OCCUPATIONAL STRESS AND DEVIANT WORKPLACE BEHAVIOR AMONG CUSTOMER SERVICES EMPLOYEES OF A CALL CENTER IN MALAYSIA

By

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ABSTRACT

Researchers have shown an increased interest in conducting studies in deviant workplace behavior since the past researches shown the cascading effects of workplace deviance on the organization as a whole. However, there is still question on the association and the influence of occupational stress and its relation to the occurrence of workplace deviance despite the increase in attention given to the study of deviant workplace behavior. This study tries to identify the correlation between occupational stress in a customer call center towards the deviant workplace behavior of its employees. The current research has been conducted among 400 customer services employees in a selected call center in Malaysia. The data was collected using a questionnaire survey method and the data analysis was conducted using Pearson correlation method and linear regression method to identify the association and to test the research hypotheses. The findings of this study reveal that there is no significant correlation between occupational stress and deviant workplace behavior on the whole. However, the results show that the interpersonal deviance level in the selected call center is linked with the responsibility pressure, role conflict and workload dimensions. Furthermore the occurrence of workplace deviance is significantly associated with the job vs non-job conflict among the employees. Ignoring these issues may cause a decrease in the work performance of the customer services employees, causing the organization valuable performance and profitability.

Keywords: deviant workplace behavior, workplace deviance, employee deviance, occupational stress, work stress.

ABSTRAK

Para penyelidik telah menunjukkan peningkatan minat dalam menjalankan kajian kelakuan menyimpang di tempat kerja sejak kajian lepas menunjukkan kesan meluas dari penyelewengan tempat kerja di organisasi secara keseluruhannya. Walau bagaimanapun, masih ada persoalan mengenai perkaitan dan pengaruh tekanan kerja dan hubungannya dengan berlakunya kelakuan menyimpang di tempat kerja walaupun terdapat peningkatan dalam perhatian yang diberikan kepada kajian tingkah laku menyimpang di tempat kerja. Kajian ini cuba mengenal pasti hubungan di antara tekanan kerja di pusat panggilan ke arah tingkah laku menyimpang di tempat kerja di kalangan pekerjanya. Penyelidikan ini dijalankan di kalangan 400 pekerja perkhidmatan pelanggan di sebuah pusat panggilan yang terpilih di Malaysia. Data dikumpulkan dengan menggunakan kaedah soal selidik dan analisis data telah dijalankan menggunakan kaedah korelasi Pearson dan kaedah regresi linear untuk mengenalpasti perkaitan dan untuk menguji hipotesis kajian. Hasil kajian ini menunjukkan bahawa tiada korelasi signifikan di antara tekanan kerja dan tingkah laku menyimpang di tempat kerja pada keseluruhannya. Walau bagaimanapun, keputusan menunjukkan bahawa tahap kelakuan menyimpang *interpersonal* di pusat panggilan yang dipilih dikaitkan dengan dimensi bebanan tanggungjawab, konflik peranan dan beban kerja. Manakala penyelewengan di tempat kerja dikaitkan dengan masalah kerja dan masalah bukan kerja dalam kalangan pekerja. Mengabaikan isu-isu ini boleh menyebabkan penurunan prestasi kerja kakitangan perkhidmatan pelanggan, serta menyebabkan penurunan prestasi dan keuntungan organisasi.

Kata kunci: tingkah laku devian di tempat kerja, penyelewengan tempat kerja, penyelewengan pekerja, tekanan kerja.

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List of Abbreviation

DWB	Deviant Workplace Behavior
ODB	Organizational Deviant Behavior
IDB	Interpersonal Deviant Behavior
KMO	Keiser-Meyers-Oklin
OSS	Occupational Stress Scale
OSR	Responsibility Pressure
OSQ	Quality Concern
OSC	Role Conflict
OSJ	Job vs Non-Job Conflict
OSW	Workload
SPSS	Statistical Package for Social Science
SPM	Sijil Pelajaran Malaysia

CHAPTER ONE
INTRODUCTION

1.1. Introduction

This chapter explains the background of the study, problem statement, research questions, research objectives, and significance of the study. Following that, this chapter also highlights the scope and limitations of the study, and also the organization of chapter in this study.

