2008). Jansen et al. (2008) posit transformational leadership behaviours of executive directors may strengthen the impact of senior team attributes on achieving organisational ambidexterity. This study was conducted at Dutch branches of a large European financial service in the Netherlands. This study reported a response rate of 42 percent and 34 percent
from executive-directors and senior team members, respectively. They found that senior team social integration only affects the achievement of organisational ambidexterity in the presence of a transformational leader. They concluded that inspirational and intellectual stimulation inherent in transformational leadership behaviour helps socially integrated teams to debate conflicting interests and to reconcile conflicting demands among senior team members in ambidextrous organisations. A comprehensive analytical strategy to mitigate common method bias applied in this study could be a good future reference. A single index was created in measuring the transformational leadership construct. An alternative approach by examining each component of transformational leadership perhaps could provide a more interesting results and clearer picture on the moderating role of transformational leadership behaviours of executive directors on the hypothesized relationship. Summary of other three relevant studies in the field of teamwork within the period of year 2000 to the current period are presented in Table 2.2.

Table2.2: Previous Empirical Researches on Moderating Role of Transformational Leadership in the Field of Teamwork

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s)</th>
<th>Research Method</th>
<th>Sample</th>
<th>Summary of Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>(Klein et al. 2011)</td>
<td>Longitudinal survey</td>
<td>American national service program teams</td>
<td>Person-focused leadership increased the relationship between traditionalism diversity and team conflict.</td>
</tr>
<tr>
<td>2007</td>
<td>(Shin and Zhou 2007)</td>
<td>Survey</td>
<td>Korean R&amp;D teams</td>
<td>Teams with greater educational specialization heterogeneity demonstrated greater team creativity when transformational leadership was high.</td>
</tr>
<tr>
<td>2002</td>
<td>(Pirola-Merlo et al. 2002)</td>
<td>Survey</td>
<td>Australian public and private R&amp;D teams</td>
<td>Transformational leadership was found to suppress the impact of obstacles on team climate.</td>
</tr>
</tbody>
</table>

Generally, leadership is claimed as a vital factor contributing to both employee perceptions in the workplace and workforce engagement (Bass et al.
Recently, transformational leadership is found to enhance employees’ work engagement among the consultants in the Netherlands through the mediation of self-efficacy and optimism (Tims, Bakker, and Xanthopoulou 2011). In the work-family literature, Wang and Walumbwa (2007) examine the moderating effect of transformational leadership in the relationships between family-friendly programs (childcare and work flexibility benefits), organisational commitment and work withdrawal. Results indicate that transformational leadership moderate the relationships between work flexibility benefits and both organisational commitment and withdrawal as well as between childcare benefits and work withdrawal. Interestingly, the respondents of this study were employees in banking sectors in non-western countries, namely, China, Kenya and Thailand. As such, this study brought about a non-western perspective of the moderating role of transformational leadership. This research highlights that family-friendly programs together with supportive leadership behaviours such as transformational leadership may encourage employees’ commitment and reduce their work withdrawal among employees in the non-western countries.

In the marketing field, Panagopoulos and Avlonitis (2010) test the moderating effect of transformational leadership on the sales-performance strategy relationship. Respondents were sales executives in Greece. Although, the response rate of 18 percent could be considered low, the sample of this study covered a variety of companies such as pharmaceuticals, fast-moving consumer goods, durable consumer goods, services and industrial equipment, thus, allowing maximum generalizability of the findings. However, it is worth to note that the reported RMSEA for the CFA in this study was above 0.08. A RMSEA statistic (Steiger 1990, 2000) estimates the lack of fit in a model compared to a perfect (saturated) model. According to Byrne (2001,p.84), RMSEA has ‘recently been recognised as one of the most informative criteria in covariance structure modelling’. Values of 0.05 or less indicate a good fit of the model to the data (Byrne 2001) and values of 0.08 or less represent an acceptable fit (Byrne 2001; Hu and Bentler 1995). The findings indicated that transformational leadership has a significant moderating effect on the hypothesised relationship. Specifically, sales
strategy and sales performance such as sales force performance behaviour and firm financial performance will be stronger when senior sales executives display transformational leadership behaviours. Panagopoulos and Avlonitis (2010) then suggest that in order to get the most of sales strategy, companies should adopt a transformational leadership approach in their management practices.

2.8 Chapter Summary

Based on the review of literature, several gaps were identified in the field of moral disengagement. Applying social cognitive theory and supported by social exchange and transformational leadership theories, this research is conducted with the aim to fill these gaps. Detailed explanation of the theoretical framework and development of hypotheses for the current research are presented in the next chapter.
CHAPTER 3: THEORETICAL FRAMEWORK AND HYPOTHESES

3.1 Introduction

This chapter presents the theoretical framework and hypotheses of this research in two major sections. The first section explains the theoretical framework. The second section discusses the development of hypotheses in this research. A short summary concludes this chapter.

3.2 Theoretical Framework

Figure 3.1 (page 64) illustrates the theoretical framework for this research. This theoretical framework is developed based on social cognitive theory (Bandura 1986) and supported by social exchange theory (Thibaut and Kelley 1959), norm of reciprocity (Gouldner 1960) and transformational leadership theory (Burns 1978). The framework identifies personality and organisational ethical climate as antecedents of moral disengagement. Supported by social exchange theory and norm of reciprocity, the framework links moral disengagement to the outcomes variable of workplace deviance, specifically, interpersonal and organisational deviance. Since transformational leadership style is asserted to have influence on the ethical behaviour exhibited by subordinates (Bass and Avolio 2002; Brown and Trevino 2006; Burns 1978), the framework integrates transformational leadership theory by examining the moderating effect of transformational leadership on the relationship between moral disengagement and workplace deviance. Finally, moral disengagement is also predicted to mediate the relationships between the antecedents and the outcomes variables. In order to account for any confounding effects on the hypothesized relationships, gender, age and work experience are treated as control variables.

The selection of variables in this framework is based on the concept of reciprocal determinism in social cognitive theory. This concept proposes that behaviour, cognitive and other personal factors, together with environmental
influences could be determinants of each other (Bandura 1986). Following this concept, the two selected personality traits represent individual differences. Moral disengagement represents the cognitive aspect, organisational ethical climate and transformational leadership represent the environmental influence and workplace deviance represents the behavioural aspect.

Moral disengagement is defined as an individual’s propensity to evoke cognitions which restructure one’s actions to appear less harmful, minimize one’s understanding of responsibility for one’s action, or attenuate the perception of the distress one causes others (Bandura 1986, 1990, 1999, 2002). As discussed in chapter two, the current framework addresses gaps in the literature by investigating the antecedents and outcomes of moral disengagement. This is consistent with Detert et al. (2008) who argue that not much is known about the antecedents of moral disengagement and no empirical study so far links moral disengagement with deviant workplace behaviour. Nonetheless, moral disengagement could be one reason for unethical behaviour in organisations (Moore 2008a) and also could be used to predict future behaviour (McAlister, Bandura, and Owen 2006; Vollum, Buffington-Vollum, and Longmire 2004).

This theoretical framework includes six main hypotheses. Hypotheses (H1a, H1b and H2) test the antecedents of moral disengagement. The direct relationships between moral disengagement and workplace deviance as well as the direct relationships between interpersonal and organisational deviance are tested by hypotheses H3a, H3b and H4. Hypotheses (H5a to H5f) propose the mediating role of moral disengagement in the direct relationship between the antecedent variables and workplace deviance. Finally, the moderating effect of transformational leadership style is tested by hypotheses H6a and H6b. For analysis purposes, personality, organisational ethical climate and perceived transformational leadership style are treated as exogenous constructs. On the other hand, moral disengagement and deviant workplace behaviour are considered as endogenous constructs.
Figure 3.1: Theoretical Framework

3.3 Hypotheses

3.3.1 Personality and Moral Disengagement

Individual differences are believed to influence an individual’s cognitive aspect such as deindividuation\(^1\) and ethical reasoning, which then leads to individual behaviour (Loch and Conger 1996; Trevino 1986). Individual differences such as empathy (Detert, Trevino, and Sweitzer 2008; Miller and Eisenberg 1988), trait cynicism (Andersson and Bateman 1997; Detert, Trevino, and Sweitzer 2008), locus of control (Detert, Trevino, and Sweitzer 2008; Trevino and Youngblood 1990) and moral identity (Aquino and Reed 2002; Detert, Trevino, and Sweitzer 2008) have been previously linked to moral cognition and action. Since moral disengagement is concerned with an individual cognition (Pajares 2002), more specifically a self-regulatory function (Bandura 1986), thus it is logical to assume

\(^1\) Deindividuation is the psychological state of separation of the individual from others.
that different individuals would have different tendencies towards being morally disengaged.

Personality traits refer to relatively stable internal states that help to explain how a job incumbent or applicant will behave at work (Burger 2008; Epstein 1979; Furnham 1992; Gangestad and Snyder 1985; Hogan 1991; McCrae and Costa 1990; Ryan and Kristof-Brown 2003). According to McKenna (1994) possessing a certain traits does not guarantee predictable behaviour. However, individuals with a certain trait will be more disposed to respond to a given situation in a certain way. Literature suggests that individual difference of personality may have some influence on decision behaviour (Chenhall and Morris 1991; Cullen and Sackett 2003; Dole and Schroeder 2001; Foran and DeCoster 1974; Sankaran and Bui 2003).

Many past studies use the Five-Factor Model (FFM) (Barrick and Mount 1991; Burger 2008; Epstein 1979; Epstein and Teraspulsky 1986; Goldberg 1993) of personality as an organizing framework in examining the relationship between personality and employee behaviour (Barrick and Mount 1991; Judge and Ilies 2002; Salgado 2002). The FFM (Burger 2008), posits that personality may be described in terms of five higher order factors, i.e. neuroticism or emotional stability; extraversion; openness to experience; agreeableness; and conscientiousness (Digman 1990; Goldberg 1992). Many scholars claim that most individual differences in personality can be best understood in terms of these five basic traits (Barrick and Mount 1991; Costa and McCrae 1992b; Hurtz and Donovan 2000; Lounsbury, Loveland, and Gibson 2003; Viswesvaran and Ones 2004; Zweig and Webster 2004). However, only extraversion and conscientiousness were considered in this study because both traits are associated with work performance (Barrick and Mount 1991; Hough 1992; Salgado 1997; Tett, Jackson, and Rothstein 1991). Conscientiousness is important in predicting success across jobs (Mount, Barrick, and Strauss 1994) whereas extraversion correlates with success in sales and management jobs as well as with training performance (Barrick and Mount 1991, 1993). Extraversion and conscientiousness are considered to represent a subset of personality in this doctoral research because aggregating these two traits into one
overall personality construct may wash out important distinctions between these two traits.

Personality is said to influence self-control and self-regulation (Stewart, Carson, and Cardy 1996; Williams 1997). Since moral disengagement is dealing with an individual’s self-regulatory function, the two personality traits chosen in this study were based on the likelihood that these traits would influence moral disengagement. The first is extraversion. Extraversion could be described as the extent to which a person is assertive, gregarious and enthusiastic (Barrick and Mount 1991; Barrick, Mount, and Strauss 1993; Burger 2008; George 1996). According to Costa and McCrae (1992b), individuals high on this trait tend to be assertive and expressive and as such they enjoy interacting with others. This trait facilitates an individual’s effort to get along with others (Hogan and Shelton 1998). Similarly, extraverted individuals prefer interpersonal situations and they feel more comfortable to be in such contexts (Sin et al. 2004). Earlier, Furnham and Heaven (1999) concluded that extraverted individuals engage more in social activity and appear to thrive in social settings, and organisations would be one example.

People high in extraversion tend to feel self efficacious (George 1996). Williams and colleagues (1995) reveal that extraversion is positively related to self-management skills. Extraverts are also optimistic (Hills and Argyle 2001). Scholars have found that optimism is positively associated with self-regulation (Cantor and Zirkel 1990; Kirschenbaum 1987; Scheier and Carver 1985). Extraverts is also claimed to be better at networking and socializing in the workplace (Forret and Dougherty 2001). Taken together, extraversion is important in the establishment and maintenance of social ties and may be at better self-regulation. Thus, extraverted individuals appear to be less likely to morally disengage. Accordingly, the following hypothesis is asserted:

*Hypothesis 1a: Extraversion is negatively associated with moral disengagement.*
The second personality trait is conscientiousness. Individuals with this trait could be described as reliable, hardworking, self-disciplined, dependable, achievement oriented, planning-oriented, organized and persevering (Barrick and Mount 1991; McCrae 1987). These traits have been related to higher work performance across occupations. Mount, Barrick and Strauss (1994, p.272) note that ‘the preponderance of evidence shows that individuals who are dependable, reliable, careful, thorough, able to plan, organized, hardworking, persistent and achievement oriented tend to have higher job performance in most if not all occupations’.

The capability of conscientiousness in predicting self-discipline, achievement striving and dutifulness have become a topic of interest (Barrick and Mount 1991, 1993; Barrick, Mount, and Strauss 1993; Costa and McCrae 1992a; Hurtz and Donovan 2000; Judge and Ilies 2002). Conscientiousness employees are believed to be more likely to spend more time on tasks and to meet job expectations even in the situations full of obstacles or having personal problems (Schmidt and Hunter 1992). Employees with this trait are more predictable.

An individual high on the conscientiousness dimension is said to display considerable self-direction (Stewart, Carson, and Cardy 1996). Conscientiousness is also found to be positively and strongly associated with self-management skills (Williams et al. 1995). Further, conscientiousness is found to be positively related to goal commitment (Barrick, Mount, and Strauss 1993; Colquitt and Simmering 1998). Based on the above empirical findings and arguments, conscientiousness is expected to be negatively related to moral disengagement. Thus, the following hypothesis is proposed:

\[ Hypothesis \ 1b: \ \text{Conscientiousness is negatively associated with moral disengagement.} \]

3.3.2 Organisational Ethical Climate and Moral Disengagement

Generally, situational and organisational factors are known to influence the behaviour and attitudes of employees (Buss 1991; Epstein 1979; George 1992;
Trevino 1986; Victor and Cullen 1988). Triadic reciprocity (see Chapter two) in social cognitive theory (Bandura 1986) also supports this concept. Literature suggests that organisational climate could be a significant factor in shaping the behaviour of employees (Schneider 1975). Other studies posit a substantial relationship between climate and behaviour (Dieterly and Schneider 1974). Further, Turnipseed (1988) finds that organisational climate has a significant impact on employee behaviour.

However, measures developed to evaluate an overall organisation climate are criticised as unwieldy with unclear defined dimensionality (Glick 1988). Examining the sub-climates in organisations is a preferable alternative. Therefore, this research examines organisational ethical climate. Previous studies have explored other sub-climates such as the safety climate (Zohar 1980), the service climate (Schneider and Bowen 1985) and the innovation climate (Anderson and West 1998).

According to Schwepker (2001) ethical climate refers to an employee’s perceptions about the organisation’s practices, procedures, norms and values within an ethical context. Similarly, Victor and Cullen (1988, p101) define ethical climate as ‘the prevailing perceptions of typical organisational practices and procedures that have ethical content’. Usually ethical climate is manifested through communication, employee inclusiveness, valuing people and demonstration of concern (Whitener et al. 1998).

Literature demonstrates that organisational ethical climate has significant influence on employees’ ethical behaviour (Deshpande, George, and Joseph 2000; Fritzsche 2000; Trevino, Butterfield, and McCabe 1998). In climates which emphasise ethical values and behaviour, more ethical behaviour is expected to exist (Wimbush and Shepard 1994). On the other hand, unethical behaviour is more likely to occur in organisations with climates that are neither clear nor ethical (Peterson 2002a; Vardi 2001). For example, Kurland (1995) finds that financial services agents
working in organisations concerned with ethical practices are less likely to withhold information from clients in order to secure sales.

Given that employees’ ethical behaviour is very much influenced by their perceptions of organisational policies and practices (Claybourn 2011; Litzky, Eddleston, and Kidder 2006; Wimbush and Shepard 1994) and the significant negative relationship between ethical climate and unethical behaviour, there is some theoretical support that employees’ perceptions of working in good ethical climate may affect their tendency to morally disengage. Ethical climate provides clues to employees about behaviours that are accepted and appropriate in the organisation (Schwepker and Hartline 2005). Working in an organisation, which upholds ethical principles and practices, will likely reduce the tendency to be morally disengaged. Consequently, the following hypothesis is posited:

_Hypothesis 2:_ Organisational ethical climate is negatively associated with moral disengagement.

### 3.3.3 Moral Disengagement and Workplace Deviance

According to Robinson and Bennett (1995), workplace deviance refers to voluntary behaviour that violates significant organisational norms and in doing so threatens the well-being of the organisation, its members or both. Workplace deviance is an employee’s voluntary behaviour which arises either from a lack of motivation to conform to rules and regulations, and/or becoming motivated to violate the normal expectations of the social context (Bennett and Robinson 2000).

Workplace deviance includes organisational and interpersonal deviance. The former refers to behaviours directed to organisations such as theft and putting little effort into work, whilst the latter concerns with behaviours directed to individuals at workplaces such as acting rudely and making fun of others (Bennett and Robinson 2000; Robinson and Bennett 1995). Examining both types of deviance rather than the general behaviour of deviance would provide further understanding on the pattern of interrelationships among different forms of deviance (Sackett and DeVore 2001).
Various different theoretical frameworks such as justice or equity theory (Greenberg 1990; Adams 1963), frustration-aggression theory (Spector 1997; Dollard et al. 1939), social learning theory (Bandura 1977; O’Leary-Kelly, Griffin, and Glew 1996) and self-control theory (Gottfredson and Hirschi 1990; Pratt and Cullen 2000) have been used to investigate organisational misbehaviour. As for a moral cognition approach, Kohlberg’s cognitive moral development theory (1969) of moral judgment has commonly been used as a foundation to investigate antisocial behaviour including deviant behaviour in the literature. However, this approach is criticized as providing limited contribution (Barriga et al. 2001). For instance, only a modest relationship is found between moral judgment delay and antisocial behaviour (Gregg, Gibbs, and Basinger 1994; Nelson, Smith, and Dodd 1990). Beyond moral judgment, moral disengagement could be the possible reason for unethical behaviour in organisations (Barsky 2011; Moore 2008a). Thus, this study addresses this gap by linking moral disengagement with deviant workplace behaviour.

Moral disengagement is about the deactivation of an individual’s self-regulatory function which tends to result in unethical behaviour (Bandura 1986, 1990). Several behaviours which are considered deviant could be also considered unethical, as the only differences between these two types of behaviour is that ethics concentrates on behaviour that is right or wrong based on justice, law, or other societal guidelines whereas deviance focuses on behaviour that violates significant organisational norms (Robinson and Bennett 1995).

Unethical behaviour would motivate self-censure because individuals tend to avoid behaving in ways that violate their internal moral standards (Bandura 1990; Bandura et al. 1996). Usually, individuals will then aim to minimize the gap between their moral standards and behaviours. Based on cognitive dissonance theory (Festinger 1957), an individual will feel distress when his or her beliefs are against actual behaviour. As a result, people attenuate this distress either by modifying their behaviour (Baumeister and Heatherton 1996) or through moral disengagement (Bandura et al. 1996; Bandura 1990). Moral disengagement will
reduce individuals’ self-deterrents which usually prevent their tendency to conduct unethical behaviour (Bandura et al. 1996).

In recent years, scholars have cited Bandura’s idea of moral disengagement when discussing cognitive processes, which could foster unethical actions in organisations. For instance, Tenbrunsel and Messick (2004) find euphemistic language to be a key self-deception tactic that allows individuals to behave unethically in organisations. Similarly, Anand et al. (2005) link selected rationalization tactics (denial of responsibility, denial of injury, denial of the victim), as well as euphemistic language, to the facilitation of corruption in organisations. Umphress et al. (2010) investigate unethical pro-organisational behaviour (UPB) which refers to unethical acts which are claimed to be conducted for organisational benefit. In a more recent study, Bunk et al. (2011) explore individuals’ justification for becoming involved with interpersonal deviance at work.

Furthermore, moral disengagement has been found to reduce pro-social behaviour and increase anti-social behaviour in children (Bandura et al. 1996; Bandura et al. 2001; Bandura, Underwood, and Fromson 1975; Hyde, Shaw, and Moilanen 2010). In evaluating attitudes towards war and terrorism, moral disengagement is said to be positively related to the support for military attacks in Iraq and Yugoslavia (McAlister 2001). In organisational setting, moral disengagement is found to influence unethical decision making (Detert, Trevino, and Sweitzer 2008), facilitate organisational corruption (Moore 2008a) and associate with unethical work behaviour (Barsky 2011; Moore et al. 2012). Based on the above discussion and previous empirical findings, there appears to be a theoretical relationship between moral disengagement and workplace deviance, although this relationship has yet to be tested empirically. Therefore, the following hypotheses are posited:

*Hypothesis 3a: Moral disengagement is positively associated with organisational deviance.*
Hypothesis 3b: Moral disengagement is positively associated with interpersonal deviance.

3.3.4 Interpersonal Deviance and Organisational Deviance

A theoretical basis for expecting a relationship between interpersonal deviance and organisational deviance is social exchange theory (Blau 1964; Thibaut and Kelley 1959), which is based on the principle of reciprocity. Gouldner (1960, p171) notes two assumptions which govern the principle of reciprocity: ‘1) people should help those who have helped them and 2) people should not injure those who have helped them’. However, in an unjust situation, negative reciprocity may take place. In the case of experiencing interpersonal deviance, employees may feel that they are treated unfairly and, as a result, their positive attitudes and behaviour suffer (Tepper 2000; Tepper et al. 1998).

Based on social exchange theory (Thibaut and Kelley 1959) and the norm of reciprocity (Gouldner 1960), employees retaliate against unsatisfactory conditions and unjust workplaces by participating in behaviour which harms the organisation or other employees, or both. Moreover, people usually decide to reciprocate behaviour when the gains of the behaviour are greater than the costs (Cook and Emerson 1978; Gergen 1980; Meeker 1971). In the case of employees who experience interpersonal deviance, gains could be perceived if the retaliatory behaviour is satisfying and enjoyable (Gouldner 1960; Knutson 2004; Tripp, Bies, and Aquino 2002), if the retaliation is seen as balancing the exchange (Gouldner 1960; Molm, Quist, and Wiseley 1994) or if retaliation demonstrates a capability of defending the self (Bies and Tripp 1996). Further, as victims of interpersonal deviance, these employees may feel that their organisations do not protect and treat them well. The perceptions of unfair treatment by the organisation is found to be retaliated by deviant behaviour at the workplace such as employee theft (Greenberg 1990, 1993). Reciprocity is believed to be a universal principle (Gouldner 1960; Tsui and Wang 2002; Wang et al. 2003). Thus, based on past studies and the above arguments, the following is posited:
Hypothesis 4: Interpersonal deviance is positively associated with organisational deviance.

3.3.5 The Mediating Effect of Moral Disengagement

Consistent with the theoretical framework (Figure 3.1, page 64), this research theorizes that moral disengagement may have a mediating role in the relationship between the antecedent variables (personality traits and organisational ethical climate) and the outcomes variables (interpersonal and organisational deviance). Six mediation hypotheses are developed to test this proposition. A variable is considered as a mediator when it creates the indirect effect through which the focal independent variable is able to influence the criterion variable of interest (Baron and Kenny 1986). According to Kline (2005), the mediator variable transmits some of the causal effects of prior variables onto subsequent variables.

3.3.5.1 Personality, Moral Disengagement and Workplace Deviance

According to Robertson and Callinan (1998, p322), ‘a person’s personality profile will provide predictions about his or her behaviour across a variety of different situations’. As mentioned by Neuman and Baron (1998), some individuals are inclined to respond aggressively even to minor provocations.

Literature suggests that an individual difference of personality plays a vital role in the manifestation of workplace aggression (Neuman and Baron 1998; O’Leary-Kelly, Griffin, and Glew 1996; Spector 1997). Personality traits such as locus of control, trait anxiety and trait anger are found to be significantly correlated with antisocial behaviour (Fox and Spector 1999).

This research hypothesizes that personality traits of extraversion and conscientiousness influence workplace deviance through moral disengagement. Previous studies reveal that personality traits are distal variables which influence behaviours through the mediating effects of proximal motivation processes such as job satisfaction (Mount, Ilies, and Johnson 2006), goal setting (Barrick, Mount, and Strauss 1993) and affect (Lee and Allen 2002).
Extraversion is proposed to have a positive association with self-leadership (Williams 1997) and is high in positive affectivity (Meyer and Shack 1989; Watson and Clark 1992). Individuals high in positive affectivity are predicted to have high level of energy, excitement and enthusiasm and thus view their environment in a more positive manner (Nikolaou and Robertson 2001). As a result, extraversion is found to be positively associated with job satisfaction (Furnham and Zacherl 1986; Nikolaou and Robertson 2001; Tokar and Subich 1997).

Empirical findings on the direct relationships between extraversion and deviant behaviour or antisocial behaviour remain inconclusive. A practical reason for the inconclusive results could be the intervening variables linking extraversion and deviant behaviour have not been taken into account. Results of meta-analyses (Salgado 2002) investigating the relationship between the Big Five personality traits and job-related behaviour indicate that extraversion is not a predictor of deviant behaviour amongst employees. Similarly, Miller and Lynam (2001) in their meta-analyses study reveal that extraversion has no significant effect on antisocial behaviour using the Five Factor Model (FFM) framework.

In contrast, Collins and Schmidt (1993) find that extraversion is associated with white-collar crimes. In addition, extraversion is found to be positively associated with both antisocial behaviour directed against individuals and organisations (Lee, Ashton, and Shin 2005). Lee and colleagues (2005) argue that a high level of energy and boldness elements in extroverts is believed to be the reasons for the positive relationship. However, they argue for further research in order to draw a firm conclusion on the positive relationship. In a more recent study on workplace incivility which refers to a relatively minor form of interpersonal deviance, a negative relationship was found between extraversion and workplace incivility (Milam, Spitzmueller, and Penney 2009).

This research proposes that the relationship between extraversion and workplace deviance can be further explained through moral disengagement. Extraversion is highly correlated with positive affectivity (Meyer and Shack 1989).
Employees with this trait are expected to have more positive thinking towards all challenges at work, be better in self-leadership skills and have better self-regulatory ability. Extrovert employees are expected to perceive challenges at the work place in a more pleasant light and therefore, extravert employees should be less likely to morally disengage which in turn should lead to a lower tendency to engage in deviant acts in the workplace. Accordingly:

**Hypothesis 5a:** Moral disengagement mediates the relationship between extraversion and interpersonal deviance

**Hypothesis 5b:** Moral disengagement mediates the relationship between extraversion and organisational deviance

As for conscientiousness, literature suggests that conscientiousness is the most consistent predictor of work performance (Barrick and Mount 1991; Barrick, Mount, and Judge 2001; Mount and Barrick 1995; Salgado 1997). Conscientious individuals are described as purposeful, hardworking, achievement striving, dependable and persistent (Barrick, Mount, and Strauss 1993). This trait is found to be correlated with goal-setting motivation, expectancy motivation and self-efficacy motivation (Judge and Ilies 2002).

In relation to deviant behaviours, a meta-analysis indicates that this trait is negatively related with deviant behaviours and turnover (Salgado 2002). Similarly, conscientiousness is negatively related to antisocial behaviour outcomes such as aggression and conduct problems (Miller, Lynam, and Leukefeld 2003). Colbert and colleagues (Colbert et al. 2004) find that employees who are conscientious are less likely to display deviant behaviour of withholding effort.

Ability to plan, organize, complete behavioural tasks, exert self-discipline and dutifulness elements in conscientious employees may make them less likely to morally disengage. This in turn should lead to a lower tendency for them to engage in workplace deviance. Therefore, the following hypotheses are proposed:
Hypothesis 5c: Moral disengagement mediates the relationship between conscientiousness and interpersonal deviance

Hypothesis 5d: Moral disengagement mediates the relationship between conscientiousness and organisational deviance

3.3.5.2 Organisational Ethical Climate, Moral Disengagement and Workplace Deviance

Employees’ behaviours are strongly influenced by their organisations’ value system (Boye and Jones 1997; Trevino 1986; Vardi and Wiener 1996). More specifically, employees’ perceptions of their organisation’s climate may affect their tendencies to behave ethically or unethically (Litzky, Eddleston, and Kidder 2006; Wimbush, Shepard, and Markham 1997). The direct relationship between organisational climate and employees’ behaviour has long been established in the literature (Deshpande and Joseph 2009; Hellriegel and Slocum 1974; Mulki, Jaramillo, and Locander 2008; Ostroff 1993; Pritchard and Karasick 1973; Vardi 2001; Wimbush, Shepard, and Markham 1997). Organisational climate with a strong emphasis on ethical behaviour is said attract less deviant behaviour among employees (Peterson 2002a). A common approach applied by organisations in creating a strong ethical climate is by creating and enforcing rules. However, there is little evidence to support the effectiveness of this approach (Sackett and DeVore 2002).

Recently, employees’ cognition is hypothesized as an important factor which should be considered in gaining further understanding of the relationship between situational factors and workplace deviance (Lee and Allen 2002). According to Organ and Near (1985,p.243) employees’ cognition at work refers to employees’ ‘appraisal, assessment or evaluation of the composite external circumstances of life (at work) as made available to the individual, relative to some standard’. Employees’ behaviour at work is believed result from their cognitive evaluation and judgment (Weiss and Cropanzano 1996). Lee and Allen (2002) further assert employees’ cognitive factors such as thought about job features or perception
about workplace justice play an equal or greater part in shaping both helpful or harmful behaviour of employees.

Based on the above arguments, this research posits that the relationship between organisational ethical climate and workplace deviance is influenced by employees’ cognitive aspect, namely, moral disengagement. When employees perceive they are working in organisations which uphold ethical values and have good ethical climate, they may have a lesser tendency to deactivate their morally disengagement mechanisms and therefore be less likely to perform deviant behaviour. Hence:

**Hypothesis 5e:** Moral disengagement mediates the relationship between organisational ethical climate and interpersonal deviance.

**Hypothesis 5f:** Moral disengagement mediates the relationship between organisational ethical climate and organisational deviance

### 3.3.6 The Moderating Effect of Transformational Leadership Style

Although this research posits that moral disengagement leads to deviant workplace behaviour, constraints may reduce the likelihood of this relationship occurring. Normally, when managers set an example by behaving ethically, employees are less likely to have the tendencies to behave deviantly (Kurland 1995). Specifically, the current study proposes that transformational leadership may serve to constrain or moderate this relationship. This proposal is consistent with Litzky and colleagues (2006) who view that deviant workplace behaviour is a function of individual factors as well as a function of leadership and norms of the organisations.

The basis of transformational leadership is a leader’s ability to influence and motivate followers to achieve a holistic change or transformation of context and vision (Burns 1978). Leaders could achieve this by influencing others to transcend personal gain and self interest by raising the level of consciousness regarding values (Bass 1985). A transformational leader will elevate a follower’s morality to ‘more
principled levels of judgment’ (Burns 1978, p. 455). Transformational leaders will improve the level of moral maturity of those whom they lead (Avolio and Bass 2002, p.1). Vitell and colleagues (2000) provide empirical evidence that top management mould the ethical tone for the organisation. They argue that employee honesty could be effectively achieved through management leadership. Past studies confirm leadership style and characteristics can have moderating influence on potential unethical or illegal activity in organisations (Daboub et al. 1995).

This research expects transformational leadership style to moderate the relationship between moral disengagement in several ways. Firstly, transformational leaders pay attention to their subordinate’ needs (Avolio and Bass 1999; Bass 1998). As a result, employees working with such leaders may perceive that they are working in organisations, which care about their well-being and value their contributions. In return, they will be less likely to commit deviant acts. Previous research indicates that leaders who show consideration to their subordinates cause their subordinates to become more attached to the group (Korsgaard, Scheiger, and Sapienza 1995).

Secondly, transformational leaders are more open to new creative ideas about how to get work done (Bass 1998). Employees are given more opportunities to explore new approaches or utilise their creativity in performing their work. Consequently, employees perceive this situation as them receiving support from their organisation in doing their work. Organisation support is found to have a positive influence on affective commitment (Eisenberger, Armeli, and Rexwinkel 2001; Joiner and Bakalis 2006; Thomas, Bliese, and Jex 2005). Affective commitment which refers to employees’ emotional bond to their organisation, is claimed to be an important determinant of employees’ dedication and loyalty to their organisations (Rhoades, Eisenberger, and Armeli 2001). As a result, affective commitment is found to have negative association with absenteeism and turnover (Mathieu and Zajac 1990; Meyer and Allen 1997; Mowday, Porter, and Steers 1982). Thus, having high affective commitment may in turn prevent employees from committing deviant acts.
Finally, transformational leaders provide inspirational motivation by behaving in ways that motivate and inspire their employees, becoming a sign of reference (Bass 1985). For example, transformational leaders’ self-determination and positive commitment as well as an optimistic view of the future, inform their subordinates regarding the expected behaviour at work. Based on the above arguments, the following hypotheses are proposed:

\textit{Hypothesis 6a: Transformational leadership moderates the relationship between moral disengagement and interpersonal deviance.}

\textit{Hypothesis 6b: Transformational leadership moderates the relationship between moral disengagement and organisational deviance.}

3.4 Chapter Summary

This chapter discusses the theoretical framework and hypotheses developed for this research. The theoretical framework builds upon social cognitive theory and the concept of reciprocal determinism which view that behaviour, cognitive and other personal factors, together with environmental influences could be determinants of each other (Bandura 1986). Personality traits of extraversion and conscientiousness as well as organisational ethical climate are selected as the antecedents of moral disengagement. Supported by social exchange theory and the norm of reciprocity, moral disengagement is then linked to the outcomes variable of interpersonal and organisational deviance. This research also tests for the mediating effect of moral disengagement on the relationship between the antecedents and outcomes variables. Further, the research framework integrates transformational leadership theory by examining the moderating effect of transformational leadership on the relationship between moral disengagement and workplace deviance. Six main hypotheses are developed to reflect the predicted relationships between the constructs. The research method used to test the six main hypotheses is discussed in the following chapter.
CHAPTER 4: RESEARCH METHODS

4.1 Introduction

This chapter describes the methodology used in this research. This chapter is divided into eleven major sections. The chapter begins with the explanation of research paradigms. Following this section, a description on the research process is presented. Next section, details out explanation on research design employed in this research, followed by a description of the process used to develop the survey questionnaire. Section six describes the questionnaire and explains the translation process. The purposes of having a pilot study and the discussion on the results of such study is explained in section seven. Further, the next two sections provide explanation regarding the sampling frame, sample size and the justification of the selected sample. Section ten describes the data collection procedure and the final section provides a summary of the chapter.