1.2. Background of study

Managing employee behaviors is a concern for any organizations globally, especially for profit oriented organizations since such behaviors can be detrimental to their financial interests (Appelbaum et al., 2007). The way employees conduct themselves at work would affect the organization and its members either positively or negatively. Therefore it is important to know the appropriate way to behave in a workplace. Ideally, employees should carry out their designated tasks and responsibilities at work and not engage in behaviors that can undermine the organization or other employees either physically or mentally. Any action that can cause detrimental effects is unwanted and can be considered deviant. Deviant workplace behavior committed by the employees when they either lack the motivation to conform to normative expectations of the social context or become motivated to violate those expectations (Kaplan, 1975).

As a result of workplace deviance, billions of dollars were lost each year. According to Harper (1990) it has been estimated that 33 percent to 75 percent of all employees have engaged in behaviors such as theft, fraud, vandalism, sabotage, and voluntary

absenteeism. Employee theft has been the cause of organizational loss up to 200 billion dollars per year, while 4.2 billion dollar lost due to violence, and 5.3 billion dollars lost because of employees' recreational web surfing (Giacolone & Greenberg, 1997). The occurrence of workplace deviance is costly not only towards the organizations, but also towards individuals (Bennett & Robinson, 2003). In addition, occurrences of negative deviant workplace behavior are now threateningly increasing, with nearly 95 percent of all corporations reporting some experience that are related with deviant behavior within their respective organizations (Henle, Giacalone, & Jurkiewicz, 2005).

Organizations are burdened with deviant workplace behavior issues on an ongoing basis and it has been reported to have severe consequences to the organizations (Appelbaum, Deguire, & Lay, 2005; Mawritz et al., 2012). Organizations have to face economic threat as one of the critical consequences of workplace deviance (Bennett & Robinson, 2003; Appelbaum, Deguire, & Lay, 2005). As an example, it has been reported that theft committed by employees has been attributed to more than one-third of retail shrinkage in a research carried out in 32 countries spanning from Asia Pacific, Europe, and North America. (Bamfield, 2007).

In addition to theft, Australian employers had lost between 6 and 13 billion Australian dollars each year due to bullying in the workplace, which is another form of deviant behavior (Chappell & Martino, 2006). Whilst in the United States, it has been reported that the rampant occurence of deviant workplace behavior has render an estimated organizational losses that has reached up to USD $200 billion per year. (Harris & Ogbonna, 2006). Moreover, employers in the United Kingdom has been depleted of more than £300 million due to loss of productivity per year as a result of unapproved

internet surfing during working hours, which including gambling activities. (Taylor, 2007).

In the Malaysian context, the issues related to deviant workplace behavior has been given widespread attention through the public media concerning cases of corruption, unpunctuality, fraudulence, terrible work attitude, treachery, underperformance, and false medical claims (Abdul Rahman & Aizat, 2008; Abdul Rahman, 2008; Awanis, 2006).

Due to the increasing incidence of deviant workplace behavior and its impending impacts, workplace deviance has become an important topic for research in the recent years (Spector & Fox, 2005).

As a further matter, managers' perception of the overall performance of the employees has been proven to be strongly influenced by deviant behavior done by employee (Rotundo & Sackett, 2002) and researchers have shown progressively higher interest in topics related to deviant workplace behavior (Bennett & Robinson, 2000, 2003; Colbert, Mount, & Dalal, 2005; Dunlop & Lee, 2004; Harter, Witt, & Barrick, 2004; Marwitz et al., 2012).

Since the occurrence of deviant workplace behavior increases, the determination of what variables that contributed to the phenomenon would be of use to the organizations due to the growing incidence and the associated costs (Peterson, 2002). A few previous research relate deviant actions at work with individual factors, social and interpersonal factors, and organizational factors (Boye & Jones, 1997; Vardi & Wiener, 1996; Vardi, 2001).

However, research at the individual level showed that a significant portion on the variance in predicting deviant workplace behavior is not likely to be accounted merely

to personality variables (Robinson & Greenberg, 1998). According to Trevino and Youngblood (1990) the best prediction of deviant actions is more probable in the event that there is a combination of personality variables and the nature of workplace situation. Other studies have also examined demographic variables and reported that employees are more likely to be involved in several forms of production deviance and property deviance when they are of young age, new to the job, work part time, and have low-paying jobs (Frank, 1989; Hollinger & Clark, 1983). However, according to Robinson and Greenberg (1998) it may be more likely for these findings to be attributed to the nature of the job as opposed to the characteristics of personal demographic. As a matter of fact, workers who involved with theft amounted to as much as 60 percent, where as many as 30 percent of them engage in stealing when they get the chance to steal and another 30 percent when they found an opportunity to steal after actively seeking for it (Thomas, 1991).

Meanwhile, according to Greenberg (1997) if employees feel that they received poor treatment from the management, or if they perceive their work environment as unjust, even employees who are genuinely honest can be propelled to behave improperly. In addition, according to Peterson (2002), deviant workplace behavior is a product of the combination between the norms of the place of work and management leadership, as well as employees' individual personality characteristic or propensity.

In addition, a study carried out by Chen and Spector (1992) showed a support between stress and deviance. The findings are supported by additional research (Marcus & Schuler, 2004; Penney & Spector, 2005). Another research by Fox, Spector and Miles (2001) supported employees involvement in workplace deviance is influenced by the nature of the workplace situation and the nature of the job, such as job stressors. Furthermore, according to Spector and Fox (2005), workplace deviance can be induced

in organizations as a result of emotional reactions due to perceived stressors in workplace.

1.2.1. Occupational Stress and Deviant Behavior in Call Centers

Call centers have rapidly become an established and significant part of the global economy and are said to be the most rapidly growing form of employment today (Kinnie & Deery, 2004). Call centers have generally been associated with stressful and hectic work environment because the agents are required to provide a quality customer service but at the same time they have to meet their productivity goals, which causes them to be in a constant stressful situation (Deery et al., 2002; Kjellberg et al., 2010). As a result, issues such as employee turnover, absenteeism, job dissatisfaction, lower organizational commitment and compromised job performance will arise and will cause considerable losses to the call center (Das, 2012; Deery et al., 2010).

In Malaysia, call centers will remain strategically important to business as 7 out of 10 respondents say the most frequent means for customers to interact with organizations is through phone calls (Azhar, 2010). According to Computerworld (2008), in comparison to all its ASEAN counterparts, Malaysia has shown the strongest growth rate. Malaysian call center industry has a growth rate of 17 percent in comparison to only 15 percent for the ASEAN region.

Meanwhile Singapore has a growth rate of 8 percent, preceded by India with 10 percent growth rate and Thailand's growth rate is 15 percent. Supposedly the high industry growth rate in Malaysia provide the opportunity for organizations to make profit. However, Asian Contact Center Industry Benchmark Report (2006) stated agent turnover rate in Asia is 22 percent per annum, which is high, and it poses numerous monetary and operational costs to the organization in terms the cost for new agents'

recruitment and training. It also has been revealed that the employees have become resentful towards the work environment of a call center due to the unsatisfactory people management practices of call centers. (URCOT, 2000).

In line with the high level of agent turnover rate, labor costs add up to 53 percent of the total budget in contact centers in Malaysia, which has been recognized as the major expense in call center operation (Ananda, 2008). Organizations have to spend money and time to recruit and train agents for call centers, and given the related high turnover rates among staff – it is an expensive problem to be endured by business, regardless of the type of business. According to the report by URCOT (2000) employees working in the call center industry have common concern on the subject of high stress levels since the industry shows an absence of definitive career paths, and working conditions and wages lead to high staff turnover, which is a reflection of emerging pattern of employee dissatisfaction in the industry. Researchers had conducted studies that linked turnover to the deviant workplace behavior occurrences (Muafi, 2011; Appelbaum et al., 2007; Bolin & Heatherly, 2001; Coccia, 1998). Therefore call center industry having high turnover rates is most likely may indicate the existence of deviant behavior among the employees.