4.2 Research Paradigms

The concept of paradigm in a contestation sense was introduced by Thomas Kuhn in the early 1960s, and could be referred as ‘people’s value judgments, norms, standards, frames of reference, perspectives, ideologies, myths, theories, and approved procedures that govern their thinking and action’ (Gummesson 2000, p.18). The design of a research study always begins with the selection of a topic and a research paradigm (Creswell 2003). Guba and Lincoln (1989) viewed paradigm as ‘a basic set of beliefs, a set of assumptions we are willing to make, which serve as touchstones in guiding our activities’.

Historically, research that was respected was anchored in the scientific method introduced during the enlightenment era (Chisick 2008) and particularly in natural sciences research. Later, scholars began to argue against positivism as an appropriate approach to be adopted in social science research (Erickson 1986). They argued that the positivist paradigm is only an effective approach when issues are known and can be counted as facts, objects or other measurable entities.
(Onwuegbuzie 2002; Smith 1983). They argued, asserting that most of the social science research deals with action and behaviour, which are generated from within the human mind and therefore needed to be interpreted by the respondent(s). Several characteristics gradually emerged from what came to be known as the constructivist paradigm (Guba and Lincoln 2005). Epistemologically, the objectivity and impersonality that contributed to validity and reliability claims in positivist research were not possible as in the interpretive epistemology it is impossible to separate the interrelationship between the researcher and what is being investigated. As a result, social science researchers who seconded this argument started to adopt the constructivist paradigm in their studies, sometimes employing sociological perspectives such as phenomenology and symbolic interactionism. However, later, both paradigms have become common approaches to be adopted in social science research, especially by scholars who advocate ‘mixed methods’ approaches (Creswell 2003; Creswell and Plano Clark 2007; Creswell 2012). Although a combined approach is possible, difficulties in applying both approaches remain a subject for debate (Creswell 1994; Creswell and Tashakkori 2007; Schultz and Hatch 1996).

Table 4.1 summarises the main features of the two paradigms (Hussey and Hussey 1997).

Table 4.1: The Main Features of the Quantitative and Qualitative Paradigm

<table>
<thead>
<tr>
<th>Quantitative (Positivistic) Paradigm</th>
<th>Qualitative (Constructivist) Paradigm*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applies scientific principles.</td>
<td>Applies understanding principles.</td>
</tr>
<tr>
<td>Uses prediction.</td>
<td>Uses exploration.</td>
</tr>
<tr>
<td>Values objectivity.</td>
<td>Values inter-subjectivity.</td>
</tr>
<tr>
<td>Aims to produce quantitative data.</td>
<td>Aims to produce qualitative data.</td>
</tr>
<tr>
<td>Uses large (statistical) samples.</td>
<td>Uses small (theoretical) samples.</td>
</tr>
<tr>
<td>Concerned with hypothesis testing.</td>
<td>Concerned with generating theories.</td>
</tr>
<tr>
<td>Data is highly specific and precise.</td>
<td>Data is rich and descriptive.</td>
</tr>
<tr>
<td>The location is artificial.</td>
<td>The location is natural.</td>
</tr>
<tr>
<td>Reliability is high.</td>
<td>Reliability is low.</td>
</tr>
<tr>
<td>Validity is low.</td>
<td>Validity is high.</td>
</tr>
<tr>
<td>Can claim generalisation from sample to population.</td>
<td>Can claim transferability, from context to similar context.</td>
</tr>
</tbody>
</table>

Source: Adapted from Hussey and Hussey (1997)

*This content reflects Hussey and Hussey’s emphasis on the phenomenological sociological perspective.
4.2.1 Justification on the Choice of Paradigm

This research applied the positivist ontology, empirical epistemology and quantitative methodology. The first reason is that other positivist studies have been conducted in this area by renowned scholars. As suggested by Remenyi et al. (1998) a methodological framework could be derived from a review of the relevant literature which will provide a researcher a clear expectation of how a particular phenomenon is likely to behave, from which a researcher can formalize a model or paradigm. With regards to moral disengagement studies, significant numbers of previous studies (Aquino et al. 2007; Osofsky, Bandura, and Zimbardo 2005; Pelton et al. 2004; Vollum, Buffington-Vollum, and Longmire 2004) apply the quantitative approach. Therefore, there is already a significant body of literature, known variables and existing theories to support the work undertaken in this research. This study, rather than exploring in an interpretive way, sought to confirm, support or challenge the findings of other scholars in a different research context. For that reason, the quantitative paradigm is employed in this research.

The second reason is related to the advantages of applying the scientific method which is the foundation for positivist research. Such a method ‘allows researchers to test their hypotheses and rely on objective measures (data) to support their findings’ (Wicks and Freeman 1998, p.125) avoiding problems of speculation and bias that occur in interpretive research (Wicks and Freeman 1998). Similarly, Amaratunga (2002) and Cavana (2001) stressed that a quantitative approach entailed verification of hypotheses providing strong reliability and validity.

Another advantage of using scientific method is that data could be replicated for verification purposes in future studies as replication of results is vital for theory testing (Flew 1979). Therefore, in this case, the positivist approach offers a new avenue of research in the Malaysian context especially in getting better understanding of antecedents and outcomes of moral disengagement.

The final reason is concerning the potential audience of this research. As most of the previous studies related to the topic of moral disengagement employed the quantitative approach, it is logical to assume that the potential audience (e.g., examiners, graduate committees, journal editors and readers) have tended to
approach this topic from a quantitative perspective; hence, it seemed appropriate to apply the quantitative approach for this research.

4.2.2 Contrasting Quantitative and Qualitative Methodologies

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Question</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontological</td>
<td>What is the nature of reality?</td>
<td>Reality is objective and singular, apart from the researcher.</td>
<td>Reality is subjective and multiple as seen by participants in a study.</td>
</tr>
<tr>
<td>Epistemological</td>
<td>What is the relationship of the researcher to that researched?</td>
<td>Researcher is independent from that being researched.</td>
<td>Researcher interacts with that being researched.</td>
</tr>
<tr>
<td>Axiological</td>
<td>What is the role of values?</td>
<td>Value-free and unbiased.</td>
<td>Value-laden and biased.</td>
</tr>
</tbody>
</table>

Source: Creswell (1994)

Having decided on the paradigm of this study, the researcher need to follow several assumptions which help to differentiate between the quantitative and the qualitative methodologies (Creswell 1994). Table 4.2 shows the assumptions of the two methodologies based on ontological, epistemological, axiological, rhetorical and methodological approaches. These assumptions act as guidelines in conducting this research.
Positivisms could be viewed as a research philosophy assuming the phenomena being studied have a stable reality measurable from the outside by an objective observer (Guba and Lincoln 2005). As discussed above, the ontological assumption is that the researcher views reality as objective and out there independent of the researcher. This research is about the antecedents and outcomes of moral disengagement and follows a set of studies over many years that have been produced by scholars in this area (Bandura et al. 2001; Bandura 2002; Detert, Trevino, and Sweitzer 2008; White, Bandura, and Bero 2009). The researcher assumed these factors could be identified and measured objectively and as for this research, a survey was utilised to meet that purpose.

Epistemology concerned with the study of knowledge and what is assumed as being valid knowledge (Collis and Hussey 2003). Only phenomena, which are observable and measureable, can be validly regarded as empirical knowledge. In this research, the antecedents and outcomes of moral disengagement were measured using selected psychometric constructs and quantitative data.

The axiological assumption concerned with values. The researcher’s values are kept out of the study in a quantitative project (although see Knorr-Cetina (1999) for critical debate on this issue). The phenomena under research are regarded as objects in the sense that they have already been identified and studied as such; in this case issues relating to moral disengagement. The researcher is interested in the interrelationship of the objects and believes that these objects were present before the researcher took an interest in them.

Following the rhetorical assumption, the language used in this report is impersonal and formal. All the main constructs are well defined based on accepted definitions. As for the methodological issue, the researcher applied a quantitative approach. The method of this research is to undertake hypotheses testing based on the conceptual framework presented. Concepts, variables and hypotheses were chosen and developed before the research began and remained fixed throughout the research. The main concern is to develop generalisations that contribute to theory as well as providing better prediction, explanation and understanding of the phenomena under study.
In short, this research adopted a positivist, empirical, quantitative approach based on three main principles. First, the researcher assumes that there are underlying laws and principles, which govern how things work in the world. The researcher plays a main role to discover these laws and principles primarily by distancing herself from respondents. Secondly, once the laws and principles have been discovered, the next step is to document and describes the facts. Finally, in analysing the data, well established and justified statistical techniques are used that counter speculation and bias.

4.3 Research Process

Generally, this research employed a research process, which is common to all scientifically based investigations. There are seven main stages i.e. problem, hypothesis, research design, measurement, data collection, data analysis and generalization. Each stage affects theory and is affected by it as well (Frankfort-Nachmias and Nachmias 1992).

![Figure 4.1: The Main Stages of the Research Process](source)

**Figure 4.1: The Main Stages of the Research Process**

**Source: Frankfort-Nachmias and Nachmias (1992)**

Figure 4.1 illustrates the research process. The research process started with the literature review in which the problem or research questions were developed by identifying gaps in the literature. Review of relevant literature was
detailed out in Chapter Two and the research questions of this study were listed in Chapter One.

Review of literature further led to the identification of the relevant theories, which acted as a platform in developing the theoretical framework and hypotheses for this research. Chapter Three describes the theoretical framework and theoretical justified hypotheses of this research.

The next phase was to determine the most suitable research design to be employed in this research. First, the researcher needed to identify the suitable research paradigm as described in the earlier section of this chapter. Having decided on the research paradigm, the appropriate research design was then employed.

In the measurement phase, careful attention was given in the process of developing the survey questionnaire. In the final stage of this phase, a pilot study was carried out to identify the reliability and the face validity of the survey questionnaire. The results from the aforementioned phase were used to make necessary adjustments to the survey questionnaires. Once the survey questionnaire was revised and finalised, the finalised instrument was used to collect data from the sample.

Data were then analysed following two subsequent phases. First, preliminary data analysis was employed to purify the data and to get the overall view of the respondents. In the second phase, structural equation modelling was employed. Analysis of the data is explained in Chapter Five.

The final stage involved the interpretation of the findings and the discussion on the implication of the findings. Chapter Six discusses all of these issues. In giving a clear explanation and detail discussion of the findings, the researcher needs to confer with relevant theories and literature.
4.4 Research Design

A cross-sectional sample survey field study is employed in this research as data were collected at a single point in time. Field study refers to non-experimental scientific inquiries designed to discover the relationship among variables in real social structures, such as communities, institutions and organisations (Kerlinger 1992). Applying a sample survey field study provides a few advantages. First, this approach enables the researcher to gather a sizeable amount of information from a relatively large sample (Kerlinger 1992). Secondly, this approach could maximize the representative sampling of population units studied and thus help to improve the generalizability of the results (Scandura and Williams 2000). Finally, literature suggests that information obtained in sample survey research is often very accurate, because the instrument is designed specifically to address the research questions (Dess and Robinson 1984; Slater 1995).

4.4.1 The Survey Method

Asking respondents’ on their tendency to be morally disengaged, their personality traits, leadership style, ethical climate in their organisations and disclosing their deviant workplace behaviour are issues that respondents will likely find sensitive. As a result, applying survey methodology was found to be the most appropriate method.

Survey could work as an accurate means of assessing information about the sample and enables the researcher to draw conclusions about generalizing the findings from a sample of responses to a population (Chisnall 1992; Creswell 1994). Besides, this method is suitable for a research with a large sample size\(^2\) (Hair, Bush, and Ortinau 2003) as a survey is quick, inexpensive and efficient to be administered (Churchill 1995; Sekaran 2003; Zikmund 2003). Finally, a survey is suitable when asking about respondents’ thoughts, opinions and feelings (Shaughnessy and Zechmeister 1997) as well as collecting data relating to beliefs, attitudes and motives (Burns and Bush 2000).

\(^2\) Large sample size refers to 200 or more respondents.
Despite the above advantages, the survey method has been criticised for its reliance on self-report data (Spector 1992). Hair et al. (2003) laid out several drawbacks of using surveys such as difficulties in determining the truthfulness of the answers, lack of detail and in-depth information and lack of control over the timeliness. Having these in mind, the researcher has adopted some guidelines recommended by Hair et al. (2003) in order to minimise the drawbacks of applying survey method. For instance, only previously tested, reliable and valid scales were used in this research. Further, to mitigate any response bias, questionnaire has been translated to the Malay language to ensure that respondents have solid understanding of the questions.

4.5 Survey Questionnaire Development

A combination of existing validated measurements based on the extensive review of literature was utilised to develop the instrument for this research. The selected validated measurements were then tailored slightly to accommodate the sample of this research. This is a common approach used in developing a survey instrument as it would bring two major advantages such as the existing instruments have already been assessed for validity and reliability and also by using the existing instruments, it enables comparison to be made between the new results with the previous results from other studies (Kitchenham and Pfleeger 2002). The survey (Appendix 1 and 2) consisted of measurements previously developed and validated from the literature.

Careful attention has been paid in designing the instrument especially in the wording used and ordering of the questions. Questionnaires should be simple, straight to the point and easy to read (Frazer and Lawley 2000). As such, the language used is equivalent to the high school level of comprehension. Questions were also neatly organized and conveniently spaced to minimise eyestrain. The maximum words used in most of the questions did not exceed 20 words as suggested by Horst (1968) and (Oppenheim 1986). The overall length of the questionnaire was less than 12 pages which is a preferable length for a survey (Frazer and Lawley 2000; Hoinville and Jowell 1978). Respondents’ possible fatigue
in the form of responding carefully to the earlier questions and carelessly to later ones was minimised by placing the relatively less important questions (demographic details) in the later part of the research instrument (Alreck and Settle 1995).

The draft of the instrument was presented to a number of experts in the field to identify any potential problems. This was done with the objective to remove any ambiguity or unclear words from the questionnaire. This process also could help in improving validity and reliability of the questionnaire (Churchill 1995; Frazer and Lawley 2000). On top of that, the questionnaire has been designed with easy to follow instructions in order to increase response rate (Babbie 1990; Sanchez 1992) and to minimise measurement error (Sanchez 1992).

4.5.1 Items Generation

This research utilised a variety of validated scales to measure major constructs illustrated in the theoretical framework. Most of the validated scales were adapted to fit in the sample of the research. In sum, a total of 73 scale items were used to measure the constructs in this research. Table 4.3, lists the number and sources of the items used to measure each construct.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of Items</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace Deviance</td>
<td>19 items:</td>
<td></td>
</tr>
<tr>
<td>Organisational deviance</td>
<td>12 items</td>
<td>(Bennett and Robinson 2000)</td>
</tr>
<tr>
<td>Interpersonal deviance</td>
<td>7 items</td>
<td>(Bennett and Robinson 2000)</td>
</tr>
<tr>
<td>Personality</td>
<td>8 items:</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>4 items</td>
<td>(Donnellan et al. 2006)</td>
</tr>
<tr>
<td>Extraversion</td>
<td>4 items</td>
<td>(Donnellan et al. 2006)</td>
</tr>
<tr>
<td>Organisational ethical climate</td>
<td>7 items</td>
<td>(Schwepker 2001)</td>
</tr>
<tr>
<td>Moral disengagement</td>
<td>32 items</td>
<td>(Bandura et al. 1996)</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>7 items</td>
<td>(Carless, Wearing, and Mann 2000)</td>
</tr>
</tbody>
</table>

The selection of the items was based on three main criteria. First, item reliability (where reported) was examined to ensure that the items chosen met the minimum acceptable threshold (e.g. Cronbach Alpha of 0.60 or greater). Next, construct validity namely the convergent and discriminant validity were examined (where reported) to determine if the items predicted to measure what it is supposed to measure. Finally, theoretical guidance and judgment were used in
making the final selection of items that best meet the domain of the specific construct as defined in this research.

4.5.2 Operationalisation of the Constructs

Constructs have been operationalised using Likert scales. The Likert type scale is a common approach used to measure a wide variety of latent constructs (Kent 2001). In this research, the six-point Likert scale, ranging from (1) strongly disagree to (6) strongly agree were applied. The rationale of applying the six-point scale was to overcome the central tendency error (Cooper and Schindler 2003). This error could occur when respondents especially in the Asian countries ended up ranked their priority in the neutrality dimension (Trompenaars and Hampden-Turner 1997). Thus, the middle response namely neutral or neither agree nor disagree was excluded when designing the instrument. For instance, personality was assessed using a scale ranging from (1) very inaccurate and (6) very accurate. As for transformational leadership style and deviant workplace behaviour scale ranging from (1) never to (6) always and (1) never to (6) daily were used respectively.

The primary reason of using multi-item constructs was to ensure a comprehensive evaluation and at the same time avoid the drawbacks of using a single item measure (Churchill 1979; Nunnally 1978; Peter 1979). Churchill (1979) criticized single item scales as lacking sufficient correlation with the attribute being measured; closely related to other attributes; restricted variance of scale and unreliable responses. Table 4.4 to Table 4.8 illustrates the original and modified (where applicable) questionnaire items which make up each construct. The modification was done to accommodate the sample of this research. These modified items were then validated in the pilot study.

4.5.3 Exogenous Variables

This research utilised two exogenous variables i.e. personality (extraversion and conscientiousness) and organisational ethical climate. In the following subsection, personality and organisational ethical climate are presented and items used to measure them are discussed.
4.5.3.1 Personality

The Big Five factors\(^3\) have been generally known as the dominant model of personality structure in trait psychology (Funder 2001a; Miller and Lynam 2001). Previously, the Big Five factors have been used to investigate substance abuse and antisocial behaviour (Ball 2005; Miller and Lynam 2001). Accordingly, this research applied the Big Five factors in investigating the relationship between personality and moral disengagement.

In this research, the two selected personality traits (extraversion and conscientiousness) were measured using Mini-IPIP scale (Donnellan et al. 2006). The Mini-IPIP shows very good test-retest reliability, convergent, discriminant and criterion related validity which is comparable to the NEO and other measures of the Big Five (Donnellan et al. 2006). Besides, Mini-IPIP also suit the needs of the exploratory factor analytic context which recommended that each common factor has at least three or four primary indicators (Fabrigar et al. 1999; Floyd and Widaman 1995). The four item questions which measures each personality trait serve as a practical minimum for scale length (Saucier and Goldberg 2002).

The total of eight item questions were used to measure the two traits on a 6-point scale ranging from 1 (very inaccurate) to 6 (very accurate). Sample items are ‘am the life of the party’ and ‘make a mess of things’. Table 4.4 illustrates the eight original and modified items used.

<table>
<thead>
<tr>
<th>Original Scale Items</th>
<th>Modified Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Am the life of the party.</td>
<td>I am the life of the organisation.</td>
</tr>
<tr>
<td>2 Get chores done right away.</td>
<td>I like to get chores done right away.</td>
</tr>
<tr>
<td>3 Don’t talk a lot.</td>
<td>I don’t talk a lot.</td>
</tr>
<tr>
<td>4 Often forget to put things back in their proper place.</td>
<td>I often forget to put things back in their proper place.</td>
</tr>
<tr>
<td>5 Talk to a lot of different people at parties.</td>
<td>I talk to a lot of different people at parties.</td>
</tr>
<tr>
<td>6 Like order.</td>
<td>I like order.</td>
</tr>
<tr>
<td>7 Keep in the background.</td>
<td>I keep myself in the background.</td>
</tr>
<tr>
<td>8 Make a mess of things.</td>
<td>I make a mess of things.</td>
</tr>
</tbody>
</table>

\(^3\) The Big Five factors refer to Extraversion, Agreeableness, Conscientiousness, Neuroticism and Intellect/Imagination.
4.5.3.2 Organisational Ethical Climate

In this research, organisational ethical climate refers to employees’ perceptions of those practices, procedures, norms and values that govern ethical decision in their firm. In other words, it is how employees’ perceive the extent on management commitment in promoting a sound ethical climate in organisation. According to Victor and Cullen (1988) employees’ perception of ethical climate may vary due to many reasons such as differences in individuals’ positions, work groups, and employment histories.

Organisational ethical climate was measured based on scale used in the study by Schwepker (2001) which was based on the work by Qualls and Puto (1989). This scale has been widely used to measure the presence and enforcement of codes of ethics, corporate policies on ethics and top management actions related to ethics (Hunt, Chonko, and Wilcox 1984; Ferrell and Skinner 1988; Vitell and Davis 1990). This scale was also chosen because it is uni-dimensional and reasonably short (Mulki, Jaramillo, and Locander 2008). Further, this scale has been shown to have acceptable reliability and validity (Schwepker, Ferrell, and Ingram 1997).

Respondents were ask to indicate on a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree) the extent to which they agreed with the statements describing the existence of ethical climate in their firm. Sample items are ‘my company has a formal, written code of ethics’ and ‘my company has policies with regards to ethical behaviour’. The 7-items measurement of organisational ethical climate including the modified items (where applicable) is shown in the following table.
Table 4.5: Organisational Ethical Climate Scale Items

<table>
<thead>
<tr>
<th></th>
<th>Original Scale Items</th>
<th>Modified Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My company has a formal, written code of ethics.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>My company strictly enforces a code of ethics.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>My company has policies with regards to ethical behaviour.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>My company strictly enforces policies regarding ethical behaviour.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Top management in my company has let it be known in no uncertain terms that unethical behaviours will not be tolerated,</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>If a salesperson in my company is discovered to have engaged in unethical behaviour that results in personal gain (rather than corporate gain), she or he will be promptly reprimanded.</td>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results in personal gain (rather than corporate gain), she or he will be promptly reprimanded.</td>
</tr>
<tr>
<td>7</td>
<td>If a salesperson in my company is discovered to have engaged in unethical behaviour that results in corporate gain (rather than personal gain), she or he will be promptly reprimanded.</td>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results in corporate gain (rather than personal gain), she or he will be promptly reprimanded.</td>
</tr>
</tbody>
</table>

4.5.4 Endogenous Variables

Deviant workplace behaviour acts as an endogenous variable in this research. This construct was assessed by measuring the organisational deviance and interpersonal deviance. Organisational deviance refers to a group of behaviours between the individual and the organisation that involve such things as theft, sabotage, lateness or putting little effort into work. Whilst, interpersonal deviance is concerned with a group of behaviours between individuals and other co-workers such as acting rudely, playing pranks on others and belittling co-workers.

This research employed self-report data in assessing deviant workplace behaviour. According to Bennett and Robinson (2000), it is possible to assess workplace deviance through self reports provided the respondents are being assured of anonymity. In addition, there are no significant differences in results for self-reports in comparisons to other methods of assessing workplace deviance (Fox and Spector 1999).

Bennett and Robinson (2000) utilised seven items on the interpersonal deviance scale and twelve items on the organisational deviance scale to measure
this construct. The main reasons for applying this scale was due to the fact that this measurement was designed to be generalised across many organisational settings and has illustrated a strong convergent and discriminant validity (Bennett and Robinson 2000). In addition, Rosse and Hulin (1985) conclude that measures summing across a range of deviant behaviours tend to provide more reliable and valid measures of the underlying construct.

Sample items for interpersonal deviance are ‘said something hurtful to someone at work’ and ‘publicly embarrassed someone at work’. As for organisational deviance, sample items are ‘falsified a receipt to get reimbursed for money than you spent on business expenses’ and ‘taken an additional or longer break than is acceptable at your workplace’. For both measures, respondents were asked to indicate on a 6-point scale ranging from 1 (never) to 6 (daily) the extent to which they had engaged in each of the behaviours in the last year. Table 4.6 provides only the original scale items used as none of the items were modified.

Table 4.6: Workplace Deviance Scale Items

<table>
<thead>
<tr>
<th>Original Scale Items (Interpersonal Deviance)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Made fun of someone at work.</td>
<td></td>
</tr>
<tr>
<td>2 Said something hurtful to someone at work.</td>
<td></td>
</tr>
<tr>
<td>3 Made an ethnic, religious, or racial remark at work.</td>
<td></td>
</tr>
<tr>
<td>4 Cursed at someone at work.</td>
<td></td>
</tr>
<tr>
<td>5 Played a mean prank on someone at work.</td>
<td></td>
</tr>
<tr>
<td>6 Acted rudely toward someone at work.</td>
<td></td>
</tr>
<tr>
<td>7 Publicly embarrassed someone at work.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Original Scale Items (Organisational Deviance)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Taken property from work without permission.</td>
<td></td>
</tr>
<tr>
<td>2 Spent too much time fantasizing or daydreaming instead of working.</td>
<td></td>
</tr>
<tr>
<td>3 Falsified a receipt to get reimbursed for more money than you spent on business expenses.</td>
<td></td>
</tr>
<tr>
<td>4 Taken an additional or longer break than is acceptable at your workplace.</td>
<td></td>
</tr>
<tr>
<td>5 Come in late to work without permission.</td>
<td></td>
</tr>
<tr>
<td>6 Littered your work environment.</td>
<td></td>
</tr>
<tr>
<td>7 Neglected to follow your boss’s instructions.</td>
<td></td>
</tr>
<tr>
<td>8 Intentionally worked slower than you could have worked.</td>
<td></td>
</tr>
<tr>
<td>9 Discussed confidential company information with an unauthorized person.</td>
<td></td>
</tr>
<tr>
<td>10 Used an illegal drug or consumed alcohol on the job.</td>
<td></td>
</tr>
<tr>
<td>11 Put little effort into your work.</td>
<td></td>
</tr>
<tr>
<td>12 Dragged out work in order to get overtime.</td>
<td></td>
</tr>
</tbody>
</table>
4.5.5 Mediating Variable

As described in the hypotheses development section in Chapter Three, this research tests the mediating role of moral disengagement. Moral disengagement was measured to determine an individual’s predisposition to disengage from moral self-regulation (Bandura et al. 1996). The 32-items scale developed by Bandura and used in multiple studies by Bandura and others (Bandura et al. 1996; Bandura et al. 2001; Pelton et al. 2004; Detert, Trevino, and Sweitzer 2008) was adapted to measure moral disengagement in this research.

Moral disengagement was composed of eight subscales corresponding with the eight interrelated moral disengagement mechanisms. Since Bandura’s scale was developed for use with children and young adolescents, the researcher adapted this scales to fit the population of this research. For instance, ‘it is alright to fight to protect your friends’ was changed to ‘it is alright to fight to protect your colleagues’. Respondents were ask to rate their agreement or disagreement on the statements given on a 6-point Likert scale ranging from (1) strongly disagree to (6) strongly agree. Table 4.7 provides the original and modified (where applicable) scale items used.

<table>
<thead>
<tr>
<th>Table 4.7: Moral Disengagement Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Original Scale Items</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Modified Items</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
</tbody>
</table>
Stealing some money is not too serious compared to those who steal a lot of money.

Not working very hard in school is really no big deal when you consider that other people are probably cheating.

Compared to other illegal things people do, taking some things from a store without paying for them is not very serious.

If people are living under bad conditions, they cannot be blamed for behaving aggressively.

If the professor doesn’t discipline cheaters, students should not be blamed for cheating.

If someone is pressured into doing something, they shouldn’t be blamed for it.

People cannot be blamed for misbehaving if their friends pressured them to do it.

A member of a group or team should not be blamed for the trouble the team caused.

A student who only suggests breaking the rules should not be blamed if other students go ahead and do it.

If a group decides together to do something harmful, it is unfair to blame any one member of the group for it.

You can’t blame a person who plays only a small part in the harm caused by a group.

It is ok to tell small lies because they don’t really do any harm.

People don’t mind being teased because it shows interest in them.

Teasing someone does not really hurt anyone.

Insults don’t really hurt anyone.

If students misbehave in class, it’s their teacher’s fault.

If someone leaves something lying around, it’s their own fault if it gets stolen.

People who are mistreated have usually done things to deserve it.

People are not at fault for misbehaving at work if their managers mistreat them.
Some people deserve to be treated like animals.

It is ok to treat badly someone who behaved like a “worm”.

Someone who is obnoxious does not deserve to be treated like a human being.

Some people have to be treated roughly because they lack feelings that can be hurt.

4.5.6 Moderating Variable

This research included an investigation of the moderating role of transformational leadership style. Transformational leaders’ are able to change followers’ attitudes, beliefs and values to align them with attitudes, beliefs and values of the organisation (Bass 1985). This research measured perceived transformational leadership style by adapting the global transformational leadership scale by Carless et al. (2000). This is the best alternative scale to measure transformational leadership style as many other scales available were relatively too long and time consuming to complete. The global transformational leadership scale could be used as a diagnostic tool and has been claimed to take less than one minute to complete (Carless, Wearing, and Mann 2000). This scale also provides strong convergent and discriminant validity (Carless, Wearing, and Mann 2000).

The global transformational leadership scale consists of seven items, which captured transformational leadership behaviours. Respondents were asked to rate the leadership group of their firms in terms of how frequently they engage in the behaviour described. A 6-point scale ranging from (1) never to (6) always were employed. Sample items are ‘communicates a clear and positive vision of the future’ and ‘give encouragement and recognition to staff’. Table 4.8 provides only the original scale items used as none of the items was modified.
Table 4.8: Transformational Leadership Scale Items

<table>
<thead>
<tr>
<th>Original Scale Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicates a clear and positive vision of the future.</td>
</tr>
<tr>
<td>2. Treat staff as individuals, supports and encourages their development.</td>
</tr>
<tr>
<td>3. Give encouragement and recognition to staff.</td>
</tr>
<tr>
<td>4. Foster trust, involvement and cooperation among team members.</td>
</tr>
<tr>
<td>5. Encourage thinking about problems in new ways and questions assumptions.</td>
</tr>
<tr>
<td>6. Are clear about their values and practices what they preaches.</td>
</tr>
<tr>
<td>7. Instil pride and respect in others and inspire me by being highly competent.</td>
</tr>
</tbody>
</table>

4.5.7 Demographic Variables

Demographic variables of interest include gender, age, race, educational level, years of working experience and current position in the company. The demographic information was either used to determine if significant individual demographic differences existed between the respondents or they acted as control variables.

4.5.8 Control Variables

The respondents of this research were employees in the production departments of large electrical and electronic manufacturing companies. Many previous studies reveal that women act differently from men in ethical situations (Beltramini, Peterson, and Kozmetsky 1984; Chonko and Hunt 1985; Reiss and Mitra 1998). Further, gender differences have been found to affect an individual’s ethical conduct (Loch and Conger 1996). Thus, to account for any confounding effect, gender is treated as control variable in this research. On top of that, the age of the employee is also treated as control variable as past research suggests that age is related to deviant reactions (Aquino and Douglas 2003; Grasmick and Kobayashi 2002). Finally, employees’ working experience is controlled because past studies indicate work experience affects ethical decision making (Craig Keller, Smith, and Smith 2007) and ethical judgment (Eweje and Brunton 2010).
4.6 Questionnaire

The questionnaire could be defined as ‘a reformulated written set of questions to which respondents record their answers usually, within rather closely defined alternatives’ (Sekaran 2003 p, 233). This research employed questionnaires as an instrument of data gathering. This method has been recognised as an effective means of gathering data from large samples (McCelland 1994) and could be considered as the most common method applied in collecting data (Clarke 1999).

The questionnaire comprises of six sections. The first five sections consist of items relating to the constructs while the last part consists of demographic questions. It was anticipated that each respondent would require about 20 minutes in completing the questionnaire. Following is a detailed discussion of each section.

Section A

This section includes 32 questions asking respondents to evaluate their tendency to be morally disengaged. These questions reflect the eight dimensions of moral disengagement.

Section B

In this section, the researcher is interested to assess perceived ethical climate in the respondents’ organisations by asking seven questions regarding the ethical practices in organisations.

Section C

This section includes eight phrases describing people’s behaviour. Respondents were asked to choose a number to describe how accurately each phrase describes them. These phrases reflect the two personality types in this study i.e. conscientiousness and extraversion.
Section D

This section contains seven phrases, which describe transformational leadership style in organisation. The respondents were asked to assess these phrases.

Section E

This section includes 19 phrases, which reflect interpersonal and organisational deviance behaviour. Respondents were asked to circle the number that conforms to the frequency with which they have carried out the acts.

Section F

This section contains nine questions asking respondents about their gender, race, language proficiency, age, educational level, working experience in number of years, position in the company, status of their employment and number of employees in their company. The final part in this section allows respondent to make any relevant comments regarding the questionnaire.

A covering letter containing ethics approval, purpose of the study and researcher contact information was included on the front page of the instrument. A covering letter is essential as it is the only opportunity to anticipate and answer respondents’ questions and it helps to improve the response rate (Dillman 1978; Bourque and Fielder 1995; Dillman 2007; Frankfort-Nachmias and Nachmias 1992; Singleton and Straits 2005). The covering letter was personalised by having a hand-signed signature of the researcher and an appeal to the respondents by highlighting the importance of their participation in this research and the assurance of anonymity.

Respondents were not compensated for their participation, however they were given a small token of appreciation. Further, in exchange for their participation, a summary of the findings will be sent to them upon their request. These were done with the aim to induce the response rate (Church 1993).
4.6.1 Translation Process

As mentioned earlier, the current study employed validated quantitative measures derived from past literature. All of the measurements used in this study are written in the source language (English) and have been tested previously mostly in western countries. Since this research was done in Malaysia and the sample of this study consists of non-English speakers, the questionnaire needed to go through the translation process in an attempt to minimize any possible variance due to cultural and linguistic differences (Kim and Han 2004).

Brislin et al. (1973) suggested one or more of the following translations techniques i.e. back-translation, bilingual techniques; committee approach and pre-test. Back-translation refers to the process where the target language version is translated back into the source language version in order to verify the translation made on the research instrument. Bilingual technique refers to the testing process of both source and target language versions among bilingual respondents in order to detect any discrepancies in the two versions. The committee approach involved a team of bilingual people do the translating from the source to the target language. Finally, a pilot study was carried out in the pre-test procedures after the completion of the translation process with the aim to ensure that the future respondents of the target language version could comprehend all questions and procedures (Brislin 1970).

Among these techniques, back-translation is highly recommended by scholars and the most widely used in cross-cultural research (Brislin 1970; Champman and Carter 1979; Werner and Campbell 1970; Yu, Lee, and Woo 2004). An approach called decentering\(^4\) has been claimed to help further improve the quality of translated instrument (Brislin 1970). As such, the current research employed back-translation technique incorporating the decentering approach along the process in order to maximise the translation equivalence of the questionnaire.

\(^4\) Ongoing process of revisions in both languages as often needed until a similar but culturally relevant is validated in each language (Ami, Robert, and Brian 1994).
from English into Malay Language and to minimize the chance of false positive translation\(^5\).

Two bilingual translators competent in both English and Malay Language were involved in the translation process. The first translator translated from the source language (English) into a target language (Malay Language). Another translator who was not familiar with the measurements used in the questionnaire served as the back translator. The Malay Language version was then translated back into the English version.

Once completed, the Malay Language version was reviewed by three professionals working in one of the manufacturing companies in Malaysia. These professionals were asked to mark the items, words, or phrases that sounded strange or were not commonly used by their members of their peer group.

The researcher of this study then invited the two translators to examine and discuss the comments made by the professionals and selected the most linguistically appropriate translated sentences. The translators also evaluated the cultural appropriateness of the instrument. At this stage, the decentering process was employed. Necessary adjustments were made to both English and Malay Language versions until the final Malay language version was produced.

Finally, a pilot test on the final Malay Language version of the questionnaire was carried out to ensure that the questionnaire reach a satisfactory level of reliability on conceptual and measurement equivalence (Sin, Cheung, and Lee 1999).

### 4.7 Pilot Study

A pilot study was conducted to identify consistency of the questions and an understanding of the respondents to the questionnaire. According to Cooper and Schindler (2008 ,p.91) ‘pilot study has saved countless survey studies from disaster

\[^5\] A false positive error could occur when the forward translation is inadequate but compensated for and corrected by an expert translator (Wang, Lee, and Fetzer 2006).
by using suggestion of the respondents to identify and changing confusing, awkward, or offensive questions and techniques’. Convenience sampling was used in selecting the sample in the pilot study. Following suggestion made by (Luckas, Hair, and Ortinau 2004), 50 respondents were involved in this pilot study to allow the running of proper statistical testing procedures. Respondents were reasonably aware about the objectives of the research and familiar with manufacturing environment in Malaysia.

4.7.1 Discussion of Pilot Study Results

Based on the comments made by respondents in the pilot study, several weaknesses of the questionnaire were identified. For instance, it was suggested that providing more space between each group of questions within the same part would make the questionnaire easier to read. The respondents also suggested that the instructions written to each group of questions should be further simplified and for questions, which cover more than one page, the scale should be provided on each page. The questionnaire was modified and refined before the data collection was carried out.

The reliability of the measures was assessed based on the Cronbach alpha coefficient. According to Churchill (1979), reliability should be the first measure referred in assessing the quality of the instrument. Generally, the lower acceptance limit of Cronbach’s alpha is 0.60 to 0.70 (Hair et al. 1998). As for this research, the reliability of the constructs range from 0.797 to 0.893; all within the acceptable range as described in the literature. Following the reliability test, the convergent and discriminant validity should be conducted using confirmatory factor analysis. However, this assessment was not practical to be done due to the small sample size. Hence, the assessment for validity was conducted after the final data collection.

4.8 Sampling Frame

The sample of this research was drawn from Federation of Malaysian Manufacturers (FMM) directory for electrical and electronics company. Electrical and electronic manufacturing companies were chosen because they are the largest
employment provider in Malaysia. Being the largest employment sector in the Malaysia, the electrical and electronic manufacturing companies should be highly concerned with the issue of moral disengagement and deviant workplace behaviour. Since studies in this area are scarce, there is a need to investigate this issue within the context of Malaysian electrical and electronic manufacturing companies.

The FMM directory is published by the Federation of Malaysian Manufacturers Association. This directory provides a list of electrical and electronics companies in Malaysia. The directory is an official authoritative publication in the country. The database from this directory provides information about the background of the electrical and electronic company such as full address, year of incorporation, telephone number, fax number, e-mail address, name of the Chief executive and the person to contact for business enquiries. This directory also supplies information regarding annual sales, number of employees, products manufactured, brand names, export markets and quality standards achieved.

The respondents of this research were the employees in the production department of electrical and electronic manufacturing companies in Malaysia. This research focused only on large electrical and electronic manufacturing companies because literature has shown that large organisations have more incidences of deviant behaviour (Lau, Au, and Ho 2002).

4.9 Sample Size

The directory consists of all electrical and electronic manufacturing companies in Malaysia, which are affiliated with FMM. Since, the directory includes all types of manufacturing companies (small, medium and large) and there is no authoritative source to tap only large electrical and electronic manufacturing companies, the first step is to filter the list. The filtering process needed to be

6 Large company refers to company having more than 1000 employees.
conducted in order to get the real population i.e. the large electrical and electronic manufacturing companies in Malaysia.

There is no specific definition of a large company in Malaysia. As a result, the researcher used number of employees as a benchmark to identify large companies. Only those companies having more than 1000 employees were considered as large manufacturing companies. Therefore, the final list, which represents the real population, consists of 82 electrical and electronic manufacturing companies in Malaysia.

A two-stage sampling technique was applied. First, using SPSS, simple random sampling was applied to select 15 companies from the final list. Companies that decline to participate were then replaced by other companies following them in the final list. Secondly, the researcher then distributed 200 questionnaires to each of the 15 companies, which total up to 3000 questionnaires distributed. This was done with the aim to get at least 20% to 30% response rate based on response rates of previous studies on ethics (Cherry and Fraedrich 2002; Marta 1999). Of the 3000 questionnaires sent out, 753 were returned representing 25.1 % response rate.

4.9.1 Justification of the Selected Sample

There are three primary reasons to support the selection of the sample. First, based on literature, moral disengagement has been used in the context of predicting aggression and antisocial behaviour in children and adolescence (Bandura et al. 1996; Bandura et al. 2001). Moral disengagement also has been linked to the decline of civic behaviour (Caprara and Capanna 2004). However, to the researcher’s knowledge, no study has been carried out to investigate moral disengagement concerning non-western countries particularly Malaysia. Hence, expanding the study in this area, particularly beyond the western countries was warranted especially to test the hypotheses in the Malaysian context.

Secondly, the reason for selecting a Malaysian sample particularly focusing on electrical and electronic manufacturing companies was due to the fact that this
sector is the largest employment provider in Malaysia (FMM. 2008). Therefore, the electrical and electronics industry is obviously the major contributor to the Malaysian economy. Moreover, a previous study has shown that large organisations have more incidences of deviant behaviour (Lau, Au, and Ho 2002). Any aspect, which could jeopardise the growth of this sector, should be seriously investigated. Hence, investigating moral disengagement of employees in this sector could be one of the positive steps in securing the growth of this sector.

Finally, workplace deviance has been found to negatively affect the profit of an organisation as well as the employees’ morale (Robinson and Greenberg 1998). Individuals who are the target of workplace deviance are more likely to quit, experience decreasing productivity, suffer lower self-esteem, and undergo psychological and physical agony (Griffin, O’Leary-Kelly, and Collins 1998). As for Malaysia, the social security organisational report (2007) reported that manufacturing sectors experience nearly 40% of industrial accidents and the possible reasons may be attributed to negligence, which is a form of deviant behaviour at the workplace. Thus, investigating moral disengagement as a possible predicting variable of deviant workplace behaviour in the manufacturing companies in Malaysia was deemed fit. Besides, this was also in line with the suggestion made by O’Leary-Kelly et al. (1996) and Vardi et al. (1996) that more studies are needed to understand the determinants and occurrences of deviant behaviour at the workplace.

4.10 Data Collection

This study applied self-administered questionnaire in collecting the data. Self-administered questionnaire refers to ‘a data collection technique in which the respondents reads the survey questions and records his or her responses without the presence of a trained interviewer’ (Hair, Bush, and Ortinau 2003, p. 265). Dillman (2007, p. 38) argued that ‘considerable evidence suggests that people are more likely to give honest answers to self-administered than to interview questions’. Furthermore, a self-administered survey helps to minimise the tendency of social
desirability bias to take place whenever sensitive data are requested (Dillman 2007).

A drop-off and collect method has been applied in this research. This method involves the researcher travelling to the respondents’ location\(^7\) and a representative\(^8\) of the researcher hand-delivering survey questionnaires to respondents. Then, the completed surveys were collected by the representative after the respondents finished (Hair, Bush, and Ortinau 2003; Zikmund 2003).

This method allows respondents to complete the questionnaire at their own time and convenience. Thus, respondents can take time to think and answer the questions and look for further information when necessary (Aaker and Day 1990; Emory and Cooper 1991). This method ensures the availability of a person to answer questions as questionnaires were hand delivered by the representative who is working in the same company with the respondents. This method also helped to stimulate interest of the respondents in completing the questionnaire through interaction between the representative and respondents (Hair, Bush, and Ortinau 2003).

### 4.11 Chapter Summary

This chapter justified the need to employ a positivist paradigm in gathering answers to the research questions with the aim of and testing the hypotheses in the model. In addition, the chapter has detailed the methods used in this research, including the research design, constructing and administrating the instruments and the pilot study. Data analyses and results will be discussed in Chapter Five.

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\(^7\) Refers to the selected manufacturing companies.  
\(^8\) Refers to human resource officer or production manager.
CHAPTER 5: ANALYSES AND RESULTS

5.1 Introduction

This chapter explains the analysis conducted and presents the empirical results to test the research hypotheses. This chapter consists of ten main sections. Following the introduction, the second section presents an overview of the data analysis process. The next section provides the preliminary analysis of the data. Here, procedures used to purify the data are described. Having done this, the next section provides an evaluation of the response rate including the non-response bias test. Section five provides a general description of the survey respondents. Results of measurement models (CFA) used to assess the uni-dimensionality, reliability and validity of the constructs and the common method bias test are presented in section six. Section seven reports the results of structural model to test the hypotheses developed in Chapter Three. Results of hypotheses testing are reported in section eight and summarised in section nine. Finally, a short chapter summary concludes this chapter in section ten.

5.2 Data Analysis: An Overview

This research employed the Statistical Package for Social Science (SPSS) version 18.0 to analyse data in the first phase. This software is widely used by researchers as a data analysis technique (Zikmund 2003). In this research, the software was used to screen the data in terms of coding, outliers\(^9\) and normality\(^10\). In addition, to gain an overview of the data, this software was used to compute the frequencies, means, standard deviations, perform the non-response and common method bias tests.

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\(^9\) Using univariate (box-plot, histograms and z-score) and multivariate (Mahalanobis D^2 distances) detections.

\(^10\) Using skewness and kurtosis.
Then, in the second phase, Structural Equation Modeling (SEM)\textsuperscript{11} using confirmatory factor analysis was employed to test the hypotheses addressed in Chapter Three. SEM methodology is claimed to be useful in the behavioural and social sciences where many constructs are unobservable (Sharma 1996). SEM helps researchers to assess the uni-dimensionality, reliability and validity of each construct. Besides, SEM provides an overall test of model fit and individual parameter estimate tests simultaneously (Hair et al. 1998; Kline 2005). Recently, SEM became a common statistical tool applied in academic research (Anderson and Gerbing 1988; Bollen 1989; Kline 2005; Hair et al. 1998). Moreover, literature confirms that SEM is the pre-eminent method of multivariate data analysis (Hershberger 2003). Applying SEM to test hypothesized relationships between factors allows a complete investigation of all hypothesized relationships simultaneously including relationships among multiple dependent variables in a study (Byrne 2001).

In using SEM, researchers are exposed to two main alternatives i.e. to use covariance based software such as AMOS, LISREL and EQS or variance based software such as PLS-Graph and Smart PLS (Chin and Newsted 1999). The decision very much depends on the characteristics of the research itself. Covariance-based SEM is best used for theory testing and development. Conversely, variance based SEM is suitable for causal predictive analysis especially in the condition of high complexity and low theoretical information (Barclay, Higgins, and Thompson 1995).

The premise of this research is more on theory testing. Consequently, only validated measurements, which were well supported by theory, were applied to measure all constructs. As such, the conceptual model in this research could not be categorised as prediction-oriented modelling. Therefore, the covariance-based SEM

\textsuperscript{11} SEM is a ‘collection of statistical techniques that allow a set of relationships between one or more independent variables, either continuous or discrete, and one or more dependent variables, either continuous or discrete, to be examined’. (Tabachnick and Fidell 2001,p.653)
i.e. structural equation modelling software AMOS (Analysis of Moment Structures) was applied to test the hypotheses.

Figure 5.1: Summary of Data Analysis Procedures

Figure 5.1 illustrates data analysis procedures applied in this research. The data analysis consists of two phases; preliminary analysis and structural equation modelling. The first phase deals with data screening procedures in order to ensure that data have been correctly entered and meet the normality assumption. The second phase is the application of a two-stage structural equation modelling process (Anderson and Gerbing 1988). A two-stage approach to SEM analysis is popular in existing research (Anderson and Gerbing 1988; Gerbing and Hamilton 1996; Kaplan 2000). The first stage is to assess the measurement properties of...
SEM, which involve assessment of uni-dimensionality of each latent variables, model re-specification or modification and test of reliability and validity of measurement properties. The second stage involves specification of the paths relationship between the underlying theoretical latent constructs. Once a good fitting structural model is identified, the structural model is then used for hypotheses testing.

5.2.1 SEM Assumptions

In applying SEM, care should be taken to ensure that the data meet several assumptions such as normality and having adequate sample size. Normality assumption is very important because indication of non-normality will generally contribute to other assumptions\(^{12}\) violation (Sharma 1996). Normality of the data as well as the treatment of missing data and outliers is discussed in the following subsection (preliminary data analysis).

As for sample size, SEM requires the sample size to be adequate because covariance and correlations are less stable when estimated from small sample sizes (Kline 2005; Tabachnick and Fidell 2001). Moreover, small sample sizes provide less power to detect significant path coefficients and have tendency to produce instability (sample error) in the covariance matrix, frequently resulting in inadmissible solutions and less than satisfactory goodness-of-fit indices (Quintana and Maxwell 1999).

According to Hair (1998), 100 is the minimum sample size in order to ensure the appropriate use of maximum likelihood estimation in SEM. On the other hand, other researchers assert that the maximum likelihood estimation in SEM could only be used when the sample size is at least 200 (Boomsma 1983; Boomsma and Hoogland 2001). Another criteria for sample size recommendations is to assess the complexity of the model estimated. Bollen (1989) recommends a ratio of 3 to 5 participants for every parameter estimated in the model while Bentler (1995)\(^{12}\)

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\(^{12}\) Non-normality of the data could affect the linearity and homoscedasticity assumptions.
suggests that a ratio of 5 participants per estimated parameter is the minimum allowable in order to generate stable parameter estimates. Since there is no agreement among the scholars about the sample size, the sample size of 669 in this study is considered as a large enough sample size (Boomsma and Hoogland 2001) and therefore deem appropriate in using SEM analyses.

5.2.2 Maximum Likelihood Estimation (ML)

In this research, parameter estimates are obtained through the use of the ML method (Brown 2006). This is the most widely used of estimation procedures (Bollen 1989). The advantages of using the ML method of estimation include the ability to handle more complicated models and the fact that this estimation method is generally robust to non-normality (Bollen 1989; Brown 2006). Although there is an option to use other estimation methods such as weighted least square (WLS) which does not make assumptions about the distribution of the data available, a large sample size requirement usually in excess of 1000, imposes a big constraint in utilizing it (Bollen 1989). Further, previous studies show that parameter estimates generated by this method are less accurate when compared to parameter estimates generated using the ML method (Olsson et al. 2000).

5.2.3 Goodness-of-fit Assessment

There are various goodness-of-fit indices to determine the fit of the model. Based on published research, usually there are between four to six fit indices that were used to assess how well models fit the data structure (Medsker, Williams, and Holahan 1994). Wheaton (1987) stresses the importance of using multiple fit indices to assess model fit. Accordingly, Hair (1998) recommended the use of at least three fit indices: 1) absolute fit indices; 2) incremental fit indices and 3) parsimonious fit indices.

An absolute fit index includes chi-square ($\chi^2$), goodness-of-fit (GFI) and root mean square error (RMSEA). Absolute fit indices measures how well the model accounts for observed covariance in the data (Hu and Bentler 1995). The incremental fit indices include comparative fit index (CFI) and normed fit index
(NFI). Incremental fit indices compare how well the proposed model fits the data in relation to a baseline model that assumes independence among all of the variables (Bentler 1990). Lastly, parsimonious fit indices can be measured by normed chi-square ($\chi^2/df$). The following table (Table 5.1) summarises goodness of fit indices utilised in this research.

### Table 5.1: Summary of Goodness-of-Fit Indices

<table>
<thead>
<tr>
<th>Goodness-of-Fit Indices</th>
<th>Acceptable Value</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute fit indices:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi-square ($\chi^2$)</td>
<td>$p &gt; 0.05$</td>
<td>Indicates exact fit of the model. A non-significant $p$ value indicates an adequate representation of the data. This measure is sensitive to large sample size.</td>
</tr>
<tr>
<td></td>
<td>(Byrne 2001; Kline 2005)</td>
<td></td>
</tr>
<tr>
<td>Goodness-of-Fit (GFI)</td>
<td>$GFI \geq 0.90$</td>
<td>Value close to 0 indicates a poor fit, while value close to 1 indicates a perfect fit. GFI indicates the amount of covariance between the latent variables in the model.</td>
</tr>
<tr>
<td></td>
<td>(Hair et al. 1998; Kline 2005)</td>
<td></td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>$RMSEA \leq 0.08$</td>
<td>Values of less than 0.05 are generally considered ‘good’ fit. Values between 0.05 and 0.08 are considered ‘adequate’ fit. A value up to .10 is considered acceptable and represents the lower bound of fit.</td>
</tr>
<tr>
<td></td>
<td>(Browne and Cudeck 1993; Kline 2005)</td>
<td></td>
</tr>
<tr>
<td>Incremental fit indices:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>$CFI \geq 0.90$</td>
<td>Compares the hypothesised model against a null model.</td>
</tr>
<tr>
<td></td>
<td>(Bentler 1990; Kline 2005)</td>
<td></td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td>$NFI \geq 0.90$</td>
<td>Value close to 0 indicates a poor fit, while value close to 1 indicates a perfect fit.</td>
</tr>
<tr>
<td></td>
<td>(Kline 2005)</td>
<td></td>
</tr>
<tr>
<td>Parsimonious fit indices:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normed chi-square ($\chi^2/df$)</td>
<td>$1.0 \leq \chi^2/df \leq 5.0$</td>
<td>Lower limit is 1.0, upper limit is 3.0 or as high as 5.0.</td>
</tr>
<tr>
<td></td>
<td>(Cunningham 2008b; Kline 2005)</td>
<td></td>
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</tbody>
</table>
5.2.4 Reliability

Reliability is defined as ‘the degree to which measures are free from random error and therefore yield consistent results’ (Zikmund 2003, p.330). The objective of reliability is to minimize the errors and biases in research (Yin 1994). This research employs three methods to assess reliability of the constructs: 1) Cronbach’s alpha; 2) construct reliability (CR) and 3) average variance extracted (AVE).

Cronbach’s alpha is the most common method used to assess reliability (Nunnally 1978; Sekaran 2003). In fact, it has been considered as the first method one should use to assess reliability of a measurement scale (Churchill 1979; Nunnally 1978). Different levels of acceptance have been suggested in the literature. For instance, Nunnally (1978) suggests that alpha should exceed 0.70 to indicate internal consistency. On the other hand, Carmines and Zeller (1979) suggest a level of acceptance of 0.80 for internal consistency. As for new scales, level of 0.60 is considered acceptable (Nunnally and Bernstein 1994). Despite the various views on the level of acceptance, it is generally agreed that an alpha of 0.70 and over is acceptable to indicate internal consistency. Therefore, this research uses 0.70 as the minimum level to indicate the internal consistency of the constructs.

The internal consistency in this research was also assessed using confirmatory factor analysis (CFA). This is important to ensure that all measures used in this study are reliable and at the same time provides greater confidence to the researcher that the individual items are consistent in their measurements (Hair et al. 1998). The two methods used are construct reliability (CR) and average variance extracted (AVE) as suggested by Fornell and Larcker (1981). Construct reliability (CR) equal to or greater than 0.60 and average variance extracted (AVE) equal to or greater than 0.50 is considered acceptable (Bagozzi and Yi 1988).

5.2.5 Validity

Validity is defined as ‘the ability of a scale to measure what intended to be measured’ (Zikmund 2003, p.331). Three types of validity namely, content,
construct (convergent and discriminant validity) and criterion validity are measured in this research.

Content validity is the assessment of the extent content of a scale measures a construct (Malhotra, Agarwal, and Peterson 1996). In order to obtain content validity, careful attention was given in the process of developing the questionnaires. For instance, only validated measurements derived from literature are used in this study. Further, the questionnaires went through a back translation process. During this process, comments from experts (practitioners in the industry) on the wording of the items in the questionnaires were analysed. Any ambiguous words or sentences were corrected. Detail of the process involved has been explained in Chapter Four. However, realising the subjective nature of content validity (Zikmund 2003) other validity assessment (construct and criterion) are also applied to validate the constructs in this research.

Construct validity is concerned with what the instrument is actually measuring (Churchill 1995). In other words, construct validity is the extent to which a set of measured items actually reflects the latent construct those items are designed to measure (Hair et al. 1998). Construct validity is examined by analysing both convergent and discriminant validity. According to Sekaran (2003), convergent validity examines whether the measures of the same construct are correlated highly, whereas discriminant validity determines the measures of a construct have not been correlated too highly with other constructs.

In this research, convergent and discriminant validity were assessed by conducting confirmatory factor analysis (CFA). To establish convergent validity, at a minimum, all factor loadings should be statistically significant and standardised loading estimate should be 0.50 or higher (Hair et al. 1998). In addition, average variance extracted (AVE) is also used as an indicator for supporting for having convergent validity (Fornell and Larcker 1981). On the other hand, discriminant validity is established when the estimated correlations between the factors do not
exceed 0.85 (Kline 2005). Finally, construct validity is enhanced by assuring that the model goodness-of-fit results obtained from CFA fit to the data adequately.

Criterion validity refers to the ability of measures to correlate with other standard measures of the same construct (Zikmund 2003). Criterion validity is synonymous with convergent validity. As such, assessment of convergent validity indirectly indicates that criterion validity is satisfied (Zikmund 1994). In this research, therefore, criterion validity was assumed to be accounted for at the moment convergent validity is satisfied.

5.3 Preliminary Data Analysis

5.3.1 Data Editing and Coding

After completing the data collection process, editing of the raw data is carried out to ensure the completeness of the data. Editing involves checking the data collection forms for omissions, legibility and its consistency in classification (Zikmund 1994). Following recommendation from Sekaran (2003), respondents who answered at least 75 percent of the questionnaire are considered for sampling purposes in this research.

Then, the raw data were manually entered into a data file in SPSS. There are two major ways to exercise this process; pre coding or post coding (De Vaus 1995). This research applied the pre coding method whereby all question items are pre-coded with numerical values. Frequency analyses are conducted for each variable to screen for out-of-range values. Any out of range values are revisited and corrected where appropriate.

5.3.2 Data Screening

Data screening is necessary in ensuring that data are correctly entered, free from outliers and to confirm that the distribution of variables are normal. Confirmation to normality is very important as it is the assumption need to fulfil in
applying SEM (Hair et al. 1998; Kline 2005; Tabachnick and Fidell 2001) and thus, the data file is examined thoroughly.

Missing data occurs when respondents failed to answer one or more items in the survey. The screening of the data indicates that there is a minimal amount of missing data (less than 5%). Cohen and Cohen (1983) stress that missing data up to 10% may not cause any serious problem in the interpretation of the findings. As for the treatment of missing data, recent literature suggests that Expected Maximisation (EM) is a better method to be adopted in treating missing data compared to other methods such as list-wise deletion and mean substitution (Graham et al. 1997). However, since there was minimal missing data, the choice of method may not have any significant influence on the results because each method has their advantages and disadvantages (Hair et al. 1998). Therefore, these missing data were replaced with the variable mean responses for each variable. This method is deemed the most appropriate because mean substitution is the most common (Schwab 2005) and widely used methods (Hair et al. 1998) to treat missing data as it is based on valid responses that make the mean the best single replacement of missing data.

Outliers\textsuperscript{13} were identified using univariate (histograms, box-plots and standardised z score) and multivariate detections (Mahalanobis $D^2$ distance). Checking for outliers is important as outliers could affect the normality of the data which could then distort the statistical results (Hair et al. 1998; Tabachnick and Fidell 2001). For univariate detection, besides examining histograms and box-plots, each variable was examined for the standardised (z) score. According to Hair (1998) for large sample size, $z > 4$ is evidenced of an extreme observation. None of the variable exceeded this threshold.

The data were further examined by applying multivariate detection. Mahalanobis $D^2$ distances are generated for each case using SPSS Regression with

\textsuperscript{13}Outliers refer to observations with a unique combination of characteristics identifiable as distinctly different from the other observations (Hair et al. 1998).
case number as the dependent variable and all non-demographic measures as independent variables. Higher $D^2$ values (> 3.5) represent potential multivariate outliers (Hair et al. 1998). Examination of $D^2$ values for all cases did not indicate the presence of multivariate outliers\(^\text{14}\), thus all observations are retained for analysis.

Skewness and kurtosis are used to check the normal distribution of the data. To confirm the univariate normality, skewness and kurtosis values smaller than an absolute value of 2 and 7 respectively, is taken as demonstrating sufficient normality (Cunningham 2008a; Curran, West, and Finch 1996; Kline 2005). Following this suggestion, the data appear to show sufficient normality (Table 5.2). However, there are three items (E16, E17 and E19) in the organisational deviance construct which do not have normal distribution. All respondents provide the same responses (1) to these particular questions.

The organisational deviance construct consists of twelve items. Since only three items of all the twelve items do not meet the normality assumption, it appears that this situation should not be a major concern. Following Hair (1998, p.99), the effect of departing from normality is a concern only to the extent that it diminishes the observed correlations. Further, the large sample size (669) in this study will further mitigate the difficulties with the normality assumption for multivariate analysis (Tabachnick and Fidell 2001, p.74-75). Thus, the decision was made to delete these three items and to carry on future analysis with the remaining nine items to present the organisational deviance construct.

<table>
<thead>
<tr>
<th>Table 5.2: Measures of the Constructs and Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
</tr>
<tr>
<td>Moral disengagement</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

\(^{14}\) Largest value of $D^2$ is 175.377; df = 70 (the number of variables). Therefore, $D^2$/df = 2.5, below 3.5.
<table>
<thead>
<tr>
<th></th>
<th>colleagues out of trouble.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Doing your colleague’s work is just a way of helping your colleague.</td>
<td>3.22</td>
<td>1.40</td>
<td>.188</td>
</tr>
<tr>
<td>6</td>
<td>Talking about people behind their backs is just part of the game.</td>
<td>3.06</td>
<td>1.48</td>
<td>.145</td>
</tr>
<tr>
<td>7</td>
<td>Taking a colleague’s personal belongings without permission is just “borrowing it”.</td>
<td>2.08</td>
<td>1.09</td>
<td>.975</td>
</tr>
<tr>
<td>8</td>
<td>Procrastination at workplace is not bad if it is once in a while.</td>
<td>2.55</td>
<td>1.21</td>
<td>.810</td>
</tr>
<tr>
<td>9</td>
<td>Damaging some property is no big deal when you consider that others are beating up people.</td>
<td>1.89</td>
<td>0.99</td>
<td>1.216</td>
</tr>
<tr>
<td>10</td>
<td>Stealing some money is not too serious compared to those who steal a lot of money.</td>
<td>1.94</td>
<td>1.19</td>
<td>1.553</td>
</tr>
<tr>
<td>11</td>
<td>Not working very hard at work is really no big deal when you consider that other people are probably absent without permission.</td>
<td>2.09</td>
<td>1.14</td>
<td>1.312</td>
</tr>
<tr>
<td>12</td>
<td>Compared to other illegal things people do, taking some things from a store without paying for them is not very serious.</td>
<td>1.97</td>
<td>1.24</td>
<td>1.521</td>
</tr>
<tr>
<td>13</td>
<td>If people are living under bad conditions, they cannot be blamed for behaving aggressively.</td>
<td>2.55</td>
<td>1.19</td>
<td>.692</td>
</tr>
<tr>
<td>14</td>
<td>If the management doesn’t take action on employees’ wrong doings, employees should not be blamed for cheating.</td>
<td>2.90</td>
<td>1.48</td>
<td>.548</td>
</tr>
<tr>
<td>15</td>
<td>If someone is pressured into doing something, they shouldn’t be blamed for it.</td>
<td>3.28</td>
<td>1.29</td>
<td>.313</td>
</tr>
<tr>
<td>16</td>
<td>People cannot be blamed for misbehaving if their colleagues pressured them to do it.</td>
<td>2.76</td>
<td>1.14</td>
<td>.680</td>
</tr>
<tr>
<td>17</td>
<td>A member of a group or team should not be blamed for the trouble the team caused.</td>
<td>3.09</td>
<td>1.37</td>
<td>.254</td>
</tr>
<tr>
<td>18</td>
<td>An employee who only suggests breaking the rules should not be blamed if other employees go ahead and do it.</td>
<td>2.77</td>
<td>1.26</td>
<td>.744</td>
</tr>
<tr>
<td>19</td>
<td>If a group decides together to do something harmful, it is unfair to blame any one member of the group for it.</td>
<td>3.01</td>
<td>1.61</td>
<td>.559</td>
</tr>
<tr>
<td>20</td>
<td>You can’t blame a person who plays only a small part in the harm caused by a group.</td>
<td>3.15</td>
<td>1.44</td>
<td>.200</td>
</tr>
<tr>
<td>21</td>
<td>It is ok to tell small lies because they don’t really do any harm.</td>
<td>2.45</td>
<td>1.25</td>
<td>.757</td>
</tr>
</tbody>
</table>
People don’t mind being teased because it shows interest in them.

Teasing someone does not really hurt anyone.

Insults don’t really hurt anyone.

If employee becomes undiscipline, it’s their manager’s fault.

If someone leaves something lying around, it’s their own fault if it gets stolen.

People who are mistreated have usually done things to deserve it.

People are not at fault for misbehaving at work if their managers mistreat them.

Some people deserve to be treated like animals.

It is ok to treat badly someone who behaved like a “worm”.

Someone who is obnoxious does not deserve to be treated like a human being.

Some people have to be treated roughly because they lack feelings that can be hurt.