Additionally the pressure to produce high levels of service quality in the service industry is increasing due to the rise in consumer awareness and consumer rights (Ananda, 2008). Customer call centers require employees to work quickly and efficiently because more customers demand minimal waiting time, especially on the phone. A survey by Avaya Contact Center Consumer Index (2010) found that Malaysian respondent is willing to wait in line on the phone for 50 seconds, second only to Japan (47 seconds) and followed by India (63 seconds), Singapore (69 seconds), Australia (87 seconds) and New Zealand (89 seconds). Additionally, for

interaction via web chat, the average Malaysians is prepared to wait up to 53 seconds while for interaction via email, they are willing to wait for seven hours (Malaysian Business, 2010). This situation may have create a sense of urgency and a time constraint on the employees as they have to meet the expectations of the customers speedily which may have been one of the main causes of stress in the customer call center.

1.3. Problem Statement

Researchers have shown an increased interest in conducting studies in workplace deviance as deviant workplace behaviors tend to result in decreasing job performance and in turn affecting organizational losses (Ahmad & Omar, 2013). However, according to Ahmad and Omar (2013) the earlier researchers conducted studies that are focused more on the adverse consequences of deviant workplace behavior, but there have been less studies concerning the effects of antecedents on workplace deviance.

Furthermore, research focusing on deviant behavior in Malaysia especially in the call center has been scarce although there was an increase of customer dissatisfaction and complaints in connection with deviant behavior in the workplace reported on the local news. For example, in Free Malaysia Today (www.freemalaysiatoday.com, 2013), the online newspaper published an email from a customer depicting unpleasant experience with customer services agents who failed to make calls to the customer as promised, and delayed in assisting and resolving the customers' request. In Malaysian Digest (www.malaysiandigest.com, 2014), it was reported that during the event of service interruption, calls to the call center customer service line was left unanswered for hours. On top of that, another report in Utusan Online (www.utusan.com.my, 2015) recounted an infuriated consumer made a complaint the Tribunal for Consumer Claims

Malaysia as a result of delayed services and no immediate action from the customer services agents who received his calls. These incidents will most likely resulted in the downfall of the image and reputation of the organization, not to mention the loss of customers to the organization.

Consequently, it translated to the loss of income and/or profit for the organization in the long run. It is vital to understand the published reports on these incidents because the profitability of a company is directly affected by the achievements of the employees. The customers' perception on the service quality of a call center is influenced by the customer contact employees or call center agents as they are the link that connects the whole organization with the external customer (Zeithml & Bitner, 2000), thus reflecting one of the key success factors of a call center in addition to the technology is the contact personnel itself (Ananda, 2008). The annual Avaya Contact Center Consumer Index (2010) report stated that 52 percent Malaysian respondents who are dissatisfied with the services are to be expected to switch to a competitor, while another 7 percent of respondents said they have moved their business elsewhere (Azhar, 2010). Losing the customers to other business is one of the ultimate risks borne by the organization as a result of deviant behavior of employees in the workplace.

Based on the observations and experiences of the author working in a customer call center, every day there are workers in the call center being involved with deviant behavior in the workplace, whether intentional or not. There are also existing workers who have shown the tricks and ways to manipulate the system and avoid from doing their jobs to new employees. They are also involved in absenteeism, going out of office without approval from their superiors and wasting organizational resources including making false claims. According to Callaghan and Thompson (2001), despite the

control framework application in call centers with the existence of a sophisticated and overt system, there is still plenty of space for worker resistance and even disobedience. Therefore it is necessary for a research to be conducted in order to comprehend the aspects that may affect this behavior among employees of the call centers in Malaysia. This research would focus on occupational stress as a variable that encourages deviant workplace behavior among employees of call centers for the reason that call centers have generally been associated with stressful and hectic work environment for it employees (Deery et al., 2002; Kjellberg et al., 2010).