### Ethical Climate

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My company has a formal, written code of ethics.</td>
<td>4.99</td>
<td>.97</td>
<td>-1.194</td>
<td>1.483</td>
</tr>
<tr>
<td>2</td>
<td>My company strictly enforces a code of ethics.</td>
<td>4.76</td>
<td>.97</td>
<td>-1.128</td>
<td>1.087</td>
</tr>
<tr>
<td>3</td>
<td>My company has policies with regards to ethical behaviour.</td>
<td>4.88</td>
<td>.99</td>
<td>-1.135</td>
<td>1.191</td>
</tr>
<tr>
<td>4</td>
<td>My company strictly enforces policies regarding ethical behaviour.</td>
<td>4.74</td>
<td>.94</td>
<td>-1.013</td>
<td>1.038</td>
</tr>
<tr>
<td>5</td>
<td>Top management in my company has let it be known in no uncertain terms that unethical behaviours will not be tolerated.</td>
<td>4.12</td>
<td>1.06</td>
<td>-.549</td>
<td>.529</td>
</tr>
<tr>
<td>6</td>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results primarily in personal gain (rather than corporate gain), she or he will be promptly reprimanded.</td>
<td>4.41</td>
<td>1.23</td>
<td>-.769</td>
<td>.423</td>
</tr>
<tr>
<td>7</td>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results in primarily corporate gain (rather than personal gain) she or he will be promptly reprimanded.</td>
<td>4.27</td>
<td>1.25</td>
<td>-.529</td>
<td>-.256</td>
</tr>
</tbody>
</table>
### Personality

<table>
<thead>
<tr>
<th></th>
<th>Item</th>
<th>Mean</th>
<th>Std Dev</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am the life of the party.</td>
<td>3.46</td>
<td>1.29</td>
<td>.188</td>
<td>.737</td>
</tr>
<tr>
<td>2</td>
<td>I get chores done right away.</td>
<td>3.49</td>
<td>1.19</td>
<td>.437</td>
<td>.765</td>
</tr>
<tr>
<td>3</td>
<td>I don’t talk a lot.</td>
<td>3.64</td>
<td>1.27</td>
<td>.081</td>
<td>.736</td>
</tr>
<tr>
<td>4</td>
<td>I often forget to put things back in their proper place.</td>
<td>3.42</td>
<td>1.27</td>
<td>.241</td>
<td>1.059</td>
</tr>
<tr>
<td>5</td>
<td>I talk to a lot of different people at parties.</td>
<td>3.62</td>
<td>1.30</td>
<td>.243</td>
<td>.538</td>
</tr>
<tr>
<td>6</td>
<td>I like order.</td>
<td>3.39</td>
<td>.94</td>
<td>.071</td>
<td>.302</td>
</tr>
<tr>
<td>7</td>
<td>I keep in the background.</td>
<td>3.68</td>
<td>1.52</td>
<td>.102</td>
<td>1.126</td>
</tr>
<tr>
<td>8</td>
<td>I make a mess of things.</td>
<td>3.31</td>
<td>1.88</td>
<td>.192</td>
<td>1.549</td>
</tr>
</tbody>
</table>

### Transformational leadership style

<table>
<thead>
<tr>
<th></th>
<th>Item</th>
<th>Mean</th>
<th>Std Dev</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communicates a clear and positive vision of the future.</td>
<td>4.25</td>
<td>1.14</td>
<td>.597</td>
<td>.459</td>
</tr>
<tr>
<td>2</td>
<td>Treat staff as individuals, supports and encourages their development.</td>
<td>4.16</td>
<td>1.27</td>
<td>.585</td>
<td>.142</td>
</tr>
<tr>
<td>3</td>
<td>Give encouragement and recognition to staff.</td>
<td>3.91</td>
<td>1.26</td>
<td>.505</td>
<td>.054</td>
</tr>
<tr>
<td>4</td>
<td>Foster trust, involvement and cooperation among team members.</td>
<td>4.40</td>
<td>1.24</td>
<td>.711</td>
<td>.213</td>
</tr>
<tr>
<td>5</td>
<td>Encourage thinking about problems in new ways and questions assumptions.</td>
<td>4.07</td>
<td>1.19</td>
<td>.474</td>
<td>.221</td>
</tr>
<tr>
<td>6</td>
<td>Are clear about their values and practices what they preaches.</td>
<td>3.95</td>
<td>1.19</td>
<td>.569</td>
<td>.360</td>
</tr>
<tr>
<td>7</td>
<td>Instil pride and respect in others and inspire me by being highly competent.</td>
<td>4.24</td>
<td>1.26</td>
<td>.546</td>
<td>.147</td>
</tr>
</tbody>
</table>

### Workplace Deviant Behaviour

<table>
<thead>
<tr>
<th></th>
<th>Item</th>
<th>Mean</th>
<th>Std Dev</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Made fun of someone at work.</td>
<td>3.02</td>
<td>1.49</td>
<td>.518</td>
<td>.426</td>
</tr>
<tr>
<td>2</td>
<td>Said something hurtful to someone at work.</td>
<td>2.06</td>
<td>.90</td>
<td>.038</td>
<td>1.454</td>
</tr>
<tr>
<td>3</td>
<td>Made an ethnic, religious, or racial remark at work.</td>
<td>2.07</td>
<td>.92</td>
<td>.662</td>
<td>4.26</td>
</tr>
<tr>
<td>4</td>
<td>Cursed at someone at work.</td>
<td>2.47</td>
<td>1.18</td>
<td>.421</td>
<td>.724</td>
</tr>
<tr>
<td>5</td>
<td>Played a mean prank on someone at work.</td>
<td>2.05</td>
<td>1.02</td>
<td>.969</td>
<td>.674</td>
</tr>
<tr>
<td>6</td>
<td>Acted rudely toward someone at work.</td>
<td>1.61</td>
<td>.67</td>
<td>.655</td>
<td>.647</td>
</tr>
<tr>
<td>7</td>
<td>Publicly embarrassed someone at work.</td>
<td>1.67</td>
<td>.79</td>
<td>.652</td>
<td>1.103</td>
</tr>
<tr>
<td>8</td>
<td>Taken property from work without permission.</td>
<td>2.31</td>
<td>1.38</td>
<td>1.209</td>
<td>.758</td>
</tr>
<tr>
<td>9</td>
<td>Spent too much time fantasizing or daydreaming instead of working.</td>
<td>2.43</td>
<td>1.41</td>
<td>.872</td>
<td>.135</td>
</tr>
<tr>
<td>10</td>
<td>Falsified a receipt to get reimbursed for more money than you spent on business expenses.</td>
<td>1.68</td>
<td>.80</td>
<td>1.084</td>
<td>.684</td>
</tr>
<tr>
<td>11</td>
<td>Taken an additional or longer break than is acceptable at your workplace.</td>
<td>2.84</td>
<td>1.23</td>
<td>.838</td>
<td>.992</td>
</tr>
<tr>
<td>12</td>
<td>Come in late to work without permission.</td>
<td>2.07</td>
<td>.98</td>
<td>.806</td>
<td>.421</td>
</tr>
<tr>
<td>13</td>
<td>Littered your work environment.</td>
<td>2.21</td>
<td>1.03</td>
<td>.779</td>
<td>.300</td>
</tr>
<tr>
<td>14</td>
<td>Neglected to follow your boss’s instructions.</td>
<td>1.64</td>
<td>.89</td>
<td>.939</td>
<td>.615</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td>Mean</td>
<td>Std Dev</td>
<td>Minimum</td>
<td>Maximum</td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>15</td>
<td>Intentionally worked slower than you could have worked.</td>
<td>2.33</td>
<td>1.11</td>
<td>.959</td>
<td>1.036</td>
</tr>
<tr>
<td>16</td>
<td>Discussed confidential company information with an unauthorized person.</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Used an illegal drug or consumed alcohol on the job.</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Put little effort into your work.</td>
<td>2.42</td>
<td>1.26</td>
<td>1.023</td>
<td>.845</td>
</tr>
<tr>
<td>19</td>
<td>Dragged out work in order to get overtime.</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 669 for all items. All items are measured using 6-point Likert scale. SD = standard deviation.
5.4 Response Rate

In order to achieve an adequate response rate, 200 questionnaires were distributed to 15 randomly selected companies from a total of 81 which are listed in the Federation of Malaysian Manufacturers (FMM) directory for electrical and electronics companies. A total of 3000 surveys were distributed to the employees in the production department of these randomly selected companies. Of the 3000 surveys, 753 were returned equivalent to a 25.1 percent response rate. However, 81 surveys were found to have more than 25 percent of unanswered items and 3 surveys were excluded because respondents provided the same responses (6) to all questions in the survey, resulting in an effective sample of 669 usable completed surveys (22.3 percent usable response rate). The summary on the rate of return of the questionnaire is illustrated in Table 5.3.

<table>
<thead>
<tr>
<th>Number of questionnaires</th>
<th>Percentage/Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total questionnaires</td>
<td>3000</td>
</tr>
<tr>
<td>Completed questionnaires</td>
<td>753</td>
</tr>
<tr>
<td>Unusable questionnaires</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Usable questionnaires</td>
<td>669</td>
</tr>
</tbody>
</table>

The response rate in this research was considered appropriate based on the following reasons. First, the rate of 22.3 percent is within the common range of 21 to 50 percent response rate reported in the business ethics research (Randall and Gibson 1990). Secondly, the rate is similar to other research on ethics carried out in the Malaysian environment (23.8 percent) (Zakaria 2010) as well as in the western countries (22 percent) (Longenecker, McKinney, and Moore 1989) and (21 percent) (Fritzsche and Becker 1983). Thirdly, the effective response rate of 22.3 percent in this research is much higher than the final effective response rate of 4 percent to test moral disengagement in an adult sample (Moore 2008b).
5.4.1 Non-Response Bias

Non-response bias is an issue of concern when dealing with survey methodology (Armstrong and Overton 1977). Non-response bias could threaten the validity of the survey (Tse et al. 2003). In this research, non-response bias was checked using the Armstrong and Overton (1977) method of comparing the responses of late respondents with those of early respondents on key demographic variables and responses on the principal constructs (Table 5.4). For this analysis, the early respondents (62 percent of the sample), refers to those that responded in the first two weeks (Pavlou and El Sawy 2006; Verreynne 2005) were compared with late respondents (38 percent of the sample) using an independent samples t-test. A comparison between early and late respondents reveals no significant difference on all variables (Table 5.4). Therefore, the t-test provides evidence that the responses of those surveyed are typical of the target population.
### Table 5.4: Independent Samples T-test

<table>
<thead>
<tr>
<th></th>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Age</td>
<td>Equal variance assumed</td>
<td>.141</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Work experience</td>
<td>Equal variance assumed</td>
<td>.392</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>Equal variance assumed</td>
<td>3.287</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Language proficiency</td>
<td>Equal variance assumed</td>
<td>.501</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Moral disengagement</td>
<td>Equal variance assumed</td>
<td>2.699</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Ethical climate</td>
<td>Equal variance assumed</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>Equal variance assumed</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Equal variance assumed</td>
<td>4.363</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>Equal variance assumed</td>
<td>1.244</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Interpersonal deviance</td>
<td>Equal variance assumed</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
<tr>
<td>Organisational deviance</td>
<td>Equal variance assumed</td>
<td>1.154</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed</td>
<td></td>
</tr>
</tbody>
</table>
5.5 Profile of Respondents

Table 5.5 presents a profile of respondents. All information is presented in actual figures and percentages to facilitate interpretation. The sample consists of a total of 669 respondents. The majority of the respondents are Malay (82%), followed by Indian (11%) and Chinese (7%). More than half of the respondents are female (69%) and the remaining (31%) are male. Almost all of the respondents (99%) are proficient in understanding Malay Language indicating that they should not have major problems in understanding the questionnaires. As for age, the majority of the respondents are below 40 years old (85%). Only 10 percent of the respondents have a first-degree qualification. The other 90 percent have Diploma, Certificate or other qualifications. More than half of the respondents work as operators in the production department (62.8%). The remainder work as production officers (12%), technicians (12%), supervisors (8%) and engineers (6%). Finally, only 21 percent of the respondents have work experience of more than 10 years. The remaining has work experience less than 5 years (48%) or between 5 to 10 years (31%).

Table 5.5: Profile of Respondents

<table>
<thead>
<tr>
<th>Demographic profile</th>
<th>Number of respondents (N= 669)</th>
<th>Valid percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>205</td>
<td>30.6</td>
</tr>
<tr>
<td>Female</td>
<td>464</td>
<td>69.4</td>
</tr>
<tr>
<td>Race:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malay</td>
<td>549</td>
<td>82.1</td>
</tr>
<tr>
<td>Chinese</td>
<td>45</td>
<td>6.7</td>
</tr>
<tr>
<td>Indian</td>
<td>75</td>
<td>11.2</td>
</tr>
<tr>
<td>Language Proficiency:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>426</td>
<td>63.7</td>
</tr>
<tr>
<td>Good</td>
<td>232</td>
<td>34.7</td>
</tr>
<tr>
<td>Moderate</td>
<td>11</td>
<td>1.6</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean = 30.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD = 7.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 40 years old</td>
<td>568</td>
<td>84.9</td>
</tr>
<tr>
<td>Above 40 years old</td>
<td>101</td>
<td>15.1</td>
</tr>
<tr>
<td>Educational Level:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Degree</td>
<td>65</td>
<td>9.7</td>
</tr>
<tr>
<td>Others (below first degree)</td>
<td>604</td>
<td>90.3</td>
</tr>
</tbody>
</table>
The profile of respondents in this research is found to be similar to characteristics of respondents in a previous study using the same sampling frame (Abdul Rahim and Mohd Nasurdin 2008). For instance, in that particular study, a higher percentage of Malays (84.5%) was found working in manufacturing companies compared to other races. Next, a majority of their respondents (64.5%) had a low educational level, which is also similar to the sample in this research. Finally, the average age (30 years) and work experience (7 years) of respondents in that study was found to be similar to the respondents in this research. Therefore, due to the aforementioned similarities, the sample in this research is believed to be representative of the wider population of employees working in electrical and electronic manufacturing companies in Malaysia.

5.6 Analysis and Results of Measurement Models (CFA): Stage 1

This research applies a two stage modelling i.e. by first developing the measurement model before proceeding to test the structural model as recommended by Anderson and Gerbing (1988) due to the following two main reasons. First, this approach has been accepted widely (Hair et al. 2006) and has been applied in other similar ethics studies in Malaysia (Zakaria 2010). Secondly, according to Hair (2006) the accurate value of reliability of the items in each constructs is best conducted in two stages to avoid any interaction between the measurement and structural model.
The measurement model is developed in order to measure how the observed variables depend on the unobserved variables or latent variables (Hair et al. 2006). In other words a measurement model refers to ‘the portion of the model that specifies how the observed variables depend on the unobserved, composite, or latent variables’ (Arbuckle 2005, p. 89).

For this purpose, confirmatory factor analysis (CFA) using AMOS 18.0 was utilised. CFA is a statistical technique that considers whether or not the number of factors and the loadings of measured (indicator) variables on factors conform to expectations (Kline 2005). CFA is also claimed to be a rigorous technique, which facilitates the examination of factorial properties of the posited measurement models or constructs applied in SEM (Anderson and Gerbing 1988; Goldberg and Velicer 2006; Hopwood and Donnellan 2010; Straub, Boudreau, and Gefen 2004; Thompson 2004). Each of the constructs was separately analysed in a separate measurement model. In any case, where the results were found to be not consistent with an a priori specified measurement model, the measurement model was respecified and reanalysed (Anderson and Gerbing 1988; Bollen 1989; Hair et al. 2006; Kline 2005; Tabachnick and Fidell 2001). The measurement model for each of the constructs was evaluated based on the uni-dimensionality, reliability as well as validity of the construct.

5.6.1 Assessment of Uni-dimensionality

In each of the measurement models, multiple items are used to measure each underlying factor. However, if items become redundant, the measurement model needs to be respecified by removing the redundant items (Arbuckle 2005; Hair et al. 2006; Kline 2005). By doing this, parsimonious uni-dimensional constructs will be achieved (Anderson and Gerbing 1988).

In order to achieve uni-dimensionality of the constructs, first, indicators or items specified to measure a proposed underlying factor should have relatively high-standardized loadings (0.50 or greater) on that factor (Hair et al. 2006). Second, the estimated correlations between the factors should not be greater than
0.85 (Kline 2005). Finally, the measurement model also needs to meet the multiple fit indices as discussed in subsection 5.2.3.

In a situation where the measurement model fails to meet the above conditions, sources of misfit such as standardised residual covariance and modification index are examined. Residuals having value of ± 2.58 are indicative of a specification error in the model whereas modification index measures how much chi-square is expected to decrease if a particular parameter is set free and the model is re-estimated. However, the evaluation of the measurement model in this research does not rely solely on statistical principles, but also on a theoretical justification as recommended by literature (Anderson and Gerbing 1988; Hair et al. 2006; Kline 2005).

In the measurement model (CFA), previously developed indicators/items are observed variables and appear as rectangle and factor (latent variable) as oval. There are single headed arrows linking the factor to their indicators and single headed arrows linking the error terms to their respective indicators. The double-headed arrows show correlations between these factors. The values appear on the arrows connecting factors with their items are the standardised parameter estimates or also known as factor loadings. The values appearing next to the edges of the items are squared multiple correlations between the latent variables. The value next to the curved double-headed arrows shows correlation between these factors (Figure 5.2).

The next sub-section discusses the development of each measurement model. The results of testing the uni-dimensionality of each construct: personality, ethical climate, moral disengagement, workplace deviance, and transformational leadership using AMOS 18.0 are presented.
5.6.1.1 Personality

The two selected personality constructs in this study are extraversion and conscientiousness. Each of these constructs was measured using four items. A total of eight items were used to measure both traits. The measurement model provides a poor fit for the two factors model with eight items. The chi-square is significant ($\chi^2 = 1595.55$, df = 19, $p=.000$). Further, the GFI is .653, AGFI =.343, NFI=.590, CFI=.592, TLI=.399 and RMSEA =.352.

Examination of standardised residual covariance indicates that four items (C3, C7, C2 and C6) have un acceptably high values. The decision was to remove these items iteratively. The final modified CFA model of personality consists of two items for each trait. This final CFA model shows a better fit to the data ($\chi^2 =1.68$, df =1, $p=.195$, N=669). The GFI is .999, AGFI=.987, NFI=.999, CFI=1.000, TLI=.998, RMSEA =.032 and $\chi^2$/df = 1.7 (Figure 5.2a). In addition, the inter-correlation of 0.43 between both constructs (factors) is far below .85, demonstrating good discriminant validity between these factors (Kline 2005). In addition, literature suggests that the Big Five personality factors are often substantially inter-correlated and such correlation does not necessarily indicates the existence of higher order constructs (Ashton et al. 2009).
Although only two items are left to measure each personality trait (Table 5.6a), this should not be a major concern because the removal of other items do not significantly change the content of the construct as it is conceptualized. The remaining indicators (C1, C5, C4 and C8) have high factor loadings ranging from .89 to .95 indicating that the meaning of the factors has been preserved by these indicators. Furthermore, debates continue on the difficulties to confirm the structure of personality constructs using CFA (Hopwood and Donnellan 2010). Previously, studies failed to confirm the structure of NEO Personality Inventory (NEO-PI) or Revised NEO Personality Inventory (NEO-PI-R) and other Big Five inventories using CFA (Borkeneau and Ostendorf 1990; Church and Burke 1994; Gignac, Bates, and Jang 2007; McCrae et al. 1996; Vassend and Skrondal 1995).

Table 5.6a: Personality Items and their Description

<table>
<thead>
<tr>
<th>Original Item</th>
<th>Item Label</th>
<th>Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am the life of the organisation.</td>
<td>C1</td>
<td></td>
</tr>
<tr>
<td>I don’t talk a lot.</td>
<td>C3</td>
<td>Deleted</td>
</tr>
<tr>
<td>I talk to a lot of different people at parties.</td>
<td>C5</td>
<td>Deleted</td>
</tr>
<tr>
<td>I keep in the background.</td>
<td>C7</td>
<td>Deleted</td>
</tr>
<tr>
<td>Conscientiousness:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I get chores done right away.</td>
<td>C2</td>
<td>Deleted</td>
</tr>
<tr>
<td>I often forget to put things back in their proper place.</td>
<td>C4</td>
<td></td>
</tr>
<tr>
<td>I like order.</td>
<td>C6</td>
<td>Deleted</td>
</tr>
<tr>
<td>I make a mess of things.</td>
<td>C8</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.2a: Measurement Model of Personality
### 5.6.1.2 Organisational Ethical Climate

As shown in Table 5.6b, seven items were used to measure the one-factor model of organisational ethical climate. The overall results of the CFA indicate that the initial measurement model needed to be respecified. The chi-square was significant ($\chi^2 = 689.78$, df = 14, $p=.000$, N=669). The GFI is .779, AGFI=.558, NFI=.825, TLI=.741 and RMSEA =.269. Therefore, further detailed examination is carried out by looking at the standardised residual covariance of each item and modification indices. Results show that three items (B1, B6 and B7) have unacceptably high values, thus the decision was to remove these items.

After iteratively removing these redundant items, results indicate that this model fits the data adequately. The chi-square goodness of fit is statistically insignificant ($\chi^2 =2.834$, df =2, $p=.242$, N=669). The GFI is .998, AGFI=.990, NFI=.999, CFI=1.000, TLI=.999, RMSEA =.025 and $\chi^2$/df=1.417 (Figure 5.2b).

#### Table 5.6b: Organisational Ethical Climate Items and their Description

<table>
<thead>
<tr>
<th>Original Item</th>
<th>Item Label</th>
<th>Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>My company has a formal, written code of ethics.</td>
<td>B1</td>
<td>Deleted</td>
</tr>
<tr>
<td>My company strictly enforces a code of ethics.</td>
<td>B2</td>
<td></td>
</tr>
<tr>
<td>My company has policies with regards to ethical behaviour.</td>
<td>B3</td>
<td></td>
</tr>
<tr>
<td>My company strictly enforces policies regarding ethical behaviour.</td>
<td>B4</td>
<td></td>
</tr>
<tr>
<td>Top management in my company has let it be known in no uncertain terms that unethical behaviours will not be tolerated.</td>
<td>B5</td>
<td></td>
</tr>
<tr>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results primarily in personal gain (rather than corporate gain), she or he will be promptly reprimanded.</td>
<td>B6</td>
<td>Deleted</td>
</tr>
<tr>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results primarily in corporate gain (rather than personal gain), she or he will be promptly reprimanded.</td>
<td>B7</td>
<td>Deleted</td>
</tr>
</tbody>
</table>
5.6.1.3 Moral Disengagement

This research applies the 32-items moral disengagement scale proposed by Bandura (1990, 1999, 2002). Four items are used to tap each of the eight mechanisms of moral disengagement. An eight factor model is tested and the results indicated a poor model fit to the sample data ($\chi^2 = 1905.65$, df = 436, $p = .000$, N=669). The GFI was .841, AGFI=.808, NFI=.814, CFI=.849, TLI=.829 and RMSEA=.071.

Based on the standardised residual covariance and modification indices, the CFA model of moral disengagement was respecified few times. The final CFA model which consists of 16 items provides the best fit to the sample data ($\chi^2 = 128.37$, df = 76, $p = .000$, N=669). The GFI is .976, AGFI=.958, NFI=.948, CFI=.978, TLI=.965, RMSEA=.032 and $\chi^2$/df = 1.7 (Figure 5.2c). Even though the chi-square is still significant, Bollen-Stine bootstrap provides a better p-value of .086, indicating that this model fit adequately with the data.

Although the number of deleted items is relatively high compared to the total items in the construct, their removal does not significantly change the content of the moral disengagement construct as it is conceptualized. Each of the remaining 16 items has a high factor loading (above .50), suggesting that the meaning of the
factors has been preserved by these 16 items (Table 5.6c). Given that the model fits the data adequately and the correlations between the underlying factors are less than .85, no further adjustments are required.

<table>
<thead>
<tr>
<th>Original Item</th>
<th>Item Label</th>
<th>Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is alright to fight to protect your colleagues.</td>
<td>A1</td>
<td></td>
</tr>
<tr>
<td>It is ok to steal to take care of your family’s needs.</td>
<td>A2</td>
<td>Deleted</td>
</tr>
<tr>
<td>It is ok to attack someone who threatens your family’s honour.</td>
<td>A3</td>
<td></td>
</tr>
<tr>
<td>It is alright to lie to keep your colleagues out of trouble.</td>
<td>A4</td>
<td>Deleted</td>
</tr>
<tr>
<td>Doing your colleague’s work is just a way of helping your colleague.</td>
<td>A5</td>
<td>Deleted</td>
</tr>
<tr>
<td>Talking about people behind their backs is just part of the game.</td>
<td>A6</td>
<td>Deleted</td>
</tr>
<tr>
<td>Taking a colleague’s personal belongings without permission is just “borrowing it”.</td>
<td>A7</td>
<td></td>
</tr>
<tr>
<td>Procrastination at workplace is not bad if it is once in a while.</td>
<td>A8</td>
<td></td>
</tr>
<tr>
<td>Damaging some property is no big deal when you consider that others are beating up people.</td>
<td>A9</td>
<td></td>
</tr>
<tr>
<td>Stealing some money is not too serious compared to those who steal a lot of money.</td>
<td>A10</td>
<td></td>
</tr>
<tr>
<td>Not working very hard at work is really no big deal when you consider that other people are probably absent without permission.</td>
<td>A11</td>
<td>Deleted</td>
</tr>
<tr>
<td>Compared to other illegal things people do, taking some things from a store without paying for them is not very serious.</td>
<td>A12</td>
<td>Deleted</td>
</tr>
<tr>
<td>If people are living under bad conditions, they cannot be blamed for behaving aggressively.</td>
<td>A13</td>
<td>Deleted</td>
</tr>
<tr>
<td>If the management doesn’t take action on employees’ wrong doings, employees should not be blamed for cheating.</td>
<td>A14</td>
<td></td>
</tr>
<tr>
<td>If someone is pressured into doing something, they shouldn’t be blamed for it.</td>
<td>A15</td>
<td>Deleted</td>
</tr>
<tr>
<td>People cannot be blamed for misbehaving if their colleagues pressured them to do it.</td>
<td>A16</td>
<td></td>
</tr>
<tr>
<td>A member of a group or team should not be blamed for the trouble the team caused.</td>
<td>A17</td>
<td>Deleted</td>
</tr>
<tr>
<td>An employee who only suggests breaking the rules should not be blamed if other employees go ahead and do it.</td>
<td>A18</td>
<td></td>
</tr>
<tr>
<td>If a group decides together to do something harmful, it is unfair to blame any one member of the group for it.</td>
<td>A19</td>
<td></td>
</tr>
<tr>
<td>You can’t blame a person who plays only a small part in the harm caused by a group.</td>
<td>A20</td>
<td>Deleted</td>
</tr>
<tr>
<td>It is ok to tell small lies because they don’t really do any harm.</td>
<td>A21</td>
<td></td>
</tr>
</tbody>
</table>
People don’t mind being teased because it shows interest in them.

A22

Teasing someone does not really hurt anyone.

A23 Deleted

Insults don’t really hurt anyone.

A24 Deleted

If employee becomes undiscipline, it’s their manager’s fault.

A25 Deleted

If someone leaves something lying around, it’s their own fault if it gets stolen.

A26 Deleted

People who are mistreated have usually done things to deserve it.

A27

People are not at fault for misbehaving at work if their managers mistreat them.

A28

Some people deserve to be treated like animals.

A29

It is ok to treat badly someone who behaved like a "worm".

A30 Deleted

Someone who is obnoxious does not deserve to be treated like a human being.

A31

Some people have to be treated roughly because they lack feelings that can be hurt.

A32 Deleted

Figure 5.2c: A CFA Measurement Model of Moral Disengagement
5.6.1.4 Single Indicator (Item) Latent Variable

A single indicator latent variable approach was used to represent the moral disengagement construct in the structural model (hypotheses testing). The main reason for applying this approach is that the inclusion of all the eight factors leads to a non-stable structural model because too many parameters need to be estimated. Thus, to overcome this problem, this research utilised a single indicator latent variable approach as this approach has been suggested could help to reduce model complexity (Kline 2005).

As discussed earlier and illustrated in Figure 5.2c, moral disengagement consists of sixteen items or indicators. Applying a single indicator approach to the moral disengagement construct, statistically, helps to reduce number of parameters to be estimated in the structural model. Following previous research, this approach has also been applied in a previous study in a different field by Rujipak (2009).

The decision to apply this approach was also justified theoretically. Theoretically, although the construct of moral disengagement is described as having eight mechanisms, Bandura never specifically declares that the measurement will be multi-factorial, only ‘multi-faceted’ (Bandura et al. 1996, p.367). In fact, Bandura commonly treated moral disengagement as one factor but kept on discussing the construct as consisting of eight mechanisms (Bandura et al. 1996). Further, this research is designed to test the generalized concept of moral disengagement, thus there is no reason to measure moral disengagement in eight separate mechanisms. Therefore, the transformation of the moral disengagement construct to a single indicator latent variable is deemed fit for this research.

Composite scores are created by summing items in the construct domain and dividing by the number of the items. Once composite scores are computed, unstandardised factor loading and measurement error variance are computed for the single indicator latent variable following Muncks’ formulae (1979). These formulae are as follows:
Regression coefficient (factor loading):

\[ \chi = SD \ (X) \sqrt{\alpha} \]

Where \( \chi \) = the regression coefficient (factor loading)
\( SD(X) \) = the standard deviation of the scale score, \( X \)
\( \alpha \) = the scale’s internal consistency reliability (Cronbach’s alpha)

Measurement error variance:

\[ \epsilon = SD^2 \ (X) \ (1 - \alpha) \]

Where \( \epsilon \) = the measurement error variance
\( SD^2 \ (X) \) = the square of the sample deviation of the scale score, \( X \)
\( \alpha \) = the scale’s internal consistency reliability (Cronbach’s alpha)

The factor loading and measurement error variance for moral disengagement scale in this study are 0.52 and 0.09 respectively. Figure 5.2d illustrates the single indicator latent variable of moral disengagement, which will then use in the structural model.

![Figure 5.2d: A Single Indicator Latent Variable of Moral Disengagement](image)

5.6.1.5 Interpersonal Deviance

Seven items are used to measure the one-factor model of interpersonal deviance. The results of CFA indicated that the initial model needed to be respecified. The chi-square is significant (\( \chi^2 =298.39 \), df =14, p=0.000, N=669). The GFI is 0.893, AGFI=.786, NFI=.905, CFI=.908, TLI=.863 and RMSEA=.174. Examination of standardised residual covariance indicates that two items have unacceptably high values (E2 and E5). The decision was to remove these two items iteratively (Table 5.6d). As shown in Figure 5.2e, the modified model fit the data adequately (\( \chi^2 =22.254 \), df =5, p=0.000, N=669). Although the chi-square is
significant, Bollen-Stine bootstrap provides an alternative value of p=.150. The GFI is .987, AGFI=.961, NFI=.992, CFI=.993, TLI=.987 and RMSEA=.072.

Table 5.6d: Interpersonal Deviance Items and Their Description

<table>
<thead>
<tr>
<th>Original Item</th>
<th>Item Label</th>
<th>Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made fun of someone at work.</td>
<td>E1</td>
<td></td>
</tr>
<tr>
<td>Said something hurtful to someone at work.</td>
<td>E2</td>
<td>Deleted</td>
</tr>
<tr>
<td>Made an ethnic, religious, or racial remark at work.</td>
<td>E3</td>
<td></td>
</tr>
<tr>
<td>Cursed at someone at work.</td>
<td>E4</td>
<td></td>
</tr>
<tr>
<td>Played a mean prank on someone at work.</td>
<td>E5</td>
<td>Deleted</td>
</tr>
<tr>
<td>Acted rudely toward someone at work.</td>
<td>E6</td>
<td></td>
</tr>
<tr>
<td>Publicly embarrassed someone at work.</td>
<td>E7</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.2e: A CFA Measurement Model of Interpersonal Deviance

5.6.1.6 Organisational Deviance

As presented in Table 5.6e, nine items were used to measure the one-factor model of organisational deviance. However, the initial CFA model needed to be respecified few times. Examination of standardised residual covariance and modification indices indicated that five items need to be deleted. The final CFA model which consists of four items indicates that this model fit the data adequately ($\chi^2 = 6.398$, df = 2, p = .041, N = 669). The GFI is .995, AGFI=.976, NFI=.997, CFI=.998, TLI=.993, RMSEA=.057 and $\chi^2$/df = 3.2 (Figure 5.2f). As discussed earlier, although the number of items deleted is relatively high compared to the total items in the
construct, this should not be a major concern as the remaining four items provides high factor loading ranging from 0.69 to 0.92.

Table 5.6e: Organisational Deviance Items and Their Description

<table>
<thead>
<tr>
<th>Original Item</th>
<th>Item Label</th>
<th>Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taken property from work without permission.</td>
<td>E8</td>
<td>Deleted</td>
</tr>
<tr>
<td>Spent too much time fantasizing or daydreaming instead of working.</td>
<td>E9</td>
<td>Deleted</td>
</tr>
<tr>
<td>Falsified a receipt to get reimbursed for more money than you spent on business expenses.</td>
<td>E10</td>
<td></td>
</tr>
<tr>
<td>Taken an additional or longer break than is acceptable at your workplace.</td>
<td>E11</td>
<td></td>
</tr>
<tr>
<td>Come in late to work without permission.</td>
<td>E12</td>
<td></td>
</tr>
<tr>
<td>Littered your work environment.</td>
<td>E13</td>
<td>Deleted</td>
</tr>
<tr>
<td>Neglected to follow your boss’s instructions.</td>
<td>E14</td>
<td></td>
</tr>
<tr>
<td>Intentionally worked slower than you could have worked.</td>
<td>E15</td>
<td>Deleted</td>
</tr>
<tr>
<td>Put little effort into your work.</td>
<td>E18</td>
<td>Deleted</td>
</tr>
</tbody>
</table>

Figure 5.2f: A CFA Measurement Model of Organisational Deviance

5.6.1.7 Transformational Leadership

Transformational leadership is a single factor model consisting of seven items. The CFA indicates that all items have a factor loading above the threshold of 0.50. However the overall model fails to meet goodness-of-fit indices benchmark as displayed by the AGFI and TLI figures, which are below 0.90. The chi-square is
significant ($\chi^2 = 162.184$, df = 9, $p = 0.000$, N=669). The GFI is .927, AGFI=.829, NFI=.922, CFI = .926, TLI=.877 and RMSEA=.160. Therefore, further detailed examination was carried out by looking at the standardised residual covariance of each item and modification indices. Results show that three items (D1, D5 and D7) had unacceptably high values, thus the decision was to remove these items. The transformational leadership items and their descriptions are presented in Table 5.6f.

After iteratively removing these three items, CFA was performed again. The modified model shows a better fit to the data. The chi-square is not significant ($\chi^2 = 4.845$, df= 2, $p = 0.089$, N= 669). The GFI is .996, AGFI=.982, NFI = .996, CFI = .998, TLI =.993, RMSEA = .046 and $\chi^2$/df = 2.4 (Figure 5.2g). Given that the model fits the data adequately; all items loading are above 0.50, thus no further adjustments are required.

<table>
<thead>
<tr>
<th>Original Item</th>
<th>Item Label</th>
<th>Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicates a clear and positive vision of the future.</td>
<td>D1</td>
<td>Deleted</td>
</tr>
<tr>
<td>Treat staff as individuals, supports and encourages their development.</td>
<td>D2</td>
<td></td>
</tr>
<tr>
<td>Give encouragement and recognition to staff.</td>
<td>D3</td>
<td></td>
</tr>
<tr>
<td>Foster trust, involvement and cooperation among team members.</td>
<td>D4</td>
<td></td>
</tr>
<tr>
<td>Encourage thinking about problems in new ways and questions assumptions.</td>
<td>D5</td>
<td>Deleted</td>
</tr>
<tr>
<td>Are clear about their values and practices what they preach.</td>
<td>D6</td>
<td></td>
</tr>
<tr>
<td>Instil pride and respect in others and inspire me by being highly competent.</td>
<td>D7</td>
<td>Deleted</td>
</tr>
</tbody>
</table>

Table 5.6f: Transformational Leadership Items and Their Description
The results from testing the series of measurement (CFA) models in this research are summarised in Table 5.6g.

Figure 5.2g: A CFA Measurement Model of Transformational Leadership
<table>
<thead>
<tr>
<th>Measurement Models (CFA)</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality</td>
<td>1.676</td>
<td>1</td>
<td>.195</td>
<td>.999</td>
<td>.987</td>
<td>.999</td>
<td>1.000</td>
<td>.998</td>
<td>.032</td>
</tr>
<tr>
<td>Organisational ethical climate</td>
<td>2.834</td>
<td>2</td>
<td>.242</td>
<td>.998</td>
<td>.990</td>
<td>.999</td>
<td>1.000</td>
<td>.999</td>
<td>.025</td>
</tr>
<tr>
<td>Moral disengagement</td>
<td>128.373</td>
<td>76</td>
<td>.000</td>
<td>.976</td>
<td>.958</td>
<td>.948</td>
<td>.978</td>
<td>.965</td>
<td>.032</td>
</tr>
<tr>
<td>Interpersonal deviance</td>
<td>22.254</td>
<td>5</td>
<td>.000</td>
<td>.987</td>
<td>.961</td>
<td>.992</td>
<td>.993</td>
<td>.987</td>
<td>.072</td>
</tr>
<tr>
<td>Organisational deviance</td>
<td>6.398</td>
<td>2</td>
<td>.041</td>
<td>.995</td>
<td>.976</td>
<td>.997</td>
<td>.998</td>
<td>.993</td>
<td>.057</td>
</tr>
<tr>
<td>Transformational leadership</td>
<td>4.845</td>
<td>2</td>
<td>.089</td>
<td>.996</td>
<td>.982</td>
<td>.996</td>
<td>.998</td>
<td>.993</td>
<td>.046</td>
</tr>
</tbody>
</table>
5.6.2 Reliability and Validity of the Constructs

Once the uni-dimensionality of the constructs is achieved each of the constructs is assessed for their reliability and validity (De Wulf, Odekerken-Schroder, and Iacobucci 2001). Reliability is assessed using Cronbach’s alpha, construct reliability (CR) and average variance extracted, whilst for validity using construct, convergent and discriminant.

Table 5.7 shows that the Cronbach’s alpha for all the constructs meet the benchmark of 0.70 (Nunnally 1978). As for the two personality traits, the reliability is based on the value of inter-item correlation. Cronbach’s alpha is not reported because each of these traits has only two indicators.

Using confirmatory factor analysis, construct reliability (CR) and average variance extracted (AVE) are calculated based on formulas by Fornell and Larcker (1981) to further confirm on the reliability of the constructs. The formulas are as follows:

Construct Reliability (CR):

$$\rho_\eta = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + \sum \delta_i}$$

Where \( \lambda_i \) = standardised loading
\( \delta_i \) = error variance

Average variance extracted (AVE):

$$\rho_{ve\eta} = \frac{(\sum \lambda_i^2)}{(\sum \lambda_i^2) + \sum \delta_i}$$

Where \( \lambda_i \) = standardised loading
\( \delta_i \) = error variance

All constructs in this research have CR of above 0.60 and AVE of at least 0.50 as recommended by Bagozzi and Yi (1988), suggesting further support of the reliability of the constructs.
Confirmatory factor analysis is also used to assess the validity of the constructs. Construct validity is vital for theory testing (Bagozzi 1980). Accordingly, construct validity is confirmed based on goodness-fit-indices (Hsieh and Hiang 2004) reported in the earlier section. Evidence of convergent validity is found based on high factor loadings (greater than 0.50) of all factors (Anderson and Gerbing 1988; Holmes-Smith, Coote, and Cunningham 2006). In addition, the results of AVE provide further support for convergent validity. In the case of discriminant validity, the correlations between factors in the measurement model do not exceed 0.85 as recommended by Kline (2005).

Table 5.7: Measurement Model Evaluation

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items</th>
<th>Standardised Loading</th>
<th>Cronbach’s alpha</th>
<th>Construct Reliability (CR)</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>C1</td>
<td>.91</td>
<td>.81</td>
<td>.90</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>C5</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>C4</td>
<td>.89</td>
<td>.85</td>
<td>.92</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>C8</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical climate</td>
<td>B2</td>
<td>.74</td>
<td>.86</td>
<td>.86</td>
<td>.61</td>
</tr>
<tr>
<td></td>
<td>B3</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B4</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>B5</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral disengagement</td>
<td>A1</td>
<td>.83</td>
<td>.75</td>
<td>.94</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>A3</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>A7</td>
<td>.61</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>A8</td>
<td>.59</td>
<td></td>
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<tr>
<td></td>
<td>A9</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A10</td>
<td>.55</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>A14</td>
<td>.50</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>A16</td>
<td>.62</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>A18</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A19</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A21</td>
<td>.75</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>A22</td>
<td>.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A27</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A28</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A29</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A31</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal deviance</td>
<td>E1</td>
<td>.61</td>
<td>.83</td>
<td>.84</td>
<td>.52</td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E6</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E7</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational deviance</td>
<td>E10</td>
<td>.92</td>
<td>.94</td>
<td>.94</td>
<td>.81</td>
</tr>
</tbody>
</table>
Descriptive Analysis

Table 5.8 displays mean values, standard deviations and correlations between the constructs. Overall, the correlation between the constructs were in the predicted direction and significant at p<0.01 except for the two personality traits which are found not to be correlated with moral disengagement. The correlation between extraversion and conscientiousness is common as the Big Five personality factors are often substantially inter-correlated (Ashton et al. 2009). Also, transformational leadership style was found not to be correlated with organisational deviance. The correlations between the variables were found to be lower than the results of Cronbach’s alpha, indicating evidence of discriminant validity of the measure (Gaski 1984). In this research, Cronbach’s alpha ranged from 0.75 to 0.94, while correlations between variables were generally low to moderate, ranged from 0.00 to 0.46.

Most respondents are not highly prone to morally disengage as indicated by the mean (2.64) and standard deviation (0.60) for moral disengagement, assessed on a 6-point Likert scale. For both deviance constructs, the mean (2.26, 2.30) indicate a low frequency of deviance committed by respondents. However, the standard deviation (1.21, 1.10) suggested reasonably high variability in respondents’ willingness to declare their deviant behaviour. A mean of 4.09 for transformational leadership assessed on a 6-point Likert scale suggested that transformational leadership is quite prominent in the manufacturing companies. Interpersonal and organisational deviance were found to have only a moderate strength (Cohen 1988) of correlation (0.335, p< 0.01). This result contradicts Dalal (2005) which asserts that interpersonal and organisational deviance should not be separated as both are highly correlated.

<table>
<thead>
<tr>
<th></th>
<th>E11</th>
<th>E12</th>
<th>E14</th>
<th>D2</th>
<th>.77</th>
<th>.86</th>
<th>.86</th>
<th>.61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational leadership</td>
<td>D2</td>
<td>.77</td>
<td>.86</td>
<td>.86</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>.82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D6</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5.8 also presents the correlation of the control variables (gender, age and work experience) and the study variables. Previous researches propose that these demographic variables may be related to the criterion variables (Loch and Conger 1996; Aquino and Douglas 2003; Keller, Smith, and Smith 2007; Eweje and Brunton 2010). However, these control variables were found to be either not correlated or have a very low correlation with the criterion variables in this research (Table 5.8). Thus, all control variables were predicted not to have any confounding effect on the hypothesized relationships.

Nevertheless, the assessment of the plausible confounding effect of the control variables on the hypothesized relationships was further analysed using AMOS (Appendix 5). Two structural models were drawn using AMOS graphics. The first model (Model A) takes into account all control variables whilst the second model, (Model B) excludes the control variables. The standardised estimates ($\beta$) of the direct hypothesized relationships in both models were then compared in order to determine whether the control variables have any confounding effect on the hypothesized relationships. A large difference in the standardised estimates ($\beta$) of the hypothesized relationships between the two models indicates a possible confounding effect of the control variables on the hypothesized relationships.

Results indicated that there were no changes in the standardised estimates ($\beta$) for all hypothesized direct relationships except for the direct relationship between extraversion and moral disengagement, which had only a small different in the standardised estimates ($\beta$) ($\beta = .04$ (Model A) and $\beta = .05$ (Model B)). The difference of 0.01 indicates that the confounding effect of this variable is not a major concern and could be ignored.

This additional analysis helps to illustrate that all control variables may not have any serious confounding effect in all hypothesized relationships. Therefore, based on the correlation matrix (Table 5.8) and the additional analysis using AMOS (Appendix 5), the decision was to exclude all control variables in subsequent analysis. The decision is aligned with previous studies which found that gender,
age, organisational tenure, position or educational level have no effects on aggressive behaviour (Douglas and Martinko 2001; Hepworth and Towler 2004).
<table>
<thead>
<tr>
<th>#</th>
<th>Construct</th>
<th>M</th>
<th>SD</th>
<th>Cronbach's alpha/inter-item correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extraversion</td>
<td>3.50</td>
<td>1.31</td>
<td>.81</td>
</tr>
<tr>
<td>2</td>
<td>Conscientiousness</td>
<td>3.61</td>
<td>1.51</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ethical climate</td>
<td>3.67</td>
<td>1.65</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Transformational leadership</td>
<td>4.09</td>
<td>1.15</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Moral disengagement</td>
<td>2.64</td>
<td>0.60</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Interpersonal deviance</td>
<td>2.26</td>
<td>1.21</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Organisational deviance</td>
<td>2.30</td>
<td>1.10</td>
<td>.94</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Control variables:
- Gender: 0.043 -0.001 0.070 0.116 -0.046 0.003 -0.089
- Age: 30.84 7.26
- Work experience: 6.60 4.97

Note: *p<0.05, **p<0.01, N=669. The number of items indicated in parentheses
5.6.4 Common Method Bias

In this research, the measurement of the research constructs relies solely on the perceptual judgment of a single individual i.e. the employees in the selected manufacturing companies. As a result, a common method bias which is defined as ‘variance that is attributable to the measurement method rather than to the constructs the measure represent’ (Podsakoff et al. 2003, p. 289) could be problematic. The correlation matrix (Table 5.8) did not reveal any high correlations between the constructs, thus, there is no initial evidence of possible common method bias (Bagozzi, Yi, and Phillips 1991).

In addition, Harman’s single-factor test (Podsakoff and Organ 1986) was employed to check for common method bias (Table 5.9). The basic assumption of this test is that if a substantial amount of common method variance is present, a factor analysis of all the data will result in a single factor accounting for the majority of the covariance in the independent and dependent variables. An unrotated factor analysis of all study items yielded six factors in total explaining 79.6 percent of the variance. Given that a single factor solution did not emerge and a general factor did not account for most of the variance, common method variance was not viewed as a significant threat in this research (Podsakoff and Organ 1986).
Table 5.9: Summary of Factor Analysis for Common Method Bias Test

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Variance Explained</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>2</td>
<td>2.866</td>
<td>13.025</td>
</tr>
<tr>
<td>3</td>
<td>2.505</td>
<td>11.387</td>
</tr>
<tr>
<td>4</td>
<td>2.390</td>
<td>10.863</td>
</tr>
<tr>
<td>5</td>
<td>1.793</td>
<td>8.149</td>
</tr>
<tr>
<td>6</td>
<td>1.101</td>
<td>5.005</td>
</tr>
<tr>
<td>7</td>
<td>.660</td>
<td>2.998</td>
</tr>
<tr>
<td>8</td>
<td>.529</td>
<td>2.405</td>
</tr>
<tr>
<td>9</td>
<td>.422</td>
<td>1.920</td>
</tr>
<tr>
<td>10</td>
<td>.401</td>
<td>1.822</td>
</tr>
<tr>
<td>11</td>
<td>.370</td>
<td>1.680</td>
</tr>
<tr>
<td>12</td>
<td>.344</td>
<td>1.565</td>
</tr>
<tr>
<td>13</td>
<td>.275</td>
<td>1.252</td>
</tr>
<tr>
<td>14</td>
<td>.231</td>
<td>1.048</td>
</tr>
<tr>
<td>15</td>
<td>.208</td>
<td>.944</td>
</tr>
<tr>
<td>16</td>
<td>.195</td>
<td>.889</td>
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<td>17</td>
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<td>18</td>
<td>.175</td>
<td>.798</td>
</tr>
<tr>
<td>19</td>
<td>.149</td>
<td>.676</td>
</tr>
<tr>
<td>20</td>
<td>.145</td>
<td>.658</td>
</tr>
<tr>
<td>21</td>
<td>.107</td>
<td>.487</td>
</tr>
<tr>
<td>22</td>
<td>.089</td>
<td>.404</td>
</tr>
</tbody>
</table>

5.7 Analysis and Results of Structural Model: Stage 2

SEM facilitates estimation of pathways among exogenous variables (independent variables) and endogenous variables (dependent variables) after accounting for measurement error (Bollen 1989). Generally, in the structural model (Figure 5.3), the exogenous constructs have no single headed arrow pointing toward them. However, all exogenous constructs need to be correlated although no correlations are hypothesized (Kline 2005). On the other hand, the endogenous constructs have at least one single-headed arrow leading to them. Single-headed arrows indicate a causal relationship or path and the absence of arrows implies that no relationship has been hypothesized. The error terms (r) represent random error due to measurement of the constructs they indicate and the parameter (z)
represents residual errors in the structural model resulting from random errors, which have not been explicitly modelled. The values for the paths connecting constructs with a single-headed arrow represent standardised regression beta weights. In addition, the values appearing on the edges of the boxes represent variance estimates and the values next to the double-headed arrows indicate correlations.

![Figure 5.3: Illustration of a Structural Model](image)

In this research, 14 hypotheses were developed in order to answer the research questions addressed in chapter one. These hypotheses are grouped into four main categories as listed in Table 5.10 and illustrated in Figure 5.4 in order to test: 1) antecedents of moral disengagement; 2) outcomes of moral disengagement; 3) the mediating effect of moral disengagement and 4) the moderating effect of transformational leadership style.
Table 5.10: List of Hypotheses

<table>
<thead>
<tr>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antecedents of Moral Disengagement</strong></td>
</tr>
<tr>
<td>H1a Extraversion is negatively associated with moral disengagement.</td>
</tr>
<tr>
<td>H1b Conscientiousness is negatively associated with moral disengagement.</td>
</tr>
<tr>
<td>H2 Organisational ethical climate is negatively associated with moral</td>
</tr>
<tr>
<td>disengagement.</td>
</tr>
<tr>
<td><strong>Outcomes of Moral Disengagement</strong></td>
</tr>
<tr>
<td>H3a Moral disengagement is positively associated with interpersonal deviance.</td>
</tr>
<tr>
<td>H3b Moral disengagement is positively associated with organisational deviance</td>
</tr>
<tr>
<td>H4 Interpersonal deviance is positively associated with organisational deviance</td>
</tr>
<tr>
<td><strong>The Mediating Effect of Moral Disengagement</strong></td>
</tr>
<tr>
<td>H5a Moral disengagement mediates the relationship between extraversion and interpersonal deviance</td>
</tr>
<tr>
<td>H5b Moral disengagement mediates the relationship between extraversion and organisational deviance</td>
</tr>
<tr>
<td>H5c Moral disengagement mediates the relationship between conscientiousness and interpersonal deviance</td>
</tr>
<tr>
<td>H5d Moral disengagement mediates the relationship between conscientiousness and organisational deviance</td>
</tr>
<tr>
<td>H5e Moral disengagement mediates the relationship between organisational ethical climate and interpersonal deviance</td>
</tr>
<tr>
<td>H5f Moral disengagement mediates the relationship between organisational ethical climate and organisational deviance</td>
</tr>
<tr>
<td><strong>The moderating effect of transformational leadership style</strong></td>
</tr>
<tr>
<td>H6a Transformational leadership style moderates the relationship between moral disengagement and interpersonal deviance</td>
</tr>
<tr>
<td>H6b Transformational leadership style moderates the relationship between moral disengagement and organisational deviance</td>
</tr>
</tbody>
</table>
To confirm that the structural model fit the data, the structural model needed to be evaluated in terms of goodness-of-fit indices. A good fit to the sample data provides support for the hypothesized model (Cunningham 2008a). The additional goodness-of-fit measure, the Expected Cross-Validation Index (ECVI) was examined in order to determine the best-fit structural model. ECVI measures the discrepancy between the fitted covariance matrix in the analysed sample and the expected covariance matrix in an equivalent sample (Byrne 2001, p.86). This measure is claimed to be useful in the process of comparing a model in order to determine best-fit. There is no appropriate range of values to act as a benchmark, however, the model with the smallest ECVI is considered as the best fit model because this model has the greatest potential for replication (Byrne 2001).

For hypotheses testing purposes, parameter estimates together with coefficient values were examined. Parameter estimates are used to generate the estimated population covariance matrix for the model (Tabachnick and Fidell 2001). Coefficients' values are derived by dividing the variance estimate by its standard error (S.E). When the critical value (C.R) or z-value is greater than 1.96 for a
regression weight (standardised estimates), the parameter is statistically significant at the .05 levels.

5.7.1  **Structural Model 1 - The Hypothesized Model**

![Figure 5.5: Structural Model 1 - The Hypothesized Model](image)

The analysis of the structural model is conducted by first testing the hypothesized model as displayed in Figure 5.5. There are six hypothesized paths of antecedents and outcomes of moral disengagement displayed in this model (Table 5.11).

<table>
<thead>
<tr>
<th>Hypothesized Path</th>
<th>Hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Extraversion → MD</td>
<td>Extraversion is negatively associated with moral disengagement.</td>
</tr>
<tr>
<td>H1b: Conscientiousness → MD</td>
<td>Conscientiousness is negatively associated with moral disengagement.</td>
</tr>
<tr>
<td>H2: Ethical climate → MD</td>
<td>Organisational ethical climate is negatively associated with moral disengagement.</td>
</tr>
<tr>
<td>H3a: MD → ID</td>
<td>Moral disengagement is positively associated with interpersonal deviance.</td>
</tr>
<tr>
<td>H3b: MD → OD</td>
<td>Moral disengagement is positively associated with organisational deviance.</td>
</tr>
<tr>
<td>H4: ID → OD</td>
<td>Interpersonal deviance is positively associated with organisational deviance.</td>
</tr>
</tbody>
</table>

Note: MD = Moral disengagement, ID = Interpersonal deviance, OD = Organisational deviance
An examination of goodness-of-fit indices indicate that the hypothesized model (Figure 5.5) fit the data adequately with all fit indices showing reasonable values ($\chi^2 = 285.615$, df= 127, p=.000). Although the chi-square statistic is statistically significant, this is not deemed unusual given the large sample size (Bagozzi, Yi, and Phillips 1991). Furthermore, Bollen–Stine Bootstrap provides a better value of $p=.002$. In addition, the GFI = .953, AGFI=.937, NFI=.972, CFI=.984, TLI=.981, RMSEA = .043 and ECVI = .559. The coefficient parameters estimates are then examined to test the hypotheses listed in Table 5.11. Results are displayed in Table 5.11a.

Table 5.11a: Testing Hypotheses Using Standardised Estimates (Antecedents and Outcomes of Moral Disengagement)

<table>
<thead>
<tr>
<th>Hypothesised Path</th>
<th>Standardised Estimate</th>
<th>z-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Extraversion</td>
<td></td>
<td></td>
<td>MD .05</td>
</tr>
<tr>
<td>H1b: Conscientiousness</td>
<td></td>
<td></td>
<td>MD -.02</td>
</tr>
<tr>
<td>H2: Ethical climate</td>
<td></td>
<td></td>
<td>MD -.57</td>
</tr>
<tr>
<td>H3a: MD</td>
<td>ID</td>
<td>.52</td>
<td>11.229***</td>
</tr>
<tr>
<td>H3b: MD</td>
<td>OD</td>
<td>.58</td>
<td>12.042***</td>
</tr>
<tr>
<td>H4: ID</td>
<td>OD</td>
<td>.14</td>
<td>3.159**</td>
</tr>
</tbody>
</table>

Note: **p<0.01, ***p<0.001; N=669; MD= Moral disengagement, ID=Interpersonal deviance, OD=Organisational deviance

Table 5.11a illustrates that H2, H3a, H3b and H4 are statistically significant and in the hypothesized direction. The standardized estimates for these hypotheses are all significant ($\beta= -.57$, p <.001; $\beta= .52$, p<.001; $\beta= .58$, p<.001 and $\beta= .14$, p<.01), respectively. Therefore, hypotheses H2, H3a, H3b and H4 are supported. However, there are two non-significant paths (H1a and H1b) in the hypothesized model. The hypothesized relationship between the two personality traits (extraversion and conscientiousness) and moral disengagement were found to be not significant with $\beta= .05$, p=.309 and $\beta= -.02$, p=.721, respectively. Thus, hypotheses H1a and H1b are not supported.

In order to arrive at the most parsimonious model, Byrne (2001) suggests that all non significant pathways should be deleted from the model. Applying this suggestion, the deleting procedure was performed by removing one non-significant path at a time as suggested by Holmes-Smith et al. (2006). They argued that
deleting one path at a time could possibly change the modification indices, structural coefficients and significant levels.

5.7.2 Structural Model 2

Earlier results indicated that two paths needed to be deleted. The non-significant path between conscientiousness and moral disengagement (H1b) was first deleted because this path displayed the lowest β coefficient (β=-.02, p=.721). Figure 5.5a illustrates structural model 2. The goodness-of-fit indices indicated that this modified model fitted the data adequately ($\chi^2 = 285.743, \text{df}=128, p=.000$, Bollen-Stine bootstrap=.002). In addition, the GFI = .953, AGFI=.938, NFI=.972, CFI=.984, TLI=.981, RMSEA = .043 and ECVI = .557. Consequently, the model was reanalysed (Table 5.11b). However, an examination of coefficient parameter estimates after deleting this path indicated no major changes in the results. The hypothesized path between extraversion and moral disengagement (H1a) was still found to be not significant (β=.04, p=.309). Thus, the next step was to delete this path (H1a).

Figure 5.5a: Structural Model 2
### Table 5.11b: Testing Hypotheses Using Standardised Estimates (Structural Model 2)

<table>
<thead>
<tr>
<th>Hypothesized Path</th>
<th>Standardised Estimate</th>
<th>z-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Extraversion → MD</td>
<td>.04</td>
<td>.961</td>
<td>No</td>
</tr>
<tr>
<td>H2: Ethical climate → MD</td>
<td>-.57</td>
<td>-13.892***</td>
<td>Yes</td>
</tr>
<tr>
<td>H3a: MD → ID</td>
<td>.52</td>
<td>11.230***</td>
<td>Yes</td>
</tr>
<tr>
<td>H3b: MD → OD</td>
<td>.58</td>
<td>12.039***</td>
<td>Yes</td>
</tr>
<tr>
<td>H4: ID → OD</td>
<td>.14</td>
<td>3.160**</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: **p<0.01, ***p<0.001; N=669; MD=moral disengagement, ID=interpersonal deviance, OD=organisational deviance

### 5.7.3 Structural Model 3

Figure 5.5b illustrates the structural model after removing the two non-significant paths (H1a and H1b). This left no paths from the two personality traits constructs (extraversion and conscientiousness). As a result, the decision was to remove these two constructs from the model (Figure 5.5c). After removing the two constructs, an examination of the goodness-of-fit indices showed that the model fitted the data adequately ($\chi^2 = 241.405$, df=74, $p=.000$, Bollen-Stine Bootstrap=.001). The GFI=.949, AGFI=.928, NFI=.971, CFI=.980, TLI=.975, RMSEA =.058 and ECVI = .454 (Figure 5.5c). Based on an examination of goodness-of-fit indices including the ECVI value, structural model 3 appears to have a better fit compared to previous models. Table 5.11c shows that all the remaining hypothesized relationships (H2, H3a, H3b and H4) were statistically significant and in the predicted direction with $\beta=-.57$, .52, .58 and .14, respectively.

### Table 5.11c: Testing Hypotheses Using Standardised Estimates (Structural Model 3)

<table>
<thead>
<tr>
<th>Hypothesized Path</th>
<th>Standardised Estimate</th>
<th>z-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2: Ethical climate → MD</td>
<td>-.57</td>
<td>-13.859***</td>
<td>Yes</td>
</tr>
<tr>
<td>H3a: MD → ID</td>
<td>.52</td>
<td>11.227***</td>
<td>Yes</td>
</tr>
<tr>
<td>H3b: MD → OD</td>
<td>.58</td>
<td>12.010***</td>
<td>Yes</td>
</tr>
<tr>
<td>H4: ID → OD</td>
<td>.14</td>
<td>3.175***</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: ***p<0.001; N=669; MD=moral disengagement, ID=interpersonal deviance, OD=Organisational deviance
Figure 5.5b: Structural Model 3- Removing the Two Paths

Chi-square=286.660, df=129, p=.000
GFI=.935, AGFI=.938
NFI=.972, CFI=.984, TLI=.981
RMSEA=.043

Figure 5.5c: Structural Model 3 (Fully Mediated Model)

Chi-square=241.405, df=74, p=.000
GFI=.949, AGFI=.928
NFI=.971, CFI=.980, TLI=.975
RMSEA=.058, BCFI=.454
5.7.4  **Structural Model 4**

In an attempt to find a better fitting model, the hypothesized model with only the remaining paths (Figure 5.5c) was re-examined, putting into effect Byrne’s (2001) suggestion of adding the links suggested by regression coefficient modification indices. Based on modification indices, two links were added (organisational ethical climate to interpersonal and organisational deviance), one at a time, to the model. Figure 5.5d illustrates the structural model with the two additional paths. Examination of goodness-of-fit indicates the model fit the data adequately ($\chi^2 = 195.382$, df= 72, p=.000, Bollen-Stine Bootstrap=.001). The GFI=.960, AGFI=.942, NFI=.977, CFI=.985, TLI=.981, RMSEA =.051. The ECVI for the initial structural model with the remaining significant paths (Figure 5.5c) is .454, while the ECVI for the structural model with the additional paths (Figure 5.5d) is .391. Therefore, based on goodness-of-fit indices and ECVI value, the structural model illustrated in Figure 5.5d is a better model compared to structural model 3.

![Figure 5.5d: Structural Model 4 - Partial Mediation (The Final Model)](image-url)

Chi-square=195.382, df=72,p=.000  
GFI=.960,AGFI=.942  
NFI=.977,CFI=.985,TLI=.981  
RMSEA=.051, ECVI=.391
5.7.5 Comparison of Alternative Models

In order to further confirm that the partial mediation model (Figure 5.5d) was the best model, model comparison was carried out. A goodness-of-fit indices of a null model, which assumes that all variables are uncorrelated, was used as a basis for comparison in assessing the model fit of a structural model. The results reported in Table 5.12 shows that the null model (M0) had a poor fit to the data. The chi-square was significant ($\chi^2 = 8459.182$, df = 91, $p=.000$). Further, the GFI is .251, AGFI =.136, NFI=.000, CFI=.000, TLI=.000, RMSEA= .371 and ECVI = 12.705.

The results of the null model were then compared with the alternative direct effects model (M1) which only included the direct effects from the antecedent variable (ethical climate) to the outcomes variables (interpersonal and organisational deviance). All other paths were set to zero. The direct effects model has a poor fit ($\chi^2 = 518.576$, df = 76, $p=.000$). The GFI=.909, AGFI=.874, NFI=.939, CFI= .947, TLI=.937, RMSEA=.093 and ECVI =.863. Against the null model (M0), the direct effects model (M1) showed a significant improvement in the goodness-of-fit indices with the change in chi-square ($\Delta\chi^2$) significant at $p<0.001$ (Table 5.12). Thus, the direct effects model was a better fit compared to the null model.

The direct effects model (M1) was then compared with the fully mediated model (M2) as illustrated in Figure 5.5c. An examination of goodness-of-fit indices of the fully mediated model, showed that this model (M2) had a better fit ($\chi^2 = 241.405$, df = 74, $p=.000$, Bollen-Stine Bootstrap = .001). Further, the GFI is .949, AGFI =.928, NFI=.971, CFI=.980, TLI=.975, RMSEA = .058 and ECVI = .454. The comparison between this two models also indicated a significant change in chi-square ($\Delta\chi^2$) at $p<0.001$ (Table 5.12). Therefore, the fully mediated model (M2) was a better-fit model compared to the direct effects model (M1).

Finally, the fully mediated model (M2) was compared with the partial mediation model (M3). The partial mediation model was illustrated in Figure 5.5d. When contrasted with the fully mediated model, the partial mediation model (M3) provided a better statistical fit ($\chi^2 = 195.382$, df = 72, $p=.000$, Bollen-Stine Bootstrap
with a significant change in chi-square ($\Delta\chi^2$) at $p<0.001$ (Table 5.12). Furthermore, the GFI=.960, AGFI=.942, NFI=.977, CFI=.985, TLI=.981, RMSEA=.051 and ECVI=.391. In fact, the partial mediation model provided the lowest ECVI among all the four models. Therefore, based on the assessment of goodness-of-fit indices including the ECVI figure and the calculation of chi-square change, the partial mediation model (M3) which is illustrated in Figure 5.5d is confirmed as the best parsimonious model and accepted as the final model. This final model was then used to retest all remaining hypothesized paths (H2, H3a, H3b, H4, H5e, H5f, H6a and H6b).
### Table 5.12: Fit Indices and Comparisons of Alternative Models

<table>
<thead>
<tr>
<th>Models</th>
<th>Type</th>
<th>$\chi^2$</th>
<th>df</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>ECVI</th>
<th>$\Delta \chi^2$(df)Sig</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null</td>
<td>M0</td>
<td>8459.182</td>
<td>91</td>
<td>.251</td>
<td>136</td>
<td>000</td>
<td>000</td>
<td>000</td>
<td>371</td>
<td>.863</td>
<td>12.705</td>
<td></td>
</tr>
<tr>
<td>Direct Effects</td>
<td>M1</td>
<td>518.576</td>
<td>76</td>
<td>909</td>
<td>874</td>
<td>939</td>
<td>947</td>
<td>937</td>
<td>093</td>
<td>.454</td>
<td>7940.606(15)***</td>
<td>M0-M1</td>
</tr>
<tr>
<td>Fully Mediated</td>
<td>M2</td>
<td>241.405</td>
<td>74</td>
<td>.949</td>
<td>928</td>
<td>971</td>
<td>980</td>
<td>975</td>
<td>058</td>
<td>.454</td>
<td>277.171(2)***</td>
<td>M1-M2</td>
</tr>
<tr>
<td>Partial Mediation</td>
<td>M3</td>
<td>195.382</td>
<td>72</td>
<td>.960</td>
<td>942</td>
<td>977</td>
<td>985</td>
<td>981</td>
<td>051</td>
<td>.391</td>
<td>46.023(2)***</td>
<td>M2-M3</td>
</tr>
</tbody>
</table>

Note: ***p<0.001; N=669
5.8 Hypotheses Testing

5.8.1 Antecedents and Outcomes of Moral Disengagement

In the earlier analysis (Figure 5.5), the hypothesized relationship between the two personality traits (H1a and H1b) and moral disengagement were found to be not statistically significant with $\beta = .05$, $p = .309$ and $-.02$, $p = .721$, respectively. Thus, these two hypotheses (H1a and H1b) were not supported. Consequently, these two personality traits were then excluded from the model in an attempt to find the most parsimonious model.

The final model (figure 5.5d), as the most parsimonious model was then used to test hypotheses H2, H3a, H3b and H4. Based on Figure 5.5d (the final model), the results presented in Table 5.13 indicate that H2, H3a, H3b and H4 are statistically significant and in the hypothesized direction. The standardised estimates for these hypotheses are all significant at $p < 0.001$ with $\beta = -.50$, .38, .43 and .14, respectively (Figure 5.5d). Thus, these hypotheses (H2, H3a, H3b and H4) are supported.

<table>
<thead>
<tr>
<th>Hypothesized Path</th>
<th>Standardised Estimate</th>
<th>z-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2: Ethical climate</td>
<td>MD</td>
<td>-.50</td>
<td>-11.729***</td>
</tr>
<tr>
<td>H3a: MD → ID</td>
<td></td>
<td>.38</td>
<td>7.201***</td>
</tr>
<tr>
<td>H3b: MD → OD</td>
<td></td>
<td>.43</td>
<td>8.480***</td>
</tr>
<tr>
<td>H4: ID → OD</td>
<td></td>
<td>.14</td>
<td>3.507***</td>
</tr>
</tbody>
</table>

Note: ***$p<0.001$; N=669; MD=moral disengagement, ID=interpersonal deviance, OD=Organisational deviance

5.8.2 Moral Disengagement as a Mediator

Generally, mediation or indirect effect is believed to occur when the causal effect of an independent variable (X) on a dependent variable (Y) is transmitted by a mediator (M) as illustrated in Figure 5.6. In other words, a variable is called a mediator ‘to the extent that it accounts for the relation between the predictor and the criterion’ (Baron and Kenny 1986, p.1176).
Literature suggests that there are two essential conditions in establishing mediation: 1) showing that the predictor variable (X) is related to the mediator variable (M) and 2) showing that the mediator variable (M) is related to the criterion variable (Y). In a similar vein, previous researchers (MacKinnon et al. 2002) suggest that mediation inferences are justified if the path between predictor variable and moderator variable) and path between moderator variable and criterion variable are significant.

Although Baron and Kenny (1986) assert that predictor variable (X) and criterion variable (Y) must have a significant relationship to allow for mediation effects, this condition is no longer essential. Recently, literature suggests that mediation effect can also be established in the absence of significant direct relationship between the predictor variable (X) and criterion variable (Y) (Shrout and Bolger 2002; MacKinnon et al. 2002). Following the recent arguments, this research took a step further to test the mediation effect of moral disengagement in the relationship between the antecedent variables (personality traits and organisational ethical climate) and the outcomes variables (interpersonal and organisational deviance).

For instance, Mathieu and Taylor (2006) argue that the confounding suppression and interactive effects could attenuate the overall X and Y relationship. In other words, the effect of confounding variables indicates the presence of non-
linear relationships, which then violate an assumption of testing indirect or mediated relations. They further argue that the mediation effects might reduce the total X and Y relationship, when the opposite signed direct and indirect effects are present. For example, in the situation where X and M are both positively related to Y, however X and M are negatively related, other variables including the mediator may serve to contaminate the total X and Y relationship.

The SEM technique is claimed to be preferable to regression techniques for testing mediation because SEM permit modelling of both measurement and structural relationships and yield overall fit indices (Baron and Kenny 1986; James, Mulaik, and Brett 2006). This research employed the bootstrapping approach (Arbuckle and Wothke 1999) to assess the mediating or indirect effect of moral disengagement on the relationship between the antecedents and the outcomes. Many researchers advocate the use of this method in assessing indirect effects (Bollen and Stine 1990; McKinnon, Lockwood, and Williams 2004; Preacher and Hayes 2004; Shrout and Bolger 2002; Hayes 2009). Bootstrap results are claimed to have more accurate probability estimates as this method can help with mediation problems in which the mediator and outcome variables are not normally distributed (Shrout and Bolger 2002; Hayes 2009). There are at least two good reasons for applying the bootstrapping method: 1) this method provides a general way to test significance and confidence intervals in a wide variety of situations and 2) this method does not require many assumptions, and as such make the result more accurate (MacKinnon, Fairchild, and Fritz 2007).