1.4. Research Questions

The study aims to examine the deviant workplace behavior among customer services employees of call centers. Therefore, the research attempts to answer the following questions.

i. What is the level of deviant workplace behavior among the customer services employees of call center?
ii. What is the level of occupational stress among the customer services employees of call center?
iii. Does occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) correlate to deviant workplace behavior (interpersonal deviance and organizational deviance) at the call center?
iv. Does occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) influence deviant workplace behavior (interpersonal deviance and organizational deviance) at the call center?

1.5. Research Objectives

The broad purpose of this study is to examine the deviant workplace behavior among customer services employees of call centers. Specifically the study is expected to investigate:

i. The level of deviant workplace behavior among the customer services employees of call center.
ii. The level of occupational stress among the customer services employees of call center.
iii. The correlation of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) and deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.
iv. The influence of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) towards deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.

1.6. Significance of Study

This study would increase the understanding of deviant workplace behavior among customer services employees of the selected call center in Malaysia. This study would attempt to provide a practical understanding on the current situation in the call center, and would give a better picture of the changes that need to be done to overcome the deviant behaviors among the employees. The recommendations of this study would help the management to strategize their workplace policy based on the outcomes of

the study to reduce the occurrences of work place deviant behavior among its customer services employees.

1.7. Scope and Limitations of Study

This study poses limitations majorly due to the narrow scope of study that focuses on the customer services employees only in the selected call center.

1.8. Organizations of Thesis

Chapter 1 described introduction and background of the study, and the research problem. It then outlined the research questions and objectives, followed by the scope and limitations of the study and end with the structure of this research.

Chapter 2 comprises the review of past studies that are related to this research. The review contains a discussion of deviant workplace behavior, including its dimensions and typology. In addition, this chapter discusses work-related stress, and its dimensions and related studies that examine the relationship between stress and deviant behavior.

Chapter 3 consists of research framework, hypotheses and design. This chapter listed the operational definition for the study, the measure of variables, population and sample of the study, and the data collection and analysis techniques.

Chapter 4 presented the results and findings of the research. It shows complete results and analyses of the study in the form of figures, tables and text to highlight the key information obtained from the study. A summary of the results of the study are shown at the end of this chapter.

Chapter 5 discussed the findings of this study and its implications, followed by recommendations. The conclusion to this study is also made in this chapter.

CHAPTER TWO
LITERATURE REVIEW

2.1. Introduction

Previous studies done relevant to this research would be discussed in order to understand the area of study in this chapter. According to Sekaran (2003) literature review is a documentation of the inclusive reviews from the published work and is obtained from the sources of data information gathered in the specific subject of the researchers. These previous studies would describe the deviant workplace behavior and occupational stress in call centers.

2.2. Deviant Workplace Behavior

Deviant workplace behavior as defined by Robinson and Bennett (1995) is voluntary behavior that violates significant organizational norms, customs, policies, or internal regulations and threatens the well-being of the organization or its members. It is also referred to as antisocial behavior by Giacolone and Greenberg (1997), counterproductive behavior by Mangione and Quinn (1975), and workplace incivility by Andersson and Pearson (1999). Based on the research by Robinson and Bennett (1995, 2000), workplace deviance vary along two dimensions, which are the target of the acts and the severity of the acts. The target of the deviant behavior would be interpersonal versus organizational, and the severity of the deviant behavior would be minor versus serious. On the basis of these two dimensions, employee deviance appears to fall into four distinct categories: production deviance, property deviance, political deviance, and personal aggression. Production and property deviance are considered under organizational deviance whereas political deviance and personal

aggression under interpersonal deviance. Production and political deviance are categorized as minor deviance whereas property deviance and personal aggression are categorized as serious deviance. Figure 2.1 shows the typology of deviant workplace behavior as illustrated by Robinson and Bennett (1995).