In this research, hypotheses 5a, 5b, 5c, 5d, 5e and 5f were developed to test moral disengagement as a mediator. Unfortunately, four hypotheses (H5a, H5b, H5c and H5d) could not be examined because the two personality constructs (extraversion and conscientiousness) had been excluded from the final model. To test the significance level of each mediating effect for those hypotheses that could be tested, the bootstrapping method with 1000 bootstrap re-sampling and bias-corrected confidence intervals was utilised (Cheung and Lau 2008; Preacher and Hayes 2008). Bootstrap samples are derived by repeatedly estimating the
coefficients with a minimum of 1000 bootstrap samples, each of which comprises $N$ cases randomly sampled with replacement from the original sample ($N=669$). Convention suggests the effect is significant if the 95% confidence interval (CI) denoted by lower and upper bounds exclude the value of 0.

In order to gauge the mediation effect of each of the hypothesized path, the total effect, indirect effect and direct effect were assessed. The total effect is the degree to which a change in the predictor variable is related to criterion variable. The indirect effect is the degree to which a change in the predictor variable produces a change in the criterion variable through the mediator variable. The direct effect is the degree to which a change in the predictor variable is directly related with the criterion variable without going through the mediator variable. The sum of direct and indirect effects equals to total effects.

To determine the degree of the mediation (partial or full mediation), this research employed suggestions made by Mathieu and Taylor (2006). If both the indirect effect and direct effect are significant, this indicates a partial mediation. If the indirect effect and total effect are significant but the direct effect is not significant, this reveals a full mediation. Table 5.13a presents the direct effect, indirect effect, total effect and the degree of mediation of the hypothesized paths.

**Table 5.13a: Degree of Mediation**

<table>
<thead>
<tr>
<th>Predictor → Mediator ← Criterion</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
<th>Degree of Mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5e: Ethical climate → MD ← ID</td>
<td>-.157**</td>
<td>-.136**</td>
<td>-.293**</td>
<td>partial</td>
</tr>
<tr>
<td>H5f: Ethical climate → MD ← OD</td>
<td>-.170**</td>
<td>-.211**</td>
<td>-.381**</td>
<td>partial</td>
</tr>
</tbody>
</table>

Note: ** p<.01; N=669; MD= Moral disengagement, ID= Interpersonal deviance and OD= Organisational deviance

Furthermore, the indirect effects of organisational ethical climate on interpersonal deviance and organisational deviance via moral disengagement are significant (indirect effect = -.136, 95% lower bootstrap CI= -.188, upper bootstrap CI= -.088, p<.01 and indirect effect = -.211, 95% lower bootstrap CI= -.264, upper bootstrap CI= -.168, p<.01), respectively. Thus, hypotheses 5e and 5f were confirmed. Moral disengagement was found to partially mediate the relationship
between organisational ethical climate and both types of deviance. Table 5.13b presents the results of hypotheses H5e and H5f.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Mediator</th>
<th>Criterion</th>
<th>Indirect Effect</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5e: Ethical climate</td>
<td>MD</td>
<td>ID</td>
<td>-.136**</td>
<td>-.188</td>
<td>-.088</td>
<td>Yes</td>
</tr>
<tr>
<td>H5f: Ethical climate</td>
<td>MD</td>
<td>OD</td>
<td>-.211**</td>
<td>-.264</td>
<td>-.168</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note: ** p<.01; N=669; MD= Moral disengagement, ID= Interpersonal deviance and OD= Organisational deviance

5.8.3 Moderating Effect of Transformational Leadership Style

According to Holmbeck (1997), a moderator variable is one that affects the relationship between two variables, so the nature of the impact of the predictor on the criterion varies according to the level or value of the moderator. Figure 5.7 illustrates the interaction of the moderator variable with the predictor variable in such a way as to have an impact on the level of the dependent variable. In this research, transformational leadership style is hypothesized (hypotheses 6a and 6b) as a moderator variable.

Figure 5.7: Illustration of the Moderator Variable

Hierarchical regression (Cohen and Cohen 1983) was used to test the moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal as well as organisational deviance. Hierarchical regression is advocated as a more appropriate method for determining whether a variable has a moderating effect on the relationship between two other
variables (Baron and Kenny 1986). This method of analysis is used to determine what proportion of variance in a particular variable is explained by other variables when these variables are entered into the regression analysis in a certain order and whether these proportions are significantly greater than would be expected by chance (Cramer 2003).

In applying this analysis, all predictors need to be standardised to mitigate problem of multicollinearity (Aiken and West 1991). The moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal and organisational deviance were assessed separately.

To determine whether the moderator effect is significant, a three step hierarchical regression was conducted. In the first step, the effect of independent variable (moral disengagement) was estimated. In the second step, the moderator variable (transformational leadership style) was entered to gauge whether the moderator had a significant direct impact on the dependent variable (interpersonal deviance). In the final step, the interaction terms (moral disengagement*transformational leadership style) were entered to show the additional variance explained.

For a moderator effect to be present, the final step (step three) must show a significant $R^2$ increase with a significant F-change value. Further, the beta coefficient ($\beta$) was used to evaluate the contribution of each of the predictor variables. In the case where a significant moderating effect is present, a technique suggested by Aiken and West (1991) to generate plots for each interaction was applied to show the effect of the moderator in the relationship between the predictor and criterion variable.

The same procedure was repeated in testing the moderating effect of transformational leadership style on the relationship between moral disengagement and organisational deviance.
Table 5.13c: Moderating Effect of Transformational Leadership Style on the Relationship between Moral Disengagement and Interpersonal Deviance

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>Standardised coefficient β</th>
<th>Hypothesis 6a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>1</td>
<td>Moral disengagement (MD)</td>
<td>.411***</td>
<td>.403***</td>
</tr>
<tr>
<td>2</td>
<td>Transformational leadership style (TL)</td>
<td>-.076*</td>
<td>-.095**</td>
</tr>
<tr>
<td>3</td>
<td>MD*TL</td>
<td></td>
<td>-.136***</td>
</tr>
</tbody>
</table>

R² | .169 | .175 | .193 |
ΔR² | .169*** | .006* | .018*** |
FΔ | 135.916*** | 4.584* | 14.818*** |

Note:*p <.05; **p <.01; *** p <.001

Table 5.13d: Moderating Effect of Transformational Leadership Style on the Relationship between Moral Disengagement and Organisational Deviance

<table>
<thead>
<tr>
<th>Step</th>
<th>Variables</th>
<th>Standardised coefficient β</th>
<th>Hypothesis 6b</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>1</td>
<td>Moral disengagement (MD)</td>
<td>.364***</td>
<td>.365***</td>
</tr>
<tr>
<td>2</td>
<td>Transformational leadership style (TL)</td>
<td>.001</td>
<td>-.003</td>
</tr>
<tr>
<td>3</td>
<td>MD*TL</td>
<td></td>
<td>-.029</td>
</tr>
</tbody>
</table>

R² | .132 | .130 | .130 |
ΔR² | .133*** | .000 | .001 |
FΔ | 102.188*** | .001 | .617 |

Note:*p <.05; **p <.01; *** p <.001

Table 5.13c and Table 5.13d present the results of the moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal as well as organisational deviance. The results show a statistical significance on the moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal deviance (β = -.136, t-value = -3.849, p <.001). Hypothesis 6a is supported. On the other hand, the moderating effect of transformational leadership style on the relationship between moral disengagement and organisational deviance is not significant (β = -.029, t-value = -.785, p = .433). Thus, hypothesis 6b is not supported.
The significant moderating effect of transformational leadership on the relationship between moral disengagement and interpersonal deviance was further evaluated by using a graph (Figure 5.7a). Based on the figure, there was a positive relationship between moral disengagement and interpersonal deviance. However, the rate of change was greater for the low transformational leadership group compare to the high transformational leadership group. In other words, high transformational leadership style provides a less profound effect on the relationship between moral disengagement and interpersonal deviance. Transformational leadership style is found to constrain or moderate the relationship between moral disengagement and interpersonal deviance. Thus, hypothesis 6a is supported.

Figure 5.7a: Moderating Effect of Transformational Leadership Style on the Relationship between Moral Disengagement and Interpersonal Deviance

In further effort to extend the body of knowledge, a more recent approach in analysing the moderating effect (Marsh, Wen, and Hau 2004) using AMOS was applied as an alternative analysis. The unconstrained approach introduced by Marsh et al. (2004) was applied to test the moderating effect of transformational leadership style on the relationship between moral disengagement and
interpersonal as well as organisational deviance. This method is claimed to be the easiest method to apply and could estimate the nonlinear effects without bias (Marsh, Wen, and Hau 2004). Moreover, according to Bagozzi , Baumgartner and Yi (1992), when variables are measured as continuous it is preferable to model moderated variable effects as multiplicative interactions compared to multi-group analysis in order to retain the full information contained in continuous variables.

Following the unconstrained approach, the moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal as well as organisational deviance could not be measured directly. The first step is to standardise or center the indicator. This was done by subtracting a measured variable from its respective mean and the result was then divided by the standard deviation of that measured variable. Having done this, the product of the centered indicator was then calculated and used as indicators of the latent interaction term. Figure 5.8 illustrates the process.

![Diagram](image-url)

**Figure 5.8: Model of Products Indicator for the Interaction Construct**

An examination of goodness-of-fit indices indicates that the hypothesized moderating model (Figure 5.8a) fit the data adequately, even though the chi-square was significant ($\chi^2 = 188.542$, df= 72, $p=.000$, Bollen-Stine Bootstrap = .018). The GFI is .961, AGFI=.942, NFI=.973, CFI=.983, TLI=.979, RMSEA =.049 and ECVI=.381.
In order to further confirm that the hypothesized moderating model (Figure 5.8a) was the best model, model comparison was carried out. A goodness-of-fit index of a null model, which assumes that all variables are uncorrelated, was used as a basis for comparison in assessing the model fit. The results reported in Table 5.13e shows that the null model (M0) had a poor fit to the data. The chi-square is significant ($\chi^2 = 6987.552$, df = 91, $p=.000$). Further, the GFI is .315, AGFI =.209, NFI=.000, CFI=.000, TLI=.000, RMSEA= .337 and ECVI = 10.502.

The results of the null model were then compared with the alternative direct effects model (M1) which only included the direct effects from the moral disengagement construct to both types of deviance. All other paths were set to zero. The direct effects model has a poor fit ($\chi^2 = 216.553$, df = 75, $p=.000$, Bollen-Stine Bootstrap =.006). The GFI=.954, AGFI=.936, NFI=.969, CFI= .979, TLI=.975, RMSEA=.053 and ECVI =.414. Against the null model (M0), the direct effects model (M1) shows a significant improvement in the goodness-of-fit indices with the change in chi-square ($\Delta \chi^2$) significant at $p<0.001$ (Table 5.13e). Thus, the direct effects model was a better-fit model compared to the null model.

Finally, the direct effects model was then compared with the hypothesized moderating model (M2/Figure 5.8a). When contrasted with the hypothesized moderating model, the hypothesized moderating model provided a significant change in chi-square ($\Delta \chi^2$) at $p<0.001$. Furthermore, the hypothesized moderating model also had better goodness-of-fit indices including a lower ECVI value. Thus, the hypothesized moderating model was concluded as the best-fit model and was used to test the moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal as well as organisational deviance.
Figure 5.8a: The Hypothesized Moderating Model of Transformational Leadership Style (M2)
Table 5.13e: Fit Indices and Comparisons of Alternative Models: Moderating Test of Transformational Leadership Style

<table>
<thead>
<tr>
<th>Models</th>
<th>Type</th>
<th>X²</th>
<th>df</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>ECVI</th>
<th>ΔX²(df)</th>
<th>Sig</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Null Model</td>
<td>M0</td>
<td>6987.552</td>
<td>91</td>
<td>.315</td>
<td>.209</td>
<td>.000</td>
<td>.000</td>
<td>.337</td>
<td>10.502</td>
<td></td>
<td></td>
<td></td>
<td>M0-M1</td>
</tr>
<tr>
<td>Direct effects model</td>
<td>M1</td>
<td>216.553</td>
<td>75</td>
<td>.954</td>
<td>.936</td>
<td>.969</td>
<td>.979</td>
<td>.975</td>
<td>.053</td>
<td>.414</td>
<td>6770 (16)***</td>
<td>***</td>
<td>M0-M1</td>
</tr>
<tr>
<td>Hypothesized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>M1-M2</td>
</tr>
<tr>
<td>moderating model</td>
<td>M2</td>
<td>188.54</td>
<td>72</td>
<td>.961</td>
<td>.942</td>
<td>.973</td>
<td>.983</td>
<td>.979</td>
<td>.049</td>
<td>.381</td>
<td>28 (3)***</td>
<td>***</td>
<td>M1-M2</td>
</tr>
</tbody>
</table>

Note: ***p<0.001
Based on Figure 5.8a and Table 5.13f, H6a is supported. The standardised estimates for this hypothesis is significant ($\beta = -.12; p < .01$). However, hypothesis 6b is not supported ($\beta = -.02; p = .572$). Therefore, transformational leadership style is found to have significant moderating effect on the relationship between moral disengagement and interpersonal deviance but not organisational deviance. To conclude, both approaches (hierarchical regression and AMOS) provide similar results, which support only hypothesis 6a.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Moderator</th>
<th>Criterion</th>
<th>Standardised Estimates</th>
<th>z-value</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6a: MD</td>
<td>TL</td>
<td>ID</td>
<td>-.12</td>
<td>-3.004**</td>
<td>Yes</td>
</tr>
<tr>
<td>H6b: MD</td>
<td>TL</td>
<td>OD</td>
<td>-.02</td>
<td>-.566</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: **p<0.01; N=669; MD= Moral disengagement, TL= Transformational leadership style, ID= Interpersonal deviance, OD= Organisational deviance

5.9 Summary of Hypotheses Testing

In total fourteen hypothesized relationships are tested in this research. The results are found to support seven of the hypotheses. Three hypotheses (H1a, H1b and H6b) were not supported. In addition, four hypotheses (H5a, H5b, H5c and H5d) could not be examined because the two personality constructs were excluded from the final model. Table 5.14 summarises the results. The implications of these results are discussed further in the next chapter.
<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Result</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedents of moral disengagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a Extraversion is negatively associated with moral disengagement.</td>
<td>Not supported</td>
<td></td>
</tr>
<tr>
<td>H1b Conscientiousness is negatively associated with moral disengagement.</td>
<td>Not supported</td>
<td></td>
</tr>
<tr>
<td>H2 Organisational ethical climate is negatively associated with moral disengagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>Outcomes of moral disengagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H3a Moral disengagement is positively associated with interpersonal deviance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H3b Moral disengagement is positively associated with organisational deviance</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H4 Interpersonal deviance is positively associated with organisational deviance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>The mediating effect of moral disengagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5a Moral disengagement mediates the relationship between extraversion and interpersonal deviance.</td>
<td>Could not be examined</td>
<td></td>
</tr>
<tr>
<td>H5b Moral disengagement mediates the relationship between extraversion and organisational deviance.</td>
<td>Could not be examined</td>
<td></td>
</tr>
<tr>
<td>H5c Moral disengagement mediates the relationship between conscientiousness and interpersonal deviance.</td>
<td>Could not be examined</td>
<td></td>
</tr>
<tr>
<td>H5d Moral disengagement mediates the relationship between conscientiousness and organisational deviance.</td>
<td>Could not be examined</td>
<td></td>
</tr>
<tr>
<td>H5e Moral disengagement mediates the relationship between organisational ethical climate and interpersonal deviance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H5f Moral disengagement mediates the relationship between organisational ethical climate and organisational deviance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>The moderating effect of transformational leadership style</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H6a Transformational leadership style moderates the relationship between moral disengagement and interpersonal deviance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H6b Transformational leadership style moderates the relationship between moral disengagement and organisational deviance.</td>
<td>Not supported</td>
<td></td>
</tr>
</tbody>
</table>
5.10 Chapter Summary

In this research, data analysis was carried out in two phases. The first phase was concerned with a preliminary analysis of the data. This process is important in order to ensure that the data meet the basic assumptions in using SEM. In general, the characteristics of the data met the univariate and multivariate distributional assumptions underlying SEM testing of research hypotheses.

In the second phase, the two stages of SEM were applied. The first stage involved the establishment of the measurement models for each of the latent variables. Having confirmed to the uni-dimensionality, reliability and validity, the next action was to perform the second stage of SEM (structural model) to test hypotheses developed in Chapter Three.

In the second stage, the initial hypothesized model was tested and compared with several models in an attempt to achieve the best-fit model. After achieving the best parsimonious model, hypotheses testing were carried out. The hypotheses testing were separated into three parts. The first part was to test the antecedents and outcomes of moral disengagement. The second part was to test the mediating effect of moral disengagement. All hypothesized relationships in both parts were analysed using AMOS.

The final part was to test the moderating effect of transformational leadership style on the relationship between moral disengagement and interpersonal as well as organisational deviance. Here, the first approach was to utilise hierarchical regression as this approach is claimed to be the most appropriate approach to test the moderating effect (Baron and Kenny 1986). In addition, this research provides an alternative analysis utilising a more recent approach suggested by Marsh and colleague (2004) using AMOS.
The next chapter discusses the above results in detail in an attempt to achieve the objectives of this research, discusses the limitation of the study, make conclusions and recommendations for future research and note theoretical and practical implication of the findings.
CHAPTER 6: DISCUSSION, IMPLICATIONS AND CONCLUSIONS

6.1 Introduction

This final chapter discusses the findings derived in Chapter Five as well as to present the implications and conclusions from this doctoral research. This chapter is divided into seven sections. Following this section, the second section provides an overview of the research. The third section presents the discussion of the findings. The fourth section consists of theoretical, methodological and managerial implications of this doctoral research. Section five highlights the limitations of this research. The signposts for future research are suggested in section six and a brief conclusion ends this chapter.

6.2 An Overview of the Doctoral Research

The concept of moral disengagement is proposed and developed as an extension of social cognitive theory (Bandura et al. 1996; Bandura 1999; Bandura et al. 2001; Bandura 2002). The eight interrelated mechanisms of moral disengagement may act as an effective strategy in cognitively reframing an individual’s detrimental conduct so that an individual is able to perform such conduct in an acceptable moral light (Bandura et al. 1996; Bandura 1999; Bandura et al. 2001; Bandura 2002; Detert, Trevino, and Sweitzer 2008; McAlister, Bandura, and Owen 2006; Moore 2008a). In short, moral disengagement may reduce the rationalization that people use to protect themselves from the consequences of their inhumane action and the self-condemnations it may impose (Bandura et al. 1996; Bandura 1999; Bandura et al. 2001; Bandura 2002; Detert, Trevino, and Sweitzer 2008; Jackson and Gaertner 2010; McAlister, Bandura, and Owen 2006; Moore 2008a; Osofsky, Bandura, and Zimbardo 2005; White, Bandura, and Bero 2009).
Previously, moral disengagement was applied in investigating issues such as aggression in children (Bandura, Underwood, and Fromson 1975; Bandura et al. 1996; Bandura et al. 2001), violence towards non-human animals (Vollum, Buffington-Vollum, and Longmire 2004), bullying among adolescents (Hymel, Rocke-Henderson, and Bonanno 2005; Turner 2008) and decision to support military action (Aquino et al. 2007; Jackson and Gaertner 2010; McAlister 2000; McAlister, Bandura, and Owen 2006).

However, recently, moral disengagement has been applied in investigating several issues in organisational contexts. For example, moral disengagement is found to be related to unethical decision making (Detert, Trevino, and Sweitzer 2008) and unethical work behaviour (Barsky et al. 2006; Barsky 2008, 2011). Moral disengagement is also claimed to facilitate organisational corruption (Moore 2008a), utilised by computer hackers to justify their actions (Rogers 2001; Young, Zhang, and Prybutok 2007), used by industries to mitigate moral consequences of producing products which are harmful to human health (White, Bandura, and Bero 2009) and enlisted in the execution process (Osofsky, Bandura, and Zimbardo 2005).

The three general objectives of this research were: 1) to investigate the antecedents and outcomes of moral disengagement, 2) to examine the mediating role of moral disengagement in the relationship between the antecedent factors and workplace deviance (interpersonal and organisational deviance) and 3) to examine the moderating role of transformational leadership style in the relationship between moral disengagement and workplace deviance (interpersonal and organisational deviance). In view of these objectives, a theoretical model was developed based on three main theories: social cognitive theory, social exchange theory and transformational leadership theory. Two personality traits (extraversion and conscientiousness) and organisational ethical climate were chosen as the antecedents of moral disengagement. Interpersonal as well as organisational deviance were posited to be the outcomes of moral disengagement. Interpersonal deviance was hypothesized to be associated with organisational deviance. Finally, transformational leadership was posited to moderate the relationship between moral disengagement and both types of deviance.
The theoretical model was then used as a framework to test fourteen hypotheses in an attempt to answer the following research questions:

1. Is moral disengagement of employees in manufacturing companies driven by their personality traits (extraversion and conscientiousness) and organisational ethical climate?
2. Is moral disengagement related to employees’ deviant behaviours?
3. Does moral disengagement mediate the relationship between the antecedent factors and workplace deviance?
4. Does transformational leadership style moderate the relationship between moral disengagement and workplace deviance?

6.3 Discussion of the Findings

6.3.1 Antecedents and Outcomes of Moral Disengagement

Table 6.1: Hypotheses and Summary of Results for the Antecedents and Outcomes of Moral Disengagement

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antecedents of moral disengagement</td>
<td></td>
</tr>
<tr>
<td>H1a Extraversion is negatively associated with moral disengagement.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1b Conscientiousness is negatively associated with moral disengagement.</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2 Organisational ethical climate is negatively associated with moral disengagement.</td>
<td>Supported</td>
</tr>
<tr>
<td>Outcomes of moral disengagement</td>
<td></td>
</tr>
<tr>
<td>H3a Moral disengagement is positively associated with interpersonal deviance.</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b Moral disengagement is positively associated with organisational deviance</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Interpersonal deviance is positively associated with organisational deviance.</td>
<td>Supported</td>
</tr>
</tbody>
</table>

There were six hypotheses developed to test the antecedents and outcomes of moral disengagement. These hypotheses and summary of the results are depicted in Table 6.1. Based on the results, only organisational ethical climate was found to be negative and significantly associated with moral disengagement.
Findings from this research failed to support the hypothesized relationship between the two personality traits (extraversion and conscientiousness) with moral disengagement. In fact, these two personality traits were removed from the hypothesized model in the process of determining the best-fit model as has been explained in Chapter Five. Therefore, only organisational ethical climate could be claimed as an antecedent of moral disengagement. Nevertheless, the results confirmed the hypothesized positive relationship between moral disengagement and both types of deviance as in Table 6.1. Also, interpersonal deviance was significantly associated with organisational deviance.

Overall, the results appeared to partly support the concept of triadic reciprocity in social cognitive theory which views that behaviour, cognitive and other personal factors, and environmental influences all operate interactively as determinants of each other (Bandura 1986). From the perspective of triadic reciprocity, human functioning is viewed as a result of interaction of personal, behavioural, and environmental influences. Accordingly, in this research, organisational ethical climate, which represented the environmental influence, was found to be associated with the cognitive aspect, namely, moral disengagement that in turn, leads to deviant workplace behaviour (interpersonal and organisational deviance). Surprisingly, the two personality traits, which represented other personal factors in triadic reciprocity, were found to be not significantly related to moral disengagement. In other words, the interactions of personal, behavioural and environmental influences may, in fact be the case, but using a broad spectrum of personality, extraversion and conscientiousness did not capture this dimension. This could be related to the integration of so many personality traits into five factors and that the meaning of extraversion and conscientiousness may be different when experienced within the Malaysian culture. The next section addresses the issue of the non-significant relationships between the two personality traits (extraversion and conscientiousness) with moral disengagement in more detail.
6.3.1.1 Antecedents of Moral Disengagement

H1a: Extraversion is negatively associated with moral disengagement.
H1b: Conscientiousness is negatively associated with moral disengagement.

Trait psychology approach is a common approach applied in personality research. For instance, in industrial, organisational and educational psychology, personality traits are found to strongly predict individuals’ motivation, performance, advancement and attitudes (Barrick, Mount, and Judge 2001; Hough 1992; Judge, Heller, and Mount 2002; Ones et al. 2007; Poropat 2009). This approach views that culture as a variable is implicitly outside of and differs from an individual personality (Church and Lonner 1998). Accordingly, in this research, personality was defined according to the trait approach, which establishes universal laws for describing and predicting an individual’s personality (McCrae and Allik 2002). Church (2000,p.653) describes the trait psychology approach as:

‘Human mind and its processes are essentially the same everywhere, despite cultural differences in content and context, which in turn leads to some optimism about the possibility of identifying universal personality dimensions and processes’.

However, it is important to note that there are contradictory views regarding culture and personality in the literature (Hofstede 1997; Schein 1985). For example, Hofstede (1997) with his *programming of the mind description of culture* and Schein’s culture (1985) as *produced by a group for a group and valid enough to be handed down generations* would suggest that although the human mind may or may not have the same processing capabilities, the meaning encapsulated within personality behaviours may be strongly influenced by culture. Schein mentioned (2004,p.8):

‘One can view personality and character as the accumulation of cultural learning that an individual has experienced in the family, the peer group, the school, the community and the
occupation. In this sense, culture is within us as individuals and yet constantly evolving as we join and create new groups that eventually creates new cultures.’

Notwithstanding the possibility of these issues, this research applied the five-factor model (FFM) (Burger 2008; Costa and McCrae 1992a; Digman 1990; Goldberg 1992) as a framework to measure the two selected personality traits. The primary reason is that the viability of this approach is highlighted in the literature by the fact that the FFM dimensions of personality are proposed as universally replicable across cultures (De Raad et al. 1998; Dilchert et al. 2006; Mastor, Jin, and Cooper 2000; McCrae and Costa 1997; McCrae and Allik 2002; Paunonen and Ashton 1998). Furthermore, FFM personality construct is claimed to represent an adequate structure for describing the basic dimensions of personality (Digman and Takemoto-Chock 1981; Digman and Inouye 1986; Goldberg 1990; McCrae and Costa 1985, 1987; Saucier and Goldberg 2003). Despite the given merits of applying FFM, this doctoral research also noted on the possibility of culture as an influencer of personality (Hofstede 1997; Schein 1985) as has been discussed earlier.

Literature suggests that extraversion and conscientiousness are important traits in predicting success across jobs (Barrick and Mount 1991; Barrick, Mount, and Judge 2001; Hough 1992; Salgado 1997; Tett, Jackson, and Rothstein 1991). Therefore, it was expected that these two traits were strongly manifested among employees in the manufacturing companies in Malaysia. Surprisingly, this was found not to be the case. Extraversion and conscientiousness were not strongly manifested among employees in the manufacturing companies in Malaysia. This was demonstrated by the mean of 3.5 and 3.6 assessed on a 6-point Likert scale for extraversion and conscientiousness, respectively. Hence, the attempt to identify the two personality traits following the trait psychology approach (FFM dimensions) in this doctoral research may not be the best option to be applied as evidenced by the findings from this research.
The above findings may be influenced by the collectivistic (Abdullah 1996; Hofstede and Hofstede 2005) and high power distance (Hofstede 1991) cultures in Malaysia. Collectivism and power distance are found to be positively and highly correlated ($r=.67$) (Hofstede 1980, 1997). Miller (1999) views that culture is constitutive of personality. Collectivist cultures reflects the subordination of personal goals to group goals (Hofstede 1991; Radakrishnan and Chan 1997), a sense of harmony and interdependence, and concern for others (Hofstede 1991). The major ethnic groups in Malaysia are Malay, Chinese and Indian. Malays constituted 82 percent of the respondents in this research and literature suggests that Malays are a collectivist community with collectivist minds (Abdullah 1996; Hofstede 1980; House et al. 2004). The influence of collectivist culture was further confirmed due to the general agreement that although Malaysian society is a multicultural mix, Malaysian workers share certain common and distinctive workplace values (Abdullah 1996).

Malaysia is also considered as a country having a high degree of high power distance (Hofstede 1980; Lim 2001). According to Hofstede (1985,p.348), power distance is defined as ‘the extent to which the members of a society accept that power in institutions and organisations is distributed unequally’. Therefore, in Malaysia, individuals tend to value tall hierarchies, which means that they are more likely to show respect for superiors and expect them to take the lead (Abdullah 1996). In general, high power distance societies are more likely to accept and be comfortable with structured authority relationships than low power distance societies (Schermerhorn and Bond 1997). Singelis et al. (1995) refer to the combination of collectivism and high power distance as vertical collectivism which reflects a culture within which one perceives the self as part of a group while accepting power or status inequalities within the group.

Therefore, Malaysian culture as described above, which is in contradiction with the cultural dimension of individualism in the trait psychology approach (Markus, Kitayama, and Heiman 1996; Markus and Kitayama 1998) could be a major plausible reason behind the findings of this research. The differences in culture,
perhaps, lead to different perceptions in assessing personality traits among Malaysians as compared to their western counterparts. Likewise, Markus and Kitayama (1991) mention that the divergent views about the self could influence various aspects of cognition, emotion and motivation among individuals. Classically, idioms were used to describe the influence of culture in a society. For instance, in the individualistic culture, *the squeaky wheel gets the grease*, however, in the collectivistic culture; the *nail that stands out gets pounded down*. These idioms may act as a basis to describe the plausible influence of culture on the findings of this research.

According to Markus and Kitayama (1998), in many Asian countries, an individual personality is built on the basis of the person as an interdependent being. In other words, culture and personality are viewed as mutually constitutive of and inter-related with each other (Markus, Kitayama, and Heiman 1996; Miller 1997; Shweder and Sullivan 1993). In a similar vein, Schimmack et al. (2002) argue that culture can influence the personality of their members which then influence their member’s well-being. A more classic comment regarding the interdependence of culture and personality is given by Geertz (1975,p.48):

‘The western conception of the person as a bounded, unique, more or less integrated motivational and cognitive universe, a dynamic centre of awareness, emotion, judgement, and action organized into a distinctive whole and set contrastively both against other such wholes and again a social and natural background is....a rather peculiar idea within the context of the world’s cultures.’

As a result, in Asian countries, personality is best understood as behaviour of a person in relationship with others in a particular social context (Markus and Kitayama 1998). Therefore, personality and culture are most productively to be analysed together as a mutual constitution (Kitayama et al. 1997). Having similar arguments, Triandis (1995,p.74) asserts ‘personality is less evident in collectivist
cultures than it is in individualistic cultures, because the situation is such a powerful determinant of social behaviour’. In fact, behaviour of individuals in collectivistic cultures is found to be cross-situationally consistent for all or most traits (Markus and Kitayama 1998; Triandis 1995). Moreover, Triandis (2001) asserts that personality in a collectivist culture is flexible and as such, the personality traits are not clear. Thus, Bandura’s (1986) comment about the interaction between behaviour, environmental influences and personal factors, may be the case in western culture. The personal factor (personality) in Malaysian culture cannot be easily separated and certainly not for quantitative measurement within the boundaries of this study.

Extraverts could be described as assertive and expressive and as such may choose to interact intensively with others. On the surface, these characteristics of extraverts appear to fit in with collectivistic cultures which are concerned with sense of harmony, interdependence and concern for others (Hofstede 1991). However, one should realise the important fact that collectivism is associated with close interactions only with in-groups members (McCrae 2001). Accordingly, Triandis et al. (1988,p.324) comment, ‘people in individualist cultures (who) are very good at meeting outsiders, forming new in-groups, and getting along with new people’. Therefore, empirically, Europeans and Americans are found to generally score higher in extraversion than Asians and Africans (McCrae and Terracciano 2005). Furthermore, power distance is found to be negatively related to extraversion (McCrae 2001; McCrae and Terracciano 2005).

Although Malaysia has been ranked among the highest scoring countries for the conscientiousness construct in a study of personality profiles of cultures using college students (McCrae and Terracciano 2005), the mean value of conscientiousness among the employees in the current research failed to reflect this fact. Differences in the sample selection and the use of observer ratings in assessing personality in the study by McCrae and Terracciano (2005) may have contributed to the divergent in findings from the current research. Nonetheless, the perceptions that collectivist and high power distance cultures lead to high levels
of conscientiousness are still inconclusive because another study found that on average, the level of conscientiousness among Malaysians do not obviously differ from Japanese and Norwegians (McCrae 2001). In addition, Japan is reported to have a low score for conscientiousness despite the perception of having collectivist cultures and industrious members in the society (McCrae and Terracciano 2005).

From another perspective, findings from this research provided further evidence to support that FFM is not wholly applicable in the non-western contexts (Cheung et al. 2001; Cheung 2004; Katigbak et al. 2002). Extraversion and conscientiousness were less evidenced in the current sample. However, conclusions must be drawn with caution because only two personality traits following the FFM framework were examined in the current research. Nevertheless, the findings supported the possibility of personality traits to differ partly along the cultural lines (Church 2000; Katigbak et al. 2002; McCrae 2000). Recently, Cheung et al. (1996) developed the Chinese Personality Assessment Inventory (CPAI) and concluded that CPAI measures constructs similar to the FFM including one additional dimension of personality, labelled Interpersonal Relatedness. This additional dimension is described as being a measure of interdependence, which has an important role in Chinese personality and is not measured by the FFM (Cheung et al. 2001; Cheung et al. 2003).

Another intriguing finding in this research was the non-significant relationship between the two personality traits and moral disengagement, given previous researches which follow the trait psychology approach and use western data, found these traits to influence self-direction (Stewart, Carson, and Cardy 1996), self-leadership (Williams 1997) and various work variables such as work performance (Barrick and Mount 1991) and job satisfaction (Judge, Heller, and Mount 2002). The connection to moral disengagement theory is the self-regulatory aspect, which resonates with self-direction and self-leadership.

A plausible reason for the non-significant relationship may be due to two basic concepts in the culture of the Malays in Malaysia. As mentioned earlier, the
Malays constituted the majority of the respondents (82 percent) in this research. First, is the concept of Adab (Abdullah 1996), which refers to ‘code of personal conduct, which is expected of an individual in his or her relationship with others, and it denotes individual’s responsibility to be courteous in words, generous in deeds, and sincere in actions to all people at all times’ (Abdullah 1996,p.22-23). To the Malays, it is important to practice the Adab behaviour such as being helpful, polite, considerate and courteous because such behaviour indicates their good breeding and a dignified control in their physical and non-verbal behaviour (Mastor, Jin, and Cooper 2000; Zawawi 2008). Consequently, Malays are particularly concerned about the coherence of their words or actions with the expected social norms (Goddard 1997).

The second basic concept in the Malay culture is the social emotion of Malu (shame, propriety). Malays normally consider a sense of Malu as an element of basic goodness and virtue in society (Mastor, Jin, and Cooper 2000). According to Swift (1965,p.110), Malu refers to ‘hypersensitiveness to what other people are thinking about oneself’. In line with this definition, in a more recent studies, Malays are reported to score higher on self-consciousness than other ethnic groups (Abdullah 1993; McCrae and Terracciano 2005). Thus, it is common for the Malays to ensure that their decisions and actions are aligned with the societal expectations. Therefore, extraversion might have used interpersonal skills and relationships to prevent moral engagement and encourage moral disengagement. In this sense, extraversion as a personality trait could be a two edged phenomenon. It can be used for the moral good but also can be used for moral bad.

In addition to the above two basic concepts originating among the Malays, as a multi-cultural country, the findings may also be influenced by the concept of face; a concept closely related to the collectivist culture, particularly the Chinese. Literature suggests that in general, Malaysians set great store by the Confucian values of collectivism, filial piety, harmonious relationships and importance of giving face (Mansor and Ali 1998). Goffman (1955,p.213) defines face as ‘the positive social value a person effectively claims for himself by the line others assume he has
taken during a particular contact. *Face* is an image of self-delineated in terms of approved social attributes’. The importance of *face* in the collectivist cultures is emphasized in the literature (Ho 1976; Triandis 2001). According to Ho (1976), it is not a necessity for an individual to strive to gain *face*, however, losing *face* is a serious matter which sometimes affect an individual’s ability to function effectively in society. If an individual deviates from the expected behaviour, there is loss of face which could affect that individual as well as the whole in-group (Triandis 2001).

As a result, individuals in collectivist cultures view themselves in terms of social connections and group harmony (Spector et al. 2004). In order to be effective in a collectivist society, an individual must cultivate relationships with colleagues at all levels and must express a high level of sensitivity. In a collectivist culture individuals have high tendency to behave in accordance to the social norms. For instance, in a strong ethical climate, the organisational norms would encourage moral engagement but in a weak or negative ethical climate individuals might be at risk of self-regulating themselves to meet the organisation’s (disengaged) norms.

Taken together, the non-significant relationship between the two personality traits and moral disengagement in this research suggested that employees in the manufacturing companies in Malaysia preferred to apply social standards in their self-monitoring orientation by behaving in ways that seem socially appropriate for that situation (Snyder 1987) and, thus, demonstrating low levels of self-directedness and self-regulation (Bandura 1991). Moreover, in a high power distance country such as Malaysia, employees expect to follow instructions from their superiors. Decision authority tends to be centralised and left to the superiors. This in itself would not prevent moral disengagement but it would only happen when the superiors used their position and the power of their authority for morally suspect acts. Furthermore, employees especially the Malays view work as a necessity for survival (Ahmad 2001). In such a situation, perhaps, relationships between employees’ personality traits and moral disengagement may not be obvious or less relevant because decisions to morally disengage at the workplace
may be more risky as they could lose their jobs; the main source of their income, which consequently could affect their survival.

\[ H2: \text{Organisational ethical climate is negatively associated with moral disengagement.} \]

As in Table 6.1, organizational ethical climate as negatively associated with moral disengagement was supported, providing opportunities to expand theories developed in the west to the Malaysian context.

Victor and Cullen (1988,p.101) define ethical climate as ‘the prevailing perceptions of typical organisational practices and procedures that have ethical content’. Ethical climate theory argues that the types of ethical climate discovered in organisation depend on the nature of the organisational units and their contexts (Victor and Cullen 1988). Thus, different organisations are expected to have different prevailing perceptions of ethical climates. In this research, organisational ethical climate is concerned with employees’ perceptions of those practices, procedures, norms and values that govern ethical decision in their organisations. Similarly, Martin and Cullen (2006) suggest that employees perceive work climate to be built by organisational norms and conventions that exist within the structure and procedures of the organisation. Moreover, Litwin and Stringer (1968) concluded that members of organisations could provide an accurate perception of their organisation’s ethical climate through an appropriate questionnaire. This conclusion formed an assumption for this research.

Consistent with the claim that fostering a positive ethical climate may encourage sound business practice (Joyner and Payne 2002; Key and Popkin 1998; Mulki, Jaramillo, and Locander 2008), and with it moral engagement, hypothesis 2 was confirmed. Ethical climate was found to have a negative significant relationship with moral disengagement. This negative significant relationship was similar to previous studies but from different perspectives. For instance, VanSandt et al. (2006) conclude that ethical work climate is a main predictor of individual moral awareness. They define moral awareness as ‘the degree to which an individual
recognizes the aspects of a situation that carry a reasonable likelihood of moral wrong or harm to individuals, classes of people, or other entities (human or non-human, living or reifications)” (VanSandt, Shepard, and Zappe 2006, p. 414). Earlier, organisational ethical climate was proposed to influence ethical decision making (Wyld and Jones 1997). Two dimensions in the concept of ethical climate (caring and principled) are linked to higher levels of ethical reasoning and more ethical decision-making (Barnett and Vaicys 2000; Elm and Nichols 1993; Martin and Cullen 2006).

Also, organisational ethical climate is claimed to encourage commitment and job satisfaction among employees. This is evidenced in previous studies which found that perceptions of positive ethical climate are positively associated with employees’ job satisfaction which has been measured in variety of contexts (Deshpande 1996a; Deshpande 1996b; Okpara and Wynn 2008; Schwepker 2001) and organisational commitment (Cullen, Parboteeah, and Victor 2003; Holmgren, Hensing, and Dellve 2010; Okpara and Wynn 2008; Schwepker 2001; Weeks et al. 2006). On the other hand, when ethical climate is negative it is significantly related to organisational misbehaviour (Appelbaum, Deguire, and Lay 2005; Peterson 2002a; Vardi 2001).

Mindful of the above discussion, it is plausible to conclude that employees with positive perceptions of their organisational ethical climate are less likely to morally disengage because they probably have better awareness of moral situations, which may help them in making ethical decision. This conclusion is also aligned with previous researches, which suggest that the ethical climate of an organisation is an important factor that may influence ethical behaviour of employees (Deshpande 1996a; Victor and Cullen 1990; Wimbush and Shepard 1994).

From a theoretical perspective, the negative significant relationship in this research indicated that employees’ perceptions of their organisational ethical climate were found to have significant influence on employees’ self-regulatory
functions particularly their decisions to morally disengage. One possible explanation was that organisational ethical climate might signal required ethical standards for employees to function effectively in their organisations. In the Malaysian setting, as discussed above, there is a high level of authority structure so that the rules and norms of an ethical climate would attract compliance. Conversely, unclear, inconsistent or incompatible standards (indicative of a poor ethical climate) may hamper self-regulatory processes among employees (Baumeister and Heatherton 1996). Disruption in their self-regulatory process may encourage them to morally disengage. Likewise, Bandura (1977) proposes and demonstrates that human beings do seem to have the unique capacity to alter their own responses.
6.3.1.2 Outcomes of Moral Disengagement

Three hypotheses (H3a, H3b and H4) were developed to test the outcomes of moral disengagement (Table 6.1). The findings confirmed that moral disengagement was associated significantly with the two types of deviance. Furthermore, interpersonal deviance was found to have significant relationship with organisational deviance.

*H3a: Moral disengagement is positively associated with interpersonal deviance.*

*H3b: Moral disengagement is positively associated with organisational deviance.*

Hypotheses 3a and 3b confirmed that moral disengagement was associated with deviant workplace behaviour (interpersonal and organisational deviance). The positive relationship between moral disengagement and both types of deviance indicated that moral disengagement facilitated employees in performing deviant behaviour. These findings were found to be consistent with social cognitive theory (Bandura 1986) as has been discussed earlier (see Chapter Two).

Moral disengagement was found to have contributed to deviant behaviour. Implicitly, the results indicated that moral disengagement mechanisms, when activated, violate employees’ self-regulatory functions, which in turn, help them to obscure psychological feelings of discomfort when performing deviant acts. At this stage, deviant behaviour becomes the justified behaviour. The findings were in line with theoretical arguments on moral disengagement proposed by Bandura (1986, 1990, 1999, 2002). The positive relationship between moral disengagement and workplace deviance (interpersonal and organisational deviance) was also in line with the neutralization theory (Sykes and Matza 1957). Sykes and Matza (1957) argue that deviant acts occur whenever an individual is able to neutralize the individual perception or social perception, or both, of a norm violation by applying techniques of neutralization such as: 1) denial of responsibility; 2) denial of injury; 3) denial of the victim; 4) condemnation of condemners and 5) appeal to higher loyalties. The Malay cultural environment with structured authority relationships may have tendency to facilitate denial of responsibility. For instance, employees
may justify to themselves that they were just following orders from their superiors. Thus, at this moment, their deviant behaviours have turned to be the justified behaviours.

The findings of this research corroborated previous studies in the western context, which found that moral disengagement could foster unethical action within organisations. For instance, Moore (2008) reveals that moral disengagement leads to lower levels of moral awareness and higher levels of unethical decision-making, which, in turn, could initiate organisational corruption. A more recent study provides evidence of the relationship between moral disengagement and unethical work behaviour (Barsky 2011; Moore et al. 2012). Another study (White et al. 2009) provides evidence that moral disengagement is applied by industries to mitigate the moral consequences of producing products, which are harmful to human health, such as tobacco, lead and vinyl chloride. Further, Detert et al. (2008) found that moral disengagement is positively related to unethical decision making. Therefore, this research bridged the western/Asian divide within moral disengagement research.

\[ H4: \text{Interpersonal deviance is positively associated with organisational deviance.} \]

Nevertheless, the findings of this research also suggested that employees’ interpersonal deviance is associated with organisational deviance. The significant relationship seems to be robust across samples, measures and contexts (Aquino and Thau 2009; Tepper 2007). From a theoretical perspective, the findings revealed that social exchange and norm of reciprocity explanations of workplace deviance might apply in the Malaysian manufacturing environment. The perceived feeling of injustice by the victims of interpersonal deviance may lead them to commit behaviour that may negatively affect the workplace. The findings could also be explained by applying equity theory (Adams 1963). Equity theory proposes that individuals who perceive themselves as either under rewarded or over rewarded will experience distress, which in turn, leads to efforts to restore equity. In this research, an employee who was the victim of interpersonal deviance may find ways to restore equity by reciprocating the organisational deviance. As Sackett and
DeVore (2002, p.160) comment, ‘there is a certain poetry in behaving badly in response to some perceived injustice’. Furthermore, people may often engage in aggressive behaviour in order to improve their own affective states (Bushman, Baumeister, and Phillips 2001; Spector and Fox 2002). These studies need to be seen in the light of earlier discussion on the compliance-orientation of Malaysian culture.

6.3.2 Moral Disengagement as a Mediator

Initially there were six hypotheses (H5a, H5b, H5c, H5d, H5e and H5f) developed to test whether moral disengagement mediated the relationship between the antecedent variables and the two types of deviant behaviours (Table 6.2). However, the first four hypotheses (H5a, H5b, H5c and H5d) could not be examined because the two personality traits were removed from the final model. Therefore, only two mediation routes (H5e and H5f) were tested and the results confirmed the hypotheses. Moral disengagement was found to function as a mediator in the relationship between organisational ethical climate and interpersonal as well as organisational deviance. Although a fully mediated model was hypothesized in the initial research model, the final model demonstrated significant direct effects between organisational ethical climate and both types of deviance. The final model indicated that these substantive direct effects, which were not measured in this research, were at play in the mediated relationship.

**Table 6.2: Hypotheses and Summary of Results for the Mediating Effect of Moral Disengagement**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5a  Moral disengagement mediates the relationship between extraversion and interpersonal deviance.</td>
<td>Could not be examined</td>
</tr>
<tr>
<td>H5b  Moral disengagement mediates the relationship between extraversion and organisational deviance.</td>
<td>Could not be examined</td>
</tr>
<tr>
<td>H5c  Moral disengagement mediates the relationship between conscientiousness and interpersonal deviance.</td>
<td>Could not be examined</td>
</tr>
<tr>
<td>H5d  Moral disengagement mediates the relationship between conscientiousness and organisational deviance.</td>
<td>Could not be examined</td>
</tr>
<tr>
<td>H5e  Moral disengagement mediates the relationship between organisational ethical climate and interpersonal deviance.</td>
<td>Supported</td>
</tr>
<tr>
<td>H5f  Moral disengagement mediates the relationship</td>
<td>Supported</td>
</tr>
</tbody>
</table>
between organisational ethical climate and organisational deviance

\textbf{H5e}: Moral disengagement mediates the relationship between organisational ethical climate and interpersonal deviance.

\textbf{H5f}: Moral disengagement mediates the relationship between organisational ethical climate and organisational deviance.

Despite the findings of a partially rather than a fully mediated relationship, the findings demonstrated the importance of exerting control over one’s thoughts, feelings and behaviour as has been emphasized universally (Baumeister and Heatherton 1996; Baumeister 2005). Empirically, the findings in this research suggested that positive evaluation of ethical climate might discourage employees to be morally disengaged and therefore lead to fewer occurrences of deviant behaviours at workplace.

According to Tsahuridu and Perryer (2002) unethical conduct in organisations often needs tacit cooperation of other organisational members and reflects the values, attitudes, beliefs, and behavioural patterns defined by the organisation. Employees’ actions usually reflect that they are subject to company rules and they are influenced by role expectations of the organisation (Tsahuridu and Perryer 2002). This could be the case especially in the Malay culture. This argument may be reflected by the emerging researches examining the relationship between organisational ethical climate and dysfunctional behaviour in the literature (Appelbaum, Deguire, and Lay 2005; Peterson 2002a; Trevino, Butterfield, and McCabe 1998; Vardi 2001). For example, literature suggests that social support which results from caring climates discourage employees’ deviance (Peterson 2002a; Vardi 2001; Wimbush, Shepard, and Markham 1997). In addition, employees’ perceptions of having a caring and principled climate leads to a higher level of ethical reasoning and ethical decision-making (Barnett and Vaicys 2000; Elm and Nichols 1993).

On the other hand, the findings suggested that negative perception of organisational ethical climate might deplete the strength of employee’s self-
regulatory processes. Employees may then decide to deactivate their self-regulatory function through moral disengagement, which in turn, functions to facilitate their deviant behaviours. Thus, the evidence of mediation effect concerning the impact of ethical climate and both deviant behaviours has supported the idea that moral disengagement undermines employees’ psychological feelings of discomfort when performing deviant acts. Also, moral disengagement is a way to justify deviant conduct (Bandura et al. 1996).

This research provided evidence which highlighted the importance of moral disengagement in mediating the relationship between organisational ethical climate and workplace deviance (interpersonal and organisational deviance). Moral disengagement appeared to be a mechanism between ethical climate and workplace deviance. As mentioned earlier, empirical evidence in the literature suggests that ethical climate is negative and significantly related to organisation misbehaviour (Appelbaum, Deguire, and Lay 2005; Peterson 2002a; Vardi 2001). A more recent study confirms the association between poor organisational ethical climate and sickness/absence among employees in Sweden (Holmgren, Hensing, and Dellve 2010). Thus, one of the reasons behind the findings in the aforementioned studies could be the utilisation of moral disengagement when performing such behaviours among employees who perceived they were working in organisations with a poor ethical climate.

6.3.3 Moderating Role of Transformational Leadership

H6a: Transformational leadership style moderates the relationship between moral disengagement and interpersonal deviance.

H6b: Transformational leadership style moderates the relationship between moral disengagement and organisational deviance.

Transformational leadership represents a form of leadership in which leaders are closely engaged with followers, motivating them to perform beyond their transactional agreements (Rubin, Munz, and Brommer 2005). Hypotheses H6a and H6b were developed to test the moderating effect of transformational leadership style on the relationship between moral disengagement and the two
types of workplace deviance (Table 6.3). Hypothesis 6a was confirmed. Transformational leadership style was found to moderate the relationship between moral disengagement and interpersonal deviance. However, findings failed to support the moderating effect of transformational leadership on the relationship between moral disengagement and organisational deviance (H6b).

Table 6.3: Hypotheses and Summary of Results for the Moderating Effect of Transformational Leadership Style

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H6a  Transformational leadership style moderates the relationship</td>
<td>Supported</td>
</tr>
<tr>
<td>between moral disengagement and interpersonal deviance.</td>
<td></td>
</tr>
<tr>
<td>H6b  Transformational leadership style moderates the relationship</td>
<td>Not supported</td>
</tr>
<tr>
<td>between moral disengagement and organisational deviance.</td>
<td></td>
</tr>
</tbody>
</table>

This research revealed that transformational leadership moderated the relationship between moral disengagement and interpersonal deviance. Implicitly, the findings suggested that employees may be reluctant to deactivate their self-regulatory function when they perceived their leaders as inspiring, challenging and individually considerate, as would be the case with (morally engaged) transformational leaders. Indeed, the graph of interaction, which has been explained in Chapter Five and re-illustrated below (page 197), suggested that the tendency of moral disengagement leading to interpersonal deviance is less likely to happen under the condition of having a high level of (morally engaged) transformational leadership. Critically, this explanation needs to take into account that the influence of transformational leaders itself is value free. It is suggested that it would be possible for transformational leaders who had activated their own self-regulatory mechanism in service of moral disengagement to render employees susceptible to activities requiring their own moral disengagement.

In a more general perspective, there is evidence that leadership style is one of the predictors of subordinate performance (Bass et al. 2003; Howell and Avolio 1993). Specifically, the findings are consistent with transformational leadership theory which views that transformational leaders could positively influence ethical behaviour in organisations (Bass 1985; Burns 1978). The positive association between transformational leadership and subordinates behaviours is well
documented in the literature. For instance, three meta-analytic reviews summarise that transformational leadership dimensions have strong and consistent correlation with task performance (Fuller et al. 1996; Judge and Piccolo 2004; Lowe, Kroeck, and Sivasubramaniam 1996). It is this finding of positive task performance that gives some confidence in transformational leaders being more likely to encourage moral engagement than moral disengagement, especially if the tasks reflect a good organisational ethical climate.

![Moderating Effect of Transformational Leadership Style on the Relationship between Moral Disengagement and Interpersonal Deviance](image)

**Figure 5.7a: Moderating Effect of Transformational Leadership Style on the Relationship between Moral Disengagement and Interpersonal Deviance**

Transformational leadership style is crucial in developing and nurturing ethical behaviour in followers (Bass and Avolio 2002). Transformational leaders display idealized influence, inspirational motivation, intellectual stimulation and individualized consideration, which reflect their ethical standards and at the same time help to create a moral culture (Bass and Steidlmeier 1999), character strengths and virtues (Sosik 2006; Sosik and Cameron 2010) within their subordinates. Literature suggests that charismatic leadership is negatively related to workplace
aggression (Hepworth and Towler 2004); charisma is an important element of transformational leadership (Feinberg, Ostroff, and Warner Burke 2005; McGuire and Kennerly 2006).

Therefore, having leadership that is supportive, caring and empathetic, such as (morally engaged) transformational leadership (Bass 1998; Avolio and Bass 1999), is likely to be an effective way of influencing workplace deviance. Similarly, Daboub et al. (1995) confirm that certain leadership styles and characteristics have a moderating influence on potential unethical or illegal activity in organisations. The findings are also in line with previous research in the field of teamwork which found that transformational leadership moderates the relationship between productive reactions to conflict and bullying (Ayoko and Callan 2010). Robbins (2003, p.313) mentioned: ‘leaders establish direction by developing a vision of the future; then they align people by communicating this vision and inspiring them to overcome hurdles’. Although the findings did not support the moderating influence of transformational leadership on organisational deviance (hypothesis 6b), earlier evidence on the significant association between interpersonal and organisational deviance (hypothesis 4) may suggest that transformational leadership style may also indirectly constrain the occurrence of organisational deviance. As such, transformational leadership style, especially in the Malaysian environment would be a fruitful topic for further research.

6.4 Significant Implications of the Research

This research provided further understanding on the concept of moral disengagement. The implications of this research with regard to theoretical, methodological and managerial are presented in this section.
6.4.1 Theoretical Implications

This research provided several important implications for theory. First, the moral disengagement literature is expanded through this research, which investigated moral disengagement within the organisational context in a non-western country, namely Malaysia. Although studies regarding the outcomes of moral disengagement are emerging in the literature, it should not be assumed that findings derived using the western data could be generalised to other regions of the world such as Asia, particularly Malaysia. In addition, little is known about the antecedents of moral disengagement. Detert et al. (2008) made the first attempt to investigate the antecedents of moral disengagement in the western context. Inspired by their work, this research tested the concept of moral disengagement in Malaysia; a country with a multi-cultural society with Malays dominated 82.1 percent of respondents, followed by Indian (11.2%) and Chinese (6.7%).

Findings of this doctoral research highlighted the fact that the interaction between behaviour, organizational factors and personal factors as has been described in triadic reciprocal determinism (Bandura 1986) may be the case in western culture. In the Malaysian culture, the two personality traits that represented the personal factor, cannot be easily identified and separated. This could be due to the selection of two of the Big Five factors and rejection of the three others and this in itself is useful for indicating further research into the connection between personality (especially within an Asian culture) and moral disengagement. Differences in demographics characteristic of respondents together with collectivist and high power distance cultures that differ from the western samples may contribute to this unique finding. Besides differences in the sample selection, the current research differs from Detert’s work almost in all other aspects such as research design, analysis strategy, and antecedents as well as outcomes variables. Taken together, it is not too much to claim that this research provided a new avenue of research surrounding moral disengagement, which extends beyond the reported scope of western countries.
Secondly, an examination of the link between moral disengagement and employees’ interpersonal and organisational deviance revealed that moral disengagement could indeed contribute to both categories of deviance. To date, to the best knowledge of the author, this is the first study to empirically link moral disengagement to both types of workplace deviance (interpersonal and organisational deviance). Previous empirical work on moral disengagement clusters within the context of predicting aggression and antisocial behaviour in children and adolescents (Bandura et al. 1996; Bandura et al. 2001) and the decline in civic behaviour (Caprara and Capanna 2004). Detert et al. (2008) relates moral disengagement to unethical decision making and Moore (2008a) integrates moral disengagement in the process of organisational corruption. Also, Barsky (2011) provides evidence of the relationship between moral disengagement and unethical work behaviour. From a different perspective, Rogers (2001) relates moral disengagement to computer hacking. Aquino et al. (2007) investigate moral disengagement in relation to reactions to war and Osofsky et al. (2005) consider the role of moral disengagement in the execution process. More recently, Bunk et al. (2011) examine one of the mechanisms of moral disengagement; that is, individuals’ justification for engaging in interpersonal deviance.

Therefore, application of social cognitive theory through the concept of moral disengagement has so far been neglected in explaining workplace deviance in organisations. Based on the significant findings on the relationship between moral disengagement and both types of deviance, without doubt, this research highlighted the significant applicability of social cognitive theory (even if somewhat modified) in providing further explanation on the issue of workplace deviance in organisations. In short, this research provided additional support beyond research previously conducted and further understanding on the consequences of moral disengagement.

In addition, the effect of moral disengagement on workplace deviance was tested by separating the workplace deviance into two categories; that is, interpersonal and organisational deviance. The separability between
interpersonally and organisationally directed workplace deviance are well documented in the literature (Bennett and Robinson 2000; Robinson and Bennett 1995). Sackett and DeVore (2002) insisted that examining both types of deviance provide further understanding about the pattern of interrelationships among different forms of deviance. A moderate strength of correlation between both types of deviance in this research proved that both types of deviance were indeed different phenomena and should be investigated separately. This finding lends further support to the separability of interpersonal and organisational deviance as suggested (Bennett and Robinson 2000; Robinson and Bennett 1995) and supported (Sackett and DeVore 2002) previously. On the other hand, the finding of this research did not support the claim that interpersonal and organisational counterproductive work behaviour could not be empirically distinguished (Lee and Allen 2002). Incidences of interpersonal and organisational deviances were found to be highly correlated (Dalal 2005), and thus separability could be questioned. Therefore, although there have been suggestions to treat workplace deviances as an overall counterproductive construct, the findings of this research proved to be otherwise.

Thirdly, this research proposed individual differences of personality and organisational factors of ethical climate as the antecedents of moral disengagement. Organisational ethical climate was found to predict moral disengagement. This finding enhanced the viability of ethical climate theory in fostering ethical behaviour among employees (Deshpande 1996a; Victor and Cullen 1990). On the other hand, the evidence in this research pointed towards the inappropriateness of applying, selectively, a trait psychology approach in assessing personality traits in collectivist and high power distance countries like Malaysia. This finding is inconsistent with previous study which indicates the applicability of this approach to the Malay culture (Mastor, Jin, and Cooper 2000). Mastor et al. (2000) utilised students as the sample in their study. Perhaps the applicability of the trait psychology approach within realistic organisational contexts as demonstrated in this research led to the inconsistency in findings. Therefore, applicability of trait
psychology approach in the collectivist and high power distance country may need to be revisited.

The next theoretical implication is the understanding of how moral disengagement affects the relationship between organisational ethical climate and both types of deviance, interpersonal and organisational. The significant mediated relationship suggested that moral disengagement could partly facilitate the occurrence of workplace deviance in manufacturing companies in Malaysia. The negative relationship between organisational ethical climate and deviant behaviour has been established in the literature (Peterson 2002a). Instead of having this type of relationship, this research showed that an indirect relationship could also possibly occur via employees’ moral disengagement. Hence, organisations should be more judicious in creating their ethical climate. Failure to create a good ethical climate could somehow encourage their employees to morally disengage, which might consequently help the employees to perform deviant acts without any psychological feeling of discomfort. The mediating role of moral disengagement is also evidenced in a previous study conducted in a western country (Detert, Trevino, and Sweitzer 2008). Findings of the current research provide further evidence that moral disengagement is a transnational concept to be applied in justifying deviant acts. This is consistent with the claim that ‘people do not ordinarily engage in reprehensible conduct until they have justified to themselves the rightness of their actions’ (Bandura et al. 1996,p.335).

Finally, another theoretical implication is relating to the role of transformational leadership style. This research supported the moderating role of transformational leadership style on the relationship between organisational ethical climate and interpersonal deviance. Theoretically, this finding showed that transformational leadership style, if utilised, could help to constrain the occurrence of workplace deviance, specifically interpersonal deviance. Perhaps, this is the first study that has empirically attempted to integrate transformational leadership theory in the relationship between moral disengagement and workplace deviance. Interestingly though, transformational leadership style did not moderate the
relationship between moral disengagement and organisational deviance. This provides an opportunity to look at why individuals would be more likely to be deviant to the organisation than to each other in a social interpersonal organisational setting.

To date, there is no conclusive evidence on Malaysian leadership style in the literature. For instance, according to Gill (1998) Malaysian managers are found to be more direct, delegate less and are more transactional. On the contrary, Malaysian managers are reported to incline more towards applying transformational leadership style which described as participative and consultative styles (Govindan 2000). In a similar vein, Abdullah (1992) asserts that the use of stronger tactics in the Malaysian context is not plausible as Malaysians are generally not in favour of overt displays of anger and aggressive behaviour. Nevertheless, this research supports the utilization of transformational leadership style and provides a foundation to highlight the importance of applying this style in controlling the occurrence of interpersonal deviance in Malaysia.

6.4.2 Methodological Implications

This research adapted Mini-IPIP (Donnellan et al. 2006), a short measure of the Big Five factors of personality in assessing the two selected personality traits. Despite being claimed as a successful representative of the longer version of FFM measures (Cooper, Smillie, and Corr 2010; Donnellan et al. 2006), findings in this research trigger some doubt on the applicability and suitability of adapting this measure in non-western countries.

A review of literature failed to detect a study that has utilised Mini-IPIP in any Asian countries. Thus, a comparison of results is not possible. Perhaps, in non-western countries, more than four items are needed to tap each of the personality traits. People in non-western countries may differ in their response styles such as acquiescence, in standards of comparisons and in norms of self-presentation. For instance, Americans are found to more likely apply psychological trait attributes to describe themselves than East Asian respondents (Kitayama et al. 1997; Markus and
Kitayama 1998). Also, Cheung and Leung (1998) argue that imported personality instruments may be inadequate in tapping the underlying personality constructs outside their culture of origin. Critically, though, the results of this study paves the way for a more mixed method approach to moral disengagement in Malaysia (Creswell and Plano Clark 2007). A supporting qualitative study may utilise some of the concerns made here and explore the meanings attached to personality constructs chosen.

In addition, the applicability claimed of Mini-IPIP was based on the empirical study done on university students in western countries (Cooper, Smillie, and Corr 2010; Donnellan et al. 2006). University students in western countries may have different frames of reference for self-description from employees in the manufacturing companies in Malaysia. Also, they may have better knowledge, more exposure and be more familiar with personality assessment compared to employees in the manufacturing companies studied. Therefore, based on the findings in this research, the researcher tends to agree with Gosling et al. (2003) that ultra-short measures should not and cannot be used as substitutes for more comprehensive personality assessments. The findings also appear to support a more extreme claimed by Hopwood and Donnellan (2010,p.340) that almost all personality measures are ‘seriously deficient in terms of fidelity to their underlying theories’.

Another significant methodological implication involves the choice of statistical analysis. This research is among a very few moral disengagement researches which utilised structural equation modelling (SEM) (Jackson and Gaertner 2010; McAlister, Bandura, and Owen 2006). By applying SEM, this research was able to demonstrate the joint impact of antecedent variables and the outcomes of moral disengagement. Moreover, SEM takes into account the measurement error variances, thus, the relationships between the factors in the hypothesized model are more accurate (Bollen 1989). In short, SEM not only provides a way to test relationships in the hypothesized model simultaneously, but this method also controls for the measurement error in the scales that measure the theoretical
constructs in the model. In addition, this research also provided supplementary analysis using a new approach introduced by Marsh et al. (2004) in testing the moderation effect. This effort provided a new frontier in analysing strategy to test moderating effect using AMOS.

Finally, this research explained a procedure for instrument translation, which should be valuable for future studies (see Chapter Four). The guidelines given regarding the translation process could minimize the impact of translation errors and help generating more valid findings. Furthermore, the guidelines may help to reduce ambiguity in the translating instrument from one culture or language to another context. Having said this, and guided by the results for the personality traits selected for the model, a more rigorous de-centering process could be used to test for meaning and acceptability within organisational contexts.

6.4.3 Managerial Implications

Organisational ethical climate was confirmed as an antecedent of moral disengagement; a cognitive mechanism applied by employees in performing deviant behaviours. The findings highlighted the importance of creating a positive ethical climate in organisations in order to reduce the occurrence of deviant workplace behaviours among employees. Therefore, it may be useful for organisations to revisit their relevant policies and procedures specifically related to behavioural governance in order to assure that a positive ethical climate is perceived by all employees. Organisations may assess their ethical climate periodically in order to monitor the climate of their organisations. As noted by Week and Nantel (2004,p.202), ‘ethical climate is one of the most manageable factors that can be used to influence ethical behaviour’.

It is also critical for organisations to ensure that ethical standards are clearly communicated to employees (Grojean et al. 2004). Clear ethical standards help employees to objectively assess the ethical climate in their organisations. The expectations of top management and efforts related to ethical issues in the organisation need be made known to all levels of employees through appropriate
cultural communication systems. Organisations should realise that ethical climate could positively influence the moral thinking of employees thus helping them to become socially responsible corporate citizens (Vitell and Paolillo 2004).

The results demonstrated that employees’ moral disengagement is associated with their tendency to commit workplace deviance (interpersonal and organisational deviance). However, the strength of the association differs between interpersonal and organisational deviance. Thus, the findings indicated that despite being related, interpersonal and organisational deviance are different phenomena. If organisations are serious about controlling employee deviance, they need to be certain about what behaviours they would like to control. In addition, it may be useful for organisations to review their policies in an effort to reduce feelings of injustice among employees, which could be a trigger for interpersonal deviance. A secure and psychologically safe working environment will consequently help further reduce the occurrence of organisational deviance, as these factors were found to be linked. As mentioned by Litzky et al. (2006, p.100), ‘preventing deviant behaviours from cropping up is the most cost-effective way to deal with employee deviance’.

Transformational leadership style may be a good option to be adopted by manufacturing companies in Malaysia. However, this leadership style needs to be decentred to fit acceptable cultural dimensions such as a high degree of power distance of Malaysia. The findings suggested that transformational leadership could help in preventing interpersonal deviance. The findings provide an initial indication of the advantage of applying transformational leadership style in Malaysia. Previously, transformational leadership style was found to fit adequately with collectivistic cultures (Jung, Bass, and Sosik 1995; Walumbwa and Lawler 2003). Furthermore, in a laboratory experiment using Asian and Caucasian students, findings supported that collectivists with a transformational leader generated more ideas (Jung and Avolio 1999). Having acknowledged this, organisations, particularly manufacturing companies in Malaysia, need to realize that all positive psychological elements inherent in transformational leadership may sometimes be too idealistic to be practised in a complex business environment (Conger and Hollenbeck 2010).
The worst one expects to happen is to have leaders with charismatic characters but without good business sense, or morally engagement who could lead organisations to bankruptcy, as was the case of the former president and chairman of Malden Mills in the US (Coltin 2009; Conger and Hollenbeck 2010). In addition, organisations should also realise the possibility that the strengths of transformational leaders as influencers of followers can, in certain circumstances, and according to their level of moral engagement facilitate moral disengagement.

6.5 Limitations of the Research

This research is not without its limitations. First, this research is subject to socially desirable responses, or a desire to present oneself favourably in light of social norms and standards (Zerbe and Paulhus 1987). Investigating antecedents and consequences of moral disengagement could be considered as a sensitive issue and thus could raise the issue of such bias. For instance, employees might be more willing to report some types of deviance than others. Employees may feel more comfortable reporting their involvement in organisational deviance, rather than reporting their own deviance, in a circumstance in which the victim was a human being. This differential willingness to report may have somehow distorted the findings of this research. However, several preventative steps such as guaranteed anonymity and confidentiality of individual responses, and the use of some reversed scored items, were taken to minimise social desirability bias (Podsakoff et al. 2003).