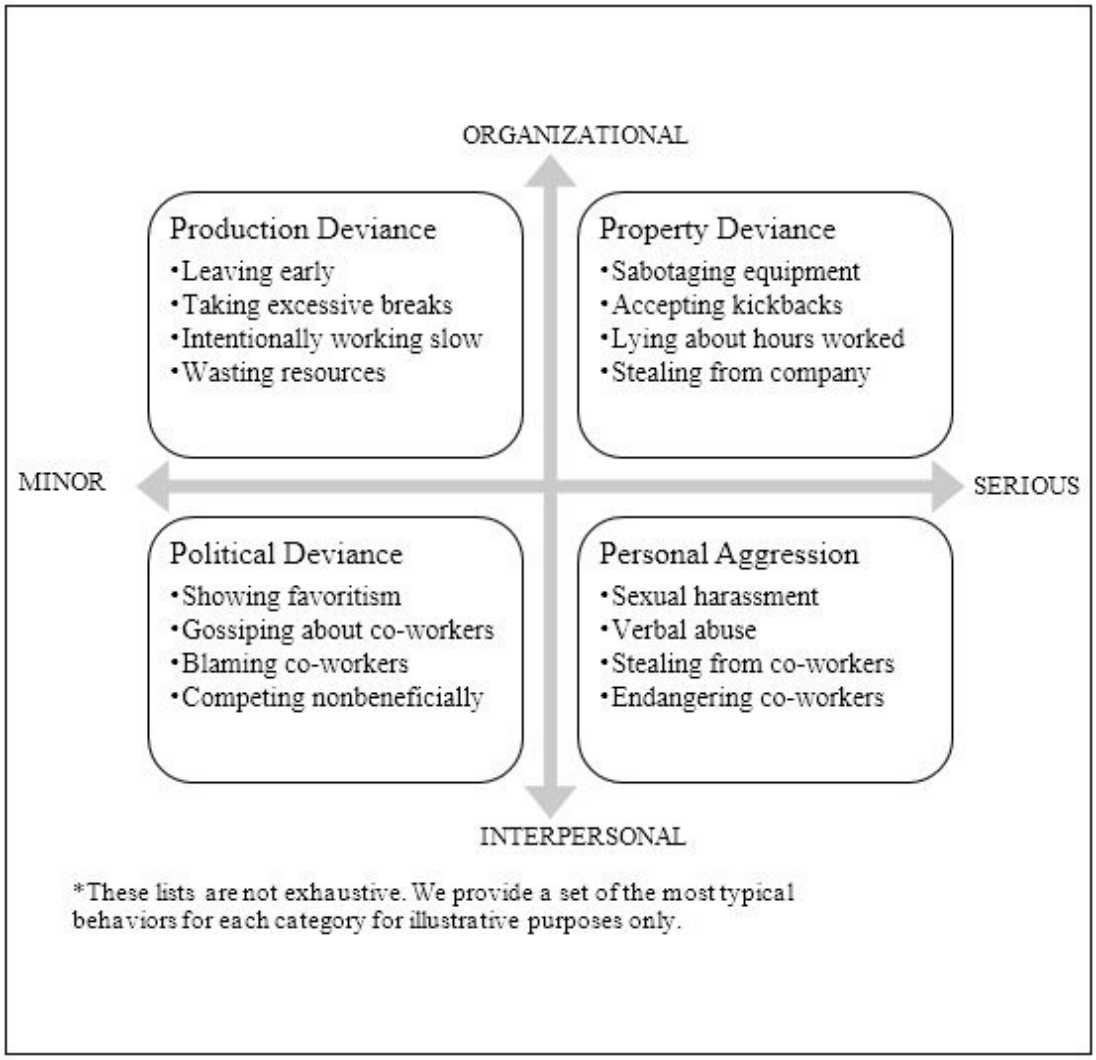

Figure 2.1
The Typology of Deviant Workplace Behavior
Source: Robinson and Bennett, 1995

Workplace deviance has been described as an adaptive response to the work environment (Bennett & Robinson, 2003). Deviant workplace behavior has also been described in terms of social exchange models (Cropanzano & Mitchell, 2005); as a compensatory or reciprocal response to unfair, unsupportive or otherwise unfavorable work conditions (Cohen-Charash & Mueller, 2007). For example, equity and justice-

based models maintain that workplace deviance is motivated by needs for restoration (corrective function) and retribution (retributive function) respectively (Bordia et al., 2008). According to these models, workplace deviance is a cognition-based response to inequity or injustice: employees who experience negative work environment conditions reciprocate (or retaliate) with workplace deviance (Grant, 2013). Other authors have adopted emotion-centered models, emphasizing the mediating role of negative emotions (anger, frustration) in the work environment-workplace deviance relationship, and highlighting occupational stress as a key variable in this process (Bruk-Lee & Spector, 2006; Fox et al., 2001; Fox et al., 2007; Penney & Spector, 2005; Spector & Fox, 2002, 2005). Spector et al. (2006) establish that abuse and sabotage were most strongly related to anger and stress, and withdrawal was associated with boredom and being upset, while theft was unrelated to emotion.

2.2.1. Production Deviance

Production deviance contains relatively minor but still organizationally harmful deviant acts such as taking additional or longer breaks, intentionally working slowly and wasting resources. It includes actions that violate the formally prohibited norms outlining the minimal quality and quantity of work to be completed (Hollinger & Clark, 1992) or doing little or nothing (Mangione & Quinn 1974). Behaviors such as coming in later for work or pretending to be sick while actually being healthy which can interrupt or limit productivity at workplace, can also be classified as production deviance. Production deviance is one of the nonconforming behavior that could compromise the organization but its stage of seriousness is low. Production deviance apply if the worker violates the qualities and standards quantity of products or services (Litzky et al., 2006). According Litzky et al. (2006) despite the low seriousness of the stage it may bring loss to the organization in the long run.

2.2.2. Property Deviance

An action where employees obtain or destruct the tangible material goods or assets of the workplace without authorization is classified as property deviance by Robinson and Bennett (1995) as adapted from Mangione and Quinn's (1974) counterproductive behavior and Hollinger and Clark's (1992) property deviance. Property deviance comprises the acquirement or obliteration of company assets without company authorization (Litzky et al., 2006). The grouping contains serious and organizationally harmful deviance such as sabotaging equipment, accepting kickbacks and stealing from company (Robinson & Bennett, 1995). In addition, employees who stole products, amplified expense accounts, or consumed sales support resources on unqualified customer prospects, are in fact has engaged in property deviance (Litzky et al., 2006). Obvious negative effects on an organizations' net earnings can be observed resulting from unauthorized acquisition, or theft, of inventory and other resources.

2.2.3. Political Deviance

Any arrangement in social interaction that puts other individuals at a personal or political disadvantage is defined as political deviance by Robinson and Bennett (1995). Political deviance transpires once personnel demonstrate favoritism or preference for particular stakeholders (e.g., clients, colleagues, dealers) consequently placing others at a handicap. Political deviance may consist of charging less for preferred clients, revealing company secrets, and gossiping. Organizations are at risk of loss due to such favoritism may lead to erratic service quality, discontentment, and perceptions of injustice (Litzky et al., 2006). This is because in order to gain a promotion or a better or more favorable work assignment, a worker may be spreading false rumors or gossip about other workers. In addition, supervisors who unjustly favor

one employee over another could prevent eligible employees from career advancement at workplace are also guilty of committing a deviant act.

2.2.4. Personal Aggression

Personal aggression occurs when a person behaving in an aggressive or hostile manner toward other individuals at workplace (Litzky et al., 2006). This type of workplace deviance can damage an organization's reputation and have serious damaging consequences for the people being the target of such behavior (Litzky et al., 2006). Personal aggression consist of various forms of intimidation or bullying devices such as sexual harassment, verbal abuse, and threats of physical harm. In addition, this type of deviance in a diverse work environment may take place when employees show prejudice or bias to colleagues of different nationalities or cultures (Joseph, n.d.). Another instance of aggressive behavior can result from workers performing in a reckless manner that endangers the safety of workmates is in work situations where safety is vital, such as on construction or renovation sites (Joseph, n.d.).