Secondly, the moral disengagement scale applied was previously designed and validated only in samples of children and young adolescents in western countries (Bandura et al. 1996; Bandura et al. 2001). Therefore, it is possible that there will be some potential setbacks when applying this measure to an adult sample in a non-western country, such as Malaysia. However, a rigorous back-translation process was used to carefully adapt and tailor the sample from this study to accommodate this concern. Furthermore, in order to increase the stability of the findings through estimating fewer parameters in the SEM model, the moral disengagement construct has been transformed to a single indicator latent variable.
Although, this decision was statistically and theoretically supported (see Chapter Five), it would be useful for future research to replicate this research using all items from the eight dimensions of moral disengagement as a reflective indicators of this construct.

The third limitation is related to the personality construct. Generally, the measurement of the variable has significant influence on the outcomes of any SEM models. Thus, the problem always remains as to whether the most appropriate scale has been applied to measure the construct. A short version of personality measure, the Mini-IPIP (Donnellan et al. 2006) was utilised to measure the two personality traits in this research. As discussed earlier, the four questions for each trait may not be enough to tap the personality traits of the respondents in this research. Only items with high factor loadings were remained to represent the two traits in this research with the hope of preserving the meaning of the trait as it was conceptualized. Nevertheless, Hopwood and Donnellan (2010,p.334) argue that ‘it is very difficult to write perfect items for assessing personality’. Such unavoidable variation in assessing personality traits often create problems in confirming the construct using CFA and generate overall misfit in later analysis (Hopwood and Donnellan 2010). In addition, only two out of five dimensions of personality were utilised in this research. This may limit the ability to make conclusions on the applicability of Mini-IPIP to non-western countries, particularly, Malaysia.

Finally, the sample of this research was derived from the Federation of Malaysian Manufacturers (FMM) directory and thus excluded companies that were not listed in the directory. Consequently, generalizations from the findings of this research to all manufacturing companies in Malaysia cannot be made.

### 6.6 Signposts for Future Research

Though this research has established that moral disengagement is driven by organisational ethical climate and could be used to predict deviant behaviour at the workplace, much remains to be understood about how moral disengagement
operates. For instance, future endeavours could be dedicated to investigate the stability of moral disengagement over time. Bandura (1986, 2002) agrees that moral disengagement does develop over time and is influenced by the social contexts in which an individual operates. Thus, there appears a logical reason to assume that the employee’s tendency to morally disengage is likely to be controlled through learning, effective training, or the ethical values contained in a positive ethical climate. Future research may integrate the effects of ethics training in investigating moral disengagement. Ethics training is posited as an important factor in an individual’s intention to act ethically (Jones, Massey, and Thorne 2003). Moreover, training is believed to improve an individual’s ethical reasoning process (Trevino, Weaver, and Reynolds 2006).

In future, a mixed-method approach (Creswell 2003) may be applied to investigate the antecedents and consequences of moral disengagement. The integration of both quantitative and qualitative methods could provide further insight on the issue of moral disengagement among employees. There are two uses for this approach. The results of this doctoral research have raised concerns about the meaning attached to the labels of personality constructs extraversion and conscientiousness. A qualitative approach, once a preliminary model was built would be able to ascertain the local meaning attributed to the constructs. The instrument itself can be adapted to include qualitative statements on some of the items. The quantitative data allows testing to confirm hypothesized relationships whilst the qualitative phase of research helps to provide in-depth data to supplement the interpretation of the quantitative results (Ridenour and Newman 2008). Hence, the mixed-method approach is predicted to strengthen the research design, resulting in more valid and reliable findings.

The moral disengagement scale was developed and validated only in samples of children and young adolescents (Bandura et al. 1996; Bandura et al. 2001). Although this scale has been adapted and effectively been used in various studies (Aquino et al. 2007; Caprara and Capanna 2004; Rogers 2001), a development of a general scale of moral disengagement especially to cater for an
organisational setting in non-western countries is worth considering given the potential usefulness of this construct within an organisational setting. Similarly, in-depth study on the generalisability of Mini-IPIP (Donnellan et al. 2006) to non-western countries is critically warranted.

Finally, realizing this could be the first empirical research to analyse the proposed relationships in Malaysia, replication of this research in future using samples from other sectors or cultures could be a fruitful attempt to confirm a robust conclusion of the findings. For example, the issue of moral disengagement may vary in salience for different classes of employees, and across industries. Additionally, this research did not examine an individualistic versus collectivist cultural orientation directly but rather used country as a proxy for that variable. Perhaps, replication of this research by assessing individualism–collectivism dimensions of culture directly may be a worthy effort.

Future research should also attempt to replicate this study by applying a different scale to measure the underlying constructs. For instance, it would be interesting to use another personality scale such as the Revised NEO Personality Inventory (NEO-PI-R) (Costa and McCrae 1992b) in the hypothesized model because the applicability of this scale to the Malay culture has been confirmed relatively recently (Mastor, Jin, and Cooper 2000). Alternatively, a new six-dimensional framework for personality structure (Ashton and Lee 2009) which is also known as HEXACO model (Ashton and Lee 2001; Ashton, Lee, and Goldberg 2004; Ashton and Lee 2007) could be a viable option. This new framework of personality is claimed to be consistent with the cross-culturally replicated findings of the six dimensions of personality and accommodates several personality variables which are poorly tapped within the Five-Factor model (Ashton, Lee, and Goldberg 2004; Ashton and Lee 2007). However, having suggested that, researchers should also realise the consequences of utilising a long instrument in conducting surveys as both scales consist of 240 items and 60 items, respectively.
6.7 Conclusion

This doctoral research presented a detailed investigation on the antecedent and outcomes of moral disengagement among manufacturing employees in Malaysia. Although moral disengagement has been widely researched, most previous research has focused on the outcomes (Bandura, Underwood, and Fromson 1975; Bandura et al. 1996; Bandura et al. 2001; McAlister, Bandura, and Owen 2006). Little, with the exception of Detert et al. (2008), is known about the antecedents of moral disengagement. This doctoral research investigated the relationship between selected employees’ individual difference of personality and organisational ethical climate with moral disengagement beyond the ordinary scope of western countries. The findings confirmed that organisational ethical climate did impact on moral disengagement. On the other hand, the two selected personality traits (extraversion and conscientiousness) were found not to be associated with employee’s moral disengagement. This has paved the way for an investigation of personality trait constructs, as they are understood in non-western cultures. The findings also pave the way for further study of antecedent conditions in predicting the extent to which manufacturing employees have a predisposition to disengage from moral self-regulation.

Further, this research responded to recent calls to investigate individual psychological processes in order to explain unethical or deviant behaviour within organisations (Daboub et al. 1995; Diefendorff and Mehta 2007; Ferris, Brown, and Heller 2009; Ferris et al. 2009; Messick and Bazerman 1996; Tenbrunsel and Messick 2004; Vazsonyi and Li 2010). The effort has made several contributions to the literature of moral disengagement, especially in the non-western context. In general, this study provided, perhaps for the first time, an analysis of the relationship between moral disengagement and workplace deviance (interpersonal and organisational deviance) by integrating the moderating effect of transformational leadership style. Further, the moderating effect of transformational leadership style was analysed using moderated regression analysis.
and supplemented with a more recent method introduced by Marsh et al. (2004) using AMOS.

Specifically, it was found that employees’ moral disengagement was associated with interpersonal and organisational deviance. Also, interpersonal deviance was associated with organisational deviance. Moral disengagement was also found to mediate the relationship between organisational ethical climate and both types of deviant behaviours. Thus, moral disengagement could be one possible explanation behind the problem of workplace deviance in Malaysia.

In addition, perceived transformational leadership style was found to mitigate the occurrence of interpersonal deviance among employees. The results confirmed results from a previous study that transformational leadership is negatively related to workplace aggression (Hepworth and Towler 2004) and withdrawal behaviours (Walumbwa and Lawler 2003). Ability to articulate a realistic vision of the future that can be shared, enable transformational leaders to arouse followers’ needs and values as well as directing their attention towards desired outcomes and away from undesired behaviour (Yammarino and Bass 1990). In the case of this research, transformational leadership could control the likelihood of employees to morally disengage which consequently help them in performing interpersonal deviance. This finding provides an initial indicator on the advantage of utilising transformational leadership style in Malaysia. Previously, transformational leadership style was claimed to be impacted positively with collectivistic cultures (Walumbwa and Lawler 2003). Therefore, manufacturing companies, which are serious about controlling workplace deviance can with some confidence, be more cognizant of the importance of applying transformational leadership style.

To conclude, by testing all the hypothesized relationships to a non-western country, namely Malaysia, this research helped to create a more inclusive global picture of the antecedents and outcomes of employees’ moral disengagement. This research provided a useful starting point in investigating moral disengagement in
non-western countries. Besides adding new knowledge to the literature of moral disengagement, the findings were predicted to aid manufacturing companies in dealing with workplace deviance more effectively. Workplace deviance is a pervasive problem which is costly to organisations and could negatively affect employees’ well-being (Diefendorff and Mehta 2007; El Akremi, Vandenberghe, and Camerman 2010; Ferguson and Barry 2011; Henle, Giacalone, and Jurkiewiez 2005). Therefore, understanding moral disengagement among employees could be a valuable research field to venture into in the future.
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APPENDICES

Appendix 1: Questionnaire (English version)

ORGANIZATIONAL PRACTICES IN MALAYSIA

Conducted by:
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There are 6 sections to the survey, which should take approximately 20 minutes to complete.

Please be open, honest and candid with your responses. All information you provide will be treated as strictly confidential. Your responses will only be presented in aggregate and no individual responses will be reported. Please make sure to complete ALL sections and items in the survey.

Your participation in this survey is greatly appreciated. Once completed, the survey can be placed in the reply envelope. Please return the survey within two weeks if possible.
### SECTION A: PRACTICES

In this section of the survey, the researcher is interested in assessing organizational practices of business professionals. Please **circle** the number that best matches the degree to which you agree or disagree with the statements (where 1 = strongly disagree and 6 = strongly agree).

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<tbody>
<tr>
<td>1</td>
<td>It is alright to fight to protect your colleagues.</td>
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<td>2</td>
<td>It is ok to steal to take care of your family’s needs.</td>
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<td>3</td>
<td>It is ok to attack someone who threatens your family’s honour.</td>
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<td>4</td>
<td>It is alright to lie to keep your colleagues out of trouble.</td>
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<td>5</td>
<td>Doing your colleague’s work is just a way of helping your colleague.</td>
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<td>6</td>
<td>Talking about people behind their backs is just part of the game.</td>
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<td>7</td>
<td>Taking a colleague’s personal belongings without permission is just “borrowing it”.</td>
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<td>8</td>
<td>Procrastination at workplace is not bad if it is once in a while.</td>
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<td>9</td>
<td>Damaging some property is no big deal when you consider that others are beating up people.</td>
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<td>10</td>
<td>Stealing some money is not too serious compared to those who steal a lot of money.</td>
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<td>11</td>
<td>Not working very hard at work is really no big deal when you consider that other people are probably absent without permission.</td>
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<td>12</td>
<td>Compared to other illegal things people do, taking some things from a store without paying for them is not very serious.</td>
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<td>13</td>
<td>If people are living under bad conditions, they cannot be blamed for behaving aggressively.</td>
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<td>14</td>
<td>If the management doesn’t take action on employees’ wrong doings, employees should not be blamed for cheating.</td>
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<td>15</td>
<td>If someone is pressured into doing something, they shouldn’t be blamed for it.</td>
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<tr>
<td>16</td>
<td>People cannot be blamed for misbehaving if their colleagues pressured them to do it.</td>
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<td></td>
<td>A member of a group or team should not be blamed for the trouble the team caused.</td>
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<td>18</td>
<td>An employee who only suggests breaking the rules should not be blamed if other employees go ahead and do it.</td>
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<td>19</td>
<td>If a group decides together to do something harmful, it is unfair to blame any one member of the group for it.</td>
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<td>20</td>
<td>You can’t blame a person who plays only a small part in the harm caused by a group.</td>
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<td>21</td>
<td>It is ok to tell small lies because they don’t really do any harm.</td>
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<td>22</td>
<td>People don’t mind being teased because it shows interest in them.</td>
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<td>23</td>
<td>Teasing someone does not really hurt anyone.</td>
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<tr>
<td>24</td>
<td>Insults don’t really hurt anyone.</td>
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<td>25</td>
<td>If employee becomes undiscipline, it’s their manager’s fault.</td>
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<td>26</td>
<td>If someone leaves something lying around, it’s their own fault if it gets stolen.</td>
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<tr>
<td>27</td>
<td>People who are mistreated have usually done things to deserve it.</td>
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<tr>
<td>28</td>
<td>People are not at fault for misbehaving at work if their managers mistreat them.</td>
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<tr>
<td>29</td>
<td>Some people deserve to be treated like animals.</td>
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<td>30</td>
<td>It is ok to treat badly someone who behaved like a “worm”.</td>
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<tr>
<td>31</td>
<td>Someone who is obnoxious does not deserve to be treated like a human being.</td>
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<tr>
<td>32</td>
<td>Some people have to be treated roughly because they lack feelings that can be hurt.</td>
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</table>
In this section of the survey, the researcher is interested in assessing perceived corporate culture in your organization. Please **circle** the number that best matches the degree to which you agree or disagree with the statements (where 1 = strongly disagree and 6 = strongly agree).

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My company has a formal, written code of ethics.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>My company strictly enforces a code of ethics.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
<tr>
<td>3</td>
<td>My company has policies with regards to ethical behaviour.</td>
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<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>My company strictly enforces policies regarding ethical behaviour.</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>5</td>
<td>Top management in my company has let it be known in no uncertain terms that unethical behaviours will not be tolerated.</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>6</td>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results primarily in personal gain (rather than corporate gain), she or he will be promptly reprimanded.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>7</td>
<td>If an employee in my company is discovered to have engaged in unethical behaviour that results in primarily corporate gain (rather than personal gain) she or he will be promptly reprimanded.</td>
<td>1</td>
<td>2</td>
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</table>
SECTION C: PERSONALITY

In this section of the survey, there are phrases describing people’s behaviour. Please CIRCLE the number to describe how accurately each statement describes you (where 1 = very inaccurate and 6 = very accurate). Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are and roughly your same age.

<table>
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<tr>
<th></th>
<th>Very Inaccurate</th>
<th>Inaccurate</th>
<th>Moderately Inaccurate</th>
<th>Moderately Accurate</th>
<th>Accurate</th>
<th>Very Accurate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am the life of the organization</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>I like to get chores done right away.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>I don’t talk a lot.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>I often forget to put things back in their proper place.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>I talk to a lot of different people at parties.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>I like order.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>I keep myself in the background.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>I make a mess of things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
SECTION D: LEADERSHIP

In this section of the survey, the researcher is interested in assessing the leadership style in your organization. Please **CIRCLE** the number that conform to the frequency with which your manager has carried out the following acts (*where 1 = never and 6 = always*).

<table>
<thead>
<tr>
<th>The leadership group in my company:</th>
<th>Never</th>
<th>Rarely</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Communicates a clear and positive vision of the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2 Treat staff as individuals, supports and encourages their development.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3 Give encouragement and recognition to staff.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4 Foster trust, involvement and cooperation among team members.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5 Encourage thinking about problems in new ways and questions assumptions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6 Are clear about their values and practices what they preach.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7 Instil pride and respect in others and inspire me by being highly competent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
In this section of the survey, the researcher is interested in assessing workplace behaviour which includes interpersonal and organizational aspects. Please **circle** the number that conform to the frequency with which you have carried out the following acts (where 1 = never and 6 = daily). Please be honest and candid with your response.

<table>
<thead>
<tr>
<th>In the last year, I have:</th>
<th>Never</th>
<th>Twice a year</th>
<th>Several times a year</th>
<th>Monthly</th>
<th>Weekly</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made fun of someone at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Said something hurtful to someone at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Made an ethnic, religious, or racial remark at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Cursed at someone at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Played a mean prank on someone at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Acted rudely toward someone at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Publicly embarrassed someone at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Taken property from work without permission.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Spent too much time fantasizing or daydreaming instead of working.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Falsified a receipt to get reimbursed for more money than you spent on business expenses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Taken an additional or longer break than is acceptable at your workplace.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Came in late to work without permission.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Littered your work environment.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Neglected to follow your boss’s instructions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Intentionally worked slower than you could have worked.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Discussed confidential company information with an unauthorized person.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Used an illegal drug or consumed alcohol on the job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Put little effort into your work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Dragged out work in order to get overtime.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
SECTION F: DEMOGRAPHIC DETAILS

This part of the questionnaire is designed to collect demographic information about you and your firm. Please respond to each question as indicated.

A. What is your gender? (Circle the corresponding number)
   1 Male   2 Female

B. What is your race? (Circle the corresponding number)
   1 Malay   2 Chinese   3 Indian   4 Others (Please specify)_____

C. How good is your command of the Malay Language? (Circle the corresponding number)
   1 Poor   2 Fair   3 Good   4 Excellent

D. What is your age?
   __________ years (Please specify a number, rounding off to the nearest year).

E. What is your highest obtained education level? (Circle the corresponding number).
   1 Undergraduate degree   2 Master’s degree
   3 Qualification beyond Master’s   4 Others (Please specify)_____

F. How long have you been working with your current employer? (Please specify a number- if less than 1 year please specify number of months).
   __________ years and _______ months

G. What is your position in your firm? ______________

H. I am a:
   1 Full-time employee   2 Part-time employee
   3 Intern   4 Others (Please specify)_____


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I. My firm has: _____________ full-time equivalent employees (Please specify a number).

J. If you have any comments regarding any part of this survey, please feel free to do so in the space provided below (please write clearly).


THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION IN THIS STUDY
Appendix 2: Questionnaire (Malay version)

<table>
<thead>
<tr>
<th>Nomor</th>
<th>Perkara</th>
<th>Sangat Tidak Setuju</th>
<th>Tidak Setuju</th>
<th>Agak Tidak Setuju</th>
<th>Agak Setuju</th>
<th>Sangat Setuju</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tidak salah untuk melawan demi untuk melindungi rakan sekerja.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Mencuri dibolehkan untuk memenuhi keperluan keluarga.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Menyerang seorang yang mengugut kehormatan keluarga anda adalah dibolehkan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Tidak salah untuk menipu bagi tujuan mengelakkan rakan sekerja daripada menghadapi masalah.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Membuat kerja yang sepatutnya dilakukan oleh rakan sekerja adalah salah satu cara untuk membantu rakan sekerja.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Mengumpat adalah perkara biasa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Mengambil barang peribadi rakan sekerja tanpa izin adalah cuma &quot;meminjam&quot;.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Perbuatan melengah-lengahkan kerja tidak apa jika ia dilakukan sekali-sekala.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Merosakan harta awam bukanlah satu masalah yang besar apabila dibandingkan dengan perbuatan memukul orang.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>Mencuri sedikit duit tidaklah dianggap begitu serius dibandingkan dengan mencuri duit yang banyak.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Tidak bekerja dengan borsunggu-sungguh bukanlah satu masalah besar jika dibandingkan dengan orang lain yang mungkin ponteng kerja.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Mengambil barang dari kedai tanpa membelannya adalah satu perbuatan yang tidak begitu serius dibandingkan dengan perbuatan lain yang menyalah undang-undang.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Mereka yang hidup dalam serba kekurangan tidak boleh dipersalahahkan jika bersikap agresif.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>Jika pihak pengurus tidak mengambil tindakan ke atas sebarang salahlaku pekerja, pekerja-pekerja tidak boleh dipersalahahkan kerana menipu.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>No.</td>
<td>Pernyataan</td>
<td>Skor</td>
<td>Tidak Setuju</td>
<td>Tidak Tidak Setuju</td>
<td>Agak Tidak Setuju</td>
<td>Agak Setuju</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------------------------------------------------</td>
<td>------</td>
<td>--------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>15</td>
<td>Jika seseorang itu dipaksa untuk melakukan sesuatu, mereka tidak patut dipersalahkan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>Mereka yang tidak berkelakuan baik tidak patut dipersalahkan jika rakan sekerja memaksa mereka untuk melakukan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>Ahli kepada kumpulan atau pasukan tidak patut dipersalahkan untuk masalah atau kesilapan yang ditimbulkan oleh kumpulan atau pasukan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>Pekerja yang hanya mencadangkan untuk melanggar peraturan tidak patut dipersalahkan jika ada rakan sekerja lain yang melakukan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>Jika satu kumpulan bersetuju untuk melakukan sesuatu yang memudaratkan, adalah tidak adil untuk menyalahkan sesiapa di dalam kumpulan tersebut.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>Anda tidak boleh menyalahkan seseorang yang hanya memainkan peranan yang kecil di dalam sebarang kesalahan yang dilakukan oleh kumpulan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>Berbohong adalah diterima jika ia tidak memberi sebarang kemudaratkan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>Manusia tidak begitu kisah jika dipersendakan kerana itu menunjukkan mereka diminati.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>Mengejeck seseorang tidak melukakan hati sesiapa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24</td>
<td>Menghina tidak melukakan hati sesiapa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td>Jika pekerja menjadi tidak berdisiplin, ia adalah disebabkan oleh pihak pengurusan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26</td>
<td>Jika seseorang meninggalkan sesuatu terbier merata-rata, adalah salah mereka sendiri jika barang tersebut hilang.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27</td>
<td>Mereka yang tidak di layan sebagaimana sepaturnya, biasanya telah melakukan sesuatu menyebabkan mereka dilayan sebegitu.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28</td>
<td>Mereka yang tidak berkelakuan baik di tempat kerja tidak boleh dipersalahkan jika pihak pengurusan juga tidak melayan mereka dengan cara yang sepaturnya.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29</td>
<td>Sesetengah orang patut di layan tanpa sebarang perikemanusiaan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td>Tidak apa untuk melayani seseorang dengan teruk jika mereka berkelakuan buruk.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sangat Tidak Setuju</td>
<td>Tidak Setuju</td>
<td>Agak Tidak Setuju</td>
<td>Agak Setuju</td>
<td>Setuju</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>----------------</td>
<td>--------------</td>
<td>-----------------</td>
<td>-------------</td>
<td>--------</td>
</tr>
<tr>
<td>31</td>
<td>Seseorang yang menimbulkan perasaan yang melaut tidak patut dilayani sepertinya yang sepatutnya.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32</td>
<td>Sesetengah orang perlu di layan kasar kerana mereka kurang perasaan sensitif.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**SEKSYEN B: BUDAYA KORPORAT**

Sila **BULATKAN** nombor yang paling sesuai mengikut tahap persetujuan berdasarkan pernyataan berikut (di mana 1 = sangat tidak setuju dan 6 = sangat setuju).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Sangat Tidak Setuju</th>
<th>Tidak Setuju</th>
<th>Agak Tidak Setuju</th>
<th>Agak Setuju</th>
<th>Setuju</th>
<th>Sangat Setuju</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Syarikat saya mempunyai kod etika bertulis yang formal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Syarikat saya amat memeringkan perlaksanaan kod etika.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Syarikat saya mempunyai polisi yang berkaitan dengan tingkahlaku beretika.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Syarikat saya amat memeringkan perlaksanaan polisi berkelaan tingkahlaku beretika.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Pengurusan atasan di dalam syarikat saya memastikan bahawa tiada toleransi bagi perbuatan yang tidak beretika walau pun tidak dinyatakan dalam terma-terma yang jelas.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Jika seorang pekerja di dalam syarikat saya didapat terlibat dengan perbuatan yang tidak beretika, terutama jika ia membawa kepada keuntungan peribadi (lebih dari keuntungan syarikat), dia akan ditegur serta-merta.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Jika seorang pekerja di dalam syarikat saya didapat terlibat dengan perbuatan tidak beretika, terutama jika ia membawa keuntungan syarikat (lebih dari keuntungan peribadi), dia akan ditegur serta-merta.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

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**SEKSYEN C: PERSONALITI**

Dalam seksyen ini, terdapat frasa yang menerangkan sikap-sikap manusia. Sila **BULATKAN** nombor yang menjelaskan ketepatan setiap pernyataan yang menerangkan diri anda (di mana 1 = sangat tidak tepat dan 6 = sangat tepat). Nilaikan diri anda secara am pada masa kini, bukan seperti yang diinginkan pada masa depan. Nilaikan diri anda sejajar mungkin seperti yang anda lihat sendiri, dengan membandingkan diri anda dengan orang lain yang sama jantina dan sekitar umur anda.

<table>
<thead>
<tr>
<th>Nombor</th>
<th>Pernyataan</th>
<th>Sangat Tidak Tepat</th>
<th>Tidak Tepat</th>
<th>Agak Tidak Tepat</th>
<th>Agak Tepat</th>
<th>Tepat</th>
<th>Sangat Tepat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saya adalah tunggak utama kepada organisasi</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Saya melakukan tugas dengan kadar segera.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Saya tidak suka banyak bercakap.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Saya sering terlupa meletakkan semula barang ke tempat asalnya.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Saya suka berkenalan dengan pelbagai golongan didalam sesuatu majlis.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Saya suka mengikut arahan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Saya tidak suka menonjolkan diri.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>Saya melakukan kerja dengan tidak terurus</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**SEKSYEN D: KEPIMPINAN**

Sila **BULATKAN** nombor yang mewakili kekerapan perkara yang dilakukan oleh pihak pengurusan anda berdasarkan kepada perlakuan berikut (di mana 1 = tidak pernah dan 6 = selalu).

<table>
<thead>
<tr>
<th>Kumpulan pengurusan di dalam syarikat saya:</th>
<th>Tidak Pernah</th>
<th>Jarang sekali</th>
<th>Jarang-jarang</th>
<th>Sedang</th>
<th>Kepal</th>
<th>Semasa</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Kumpulan pengurusan di dalam syarikat saya:</th>
<th>Tidak Pernah</th>
<th>Jarang sekali</th>
<th>Jarang-jarang</th>
<th>Sekali</th>
<th>Kesepakatan</th>
<th>Kes</th>
<th>Semiasa</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Menggalakkan pemikiran cara baru tentang masalah-masalah dan persoalan yang timbul.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Jelas tentang nilai-nilai dan mempraktikkannya apa yang mereka ungkapkan.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Menerapkan kehormatan dan harga diri kepada semua pekerja dan memberi inspirasi kepada saya untuk menjadi lebih cekap.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SEKSYEN E: PERLAKUAN DI TEMPAT KERJA**

Sila **BULATKAN** nombor yang mewakili kekerapan perlakuan anda (di mana 1 = tidak pernah dan 6 = setiap hari). Sila berlaku jujur dan sepontan dengan jawapan anda.

<table>
<thead>
<tr>
<th>Pada tahun lepas, saya telah:</th>
<th>Tidak Pernah</th>
<th>Dua kali setahun</th>
<th>Beberapa kali setahun</th>
<th>Setiap bulan</th>
<th>Mingguan</th>
<th>Harian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Menyakat seseorang di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Menyatakan sesuatu yang menyakitan hati seseorang di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Membuat komen berkenaan kumpulan etnik, agama dan perkauman di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Memaki seseorang di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Membuat usikan yang keterlaluan kepada seseorang di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Bersikap biadap terhadap seseorang di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Memalu seseorang secara terbuka di tempat kerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Mengambil harta pejabat tanpa izin.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Menghabiskan banyak masa untuk berfanta dan berangan-angankan selain bekerja.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Menipu resit untuk mendapatkan semula wang lebih dari yang sepatutnya yang telah digunakan untuk tujuan perbelanjaan perniagaan.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Mengambil masa rehat berlebihan dari yang sepatutnya di tempat kerja anda.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Datang lambat ke tempat kerja tanpa izin.</td>
<td>1 2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pada tahun lepas, saya telah:</td>
<td>Tidak Pernah</td>
<td>Dua kali setahun</td>
<td>Beberapa kali setahun</td>
<td>Setiap bulan</td>
<td>Menjengum</td>
<td>Harian</td>
</tr>
<tr>
<td>------------------------------------------------------------------</td>
<td>--------------</td>
<td>------------------</td>
<td>------------------------</td>
<td>--------------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>13 Mengotorkan persekitaran tempat kerja.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14 Mengabaikan arahan ketua.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15 Sengaja melakukan pekerjaan dengan perlahan dan sambil lewa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16 Berbincang rahsia sulit syarikat dengan orang yang tidak</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>berkenaan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Menggunakan ubat yang terlarang dan mengambil alcohol ketika bekerja.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18 Tidak bersungguh dalam melakukan pekerjaan.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19 Melengah-lengan kerja supaya layak untuk mendapatkan upah kerja lebih masa</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

SEKSYEN F: BUTIRAN DEMOGRAFI

Sila jawab setiap soalan seperti yang dinyatakan.

A. Jantina anda? (Bulatkan nombor yang berkaitan)
   1 Lelaki  2 Perempuan

B. Bangsa anda? (Bulatkan nombor yang berkaitan)
   1 Melayu  2 Cina  3 India  4 Lain-lain (Sila nyatakan) __________

C. Apakah tahap penguasaan Bahasa Malaysia anda? (Bulatkan nombor yang berkaitan)
   1 Lemah  2 Sederhana  3 Baik  4 Amat Baik

D. Umur anda? __________ tahun (Sila nyatakan nombor, genapkan kepada tahun yang terdekat).

E. Taraf pendidikan yang tertinggi? (Bulatkan nombor yang berkaitan).
   1 Ijazah Sarjana Muda  2 Sarjana
   3 Kelayakan lebih dari Sarjana  4 Lain-lain (Sila nyatakan) __________
F. Berapa lama anda telah bekerja dengan majikan terkini? (Sila nyatakan nombor yang tepat – jika kurang dari setahun sila nyatakan bulan yang tepat)

________ tahun dan _______ bulan

G. Jawatan terkini? __________________

H. Saya adalah: [(Bulatkan nombor yang berkaitan)]

1 Pekerja tetap
2 Pekerja Sepanjang Masa
3 Pelajar Amali
4 Lain-lain (Sila nyatakan) ______

I. Syarikat saya mempunyai lebih kurang ________ pekerja tetap (Sila nyatakan satu jumlah)

J. Jika anda mempunyai sebarang komentar pada mana-mana bahagian didalam tinjauan ini, sila isikan didalam ruang yang disediakan dibawah (sila tulis dengan jelas).

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TERIMA KASIH ATAS MASA DAN KERJASAMA ANDA DI DALAM KAJIAN INI
Appendix 3: Cover letter (English version)

Dear Respondents,

In order to expand knowledge on how organisations operate and function, a research project is being undertaken to explore organisational practices in Malaysia. This research is being conducted jointly by Curtin University of Technology, Australia and Universiti Teknologi MARA, Malaysia. Despite the importance of this aspect in creating a productive working environment, studies on organisational practices are mostly conducted in western countries. The main reason for this is the difficulties in collecting information from relevant parties. **That is why I am asking you to participate in this research.**

You are one of 3000 people who have the opportunity to provide valuable information regarding organizational practices in the electrical and electronics manufacturing companies in Malaysia. Without your participation, it will be impossible to investigate this vitally important aspect of business. Therefore, your responses are essential to the usefulness of this research.

I understand that you are extremely busy and so have purposely created a concise survey that can be completed in around 20 minutes. When you have completed the survey, please return it in the reply envelope. Please return the survey even if you have not been able to answer every question.

Please be open, honest and candid with your response. **Confidentiality is assured** and only aggregate statistics will be reported. No one other than the researcher will have access to the completed questionnaires.

Lastly, in exchange for your participation, a summary of the results will be mailed to you upon your request after the data are analysed. If you have any questions regarding this study, please contact Intan Marzita Saidon (i.saidon@postgrad.curtin.edu.au).

Kind Regards,

Intan Marzita Saidon  
PhD Candidate  
Graduate School of Business  
Curtin University of Technology  
Perth, Australia
Appendix 4: Cover letter (Malay version)

Responden yang dihormati,

Projek penelitian ini dijalankan untuk meneroka amalan organisasi yang diamalkan di Malaysia. Penelitian ini akan dijalankan secara usahasama antara Curtin University of Technology, Australia dan Universiti Teknologi MARA, Malaysia. Walaupun amalan organisasi amat penting untuk melahirkan persekitaran pekerjaan yang produktif, kebanyakan kajian tentang amalan organisasi hanya dijalankan di negara-negara barat. Sebab utamanya adalah kesukaran untuk mendapatkan maklumat dari pihak yang berkaitan. Jadi, ini adalah sebab mengapa saya memilih anda untuk menyertai penelitian ini.

Anda adalah salah seorang dari 3000 orang yang berpeluang untuk menyalurkan maklumat yang berguna berkaitan dengan amalan organisasi di sektor perkilangan di Malaysia. Tanpa penyertaan anda, adalah sukar untuk meneruskan kajian mengenai perkara ini. Oleh itu, setiap respon anda adalah penting bagi kegunaan penelitian ini.

Saya faham akan kesibukan anda, oleh itu tinjauan yang ringkas dan tepat telah dihasilkan supaya ia dapat dilengkapkan dalam masa lebih kurang 20 minit. Apabila anda telah menjawabnya, sila pulangkannya semula menggunakan sampul jawapan. Sila kembalikan semula tinjauan ini walaupun anda tidak dapat menjawab kesemua soalan.

Sila bersikap terbuka, jujur dan sepontan dengan respon anda. Kerahsiaan adalah dijamin dan hanya statistik agregat yang akan dilaporkan. Tiada siapa selain dari pengkaji yang mempunyai akses kepada keseluruhan borang soal selidik.

Akhir sekali, sebagai balasan kepada kerjasama anda, ringkasan hasil penelitian akan dimelakan kepada anda, selepas data-data selesai dianalisis, sekringnya ada permintaan. Jika anda mempunyai sebarang pertanyaan berkaitan dengan kajian ini, sila hubungi Intan Marzita Saidon (i.saidon@postgrad.curtin.edu.au).

Salam,

Intan Marzita Saidon
Calon PhD
Curtin University of Technology
Perth, Australia.
Appendix 5: Assessment of control variables

Model A: A Structural Model with Control Variables

Model B: A Structural Model without Control Variables