2.3. Occupational Stress

Stress is defined by Kaplan (1975) as any characteristic of the work surroundings that poses a danger to the individual's well-being. According to Beehr and Newman (1978), stress is defined as a situation which will push a person to move away from normal functioning because of the change (i.e. disrupt or enhance) in his/her psychological and/or physiological condition. It can also be defined as features of an occupation that requires workforces to work together intensively with others (Ellison, 2004). Such stress takes place as individuals interact with other individuals, or deals with organizational policies and environmental circumstances (Stinchcomb, 2004; Miller, 2005). A number of research have shown that job stressors, such as

interpersonal conflict, are associated with workplace deviance (Chen & Spector, 1992; Fox et al., 2001; Mitchell & Ambrose, 2007). Occupational stress may also arise from monetary aspect, societal aspect, or overall working environments and may possibly consist of, for instance, interpersonal stressors (abusive superiors, conflict with colleagues), stressors concerning to the nature of the job itself (dull, monotonous, or mundane work, complex or difficult jobs, heavy workload, shift work), or stressors associated with organizational framework (inadequate resources, unfair reimbursement or payment systems) (Spector, 2002). Occupational stress has been linked with absenteeism, communication problems, morale, and productivity/performance issues (Beehr & Newman, 1978; Hepburn et al., 1997; Jex, 1998).

In addition, workers who have unmet expectations of their roles in the organization, faced with conflicting demands, and conflicting needs, goals and values from what is required by the job can become the cause in the occurrence of stress (Connor & Worley, 1991). An additional source of stress is when the information about job duties and responsibilities is lacking, for the reason that the uncertainty about responsibilities and others' expectations may result in role ambiguity. Moreover, supervisors as well as regular workforces can experience stress when either they are overloaded or under loaded with work, when they suffer from time pressures and deadlines, when they have to do repetitive work, or when they have responsibility for others (Connor & Worley, 1991).

In addition, longitudinal research has confirmed that occupational stress is indeed a causal factor (Karasek & Theorell, 1990). Work related stress can adversely impact individual workers emphasizing counterproductive work behavior (Chraif, 2010), low performances at work place (Pitariu, Radu & Chraif, 2009; Pitariu & Chraif, 2009,

Chraif, 2008) as well as the whole organization. Fairbrother & Warn (2003) noted that studies of the scientific collected works point out stress to be associated with impaired individual functioning in the place of work. According to Stranks (2005) basically stress instigated a number of complex changes on a few aspects. First changes is in the psychological and emotional level which causes tiredness, anxiety and lack of motivation. Second is in the cognitive level which causes increased potential for error and, in some cases, accidents arising through error. Third is in the behavioral level which leads to poor or declining relationships with coworkers, irritability, indecisiveness, absenteeism, smoking, too much eating and alcohol consumption. The last changes is in the physical level which induce increasing ill health associated with headaches, general aches and pains, and lightheadedness (Stranks, 2005).

Furthermore, Wallace et al. (2000) noted that it has been found that one of the most stressful jobs is working in call centers. A highly stressed work environment in call centers is produced as a result of continual monitoring and frequent concentration on efficiency of call center agents by the managers in the organizations, which often at the expense of the employees. This situation in the call center is termed as the 'sacrificial human strategy' by Wallace, Eagleson, and Waldersee (2000).

As a further matter, critical issues in call centers are involving the quality versus quantity, and the efficiency versus productivity of call centers (Ananda, 2008). According to Ananda (2008) this is because the call center agents' productivity measures interconnected as quality outputs of the call center, a situation that is impelled by the frequent high technological advancement in the industry. Examples of the measurements that are commonly used as key performance outputs of call centers at present are customer waiting time, number of calls attended, number of abandoned

calls, and time taken to attend each calls; whereby these measurements put much destructive pressures on call center agents (Ananda, 2008).

There are five types of job pressure assessed by House et al. (1979) namely: responsibility pressure (having too much responsibility for people, process, or products and insufficient human or material assistance); quality concern (having concern about not being able to do as good work as one could or should); role conflict (receiving ambiguous and/or conflicting expectations from others at work); job vs. non-job conflict (feeling that the job interferes with non-work (e.g., family) life); work load (reporting a large quantity of work and frequent time pressure).

The nature of work in call centers fit these categories of job pressures. According to Frenkel and Donoghue (1996) agents occupancy is monitored using call handling statistics where their work routines are tightly structured and breaks are allowed to be taken only at predetermined times; and there was evidence of increasing management emphasis on achieving and maintaining higher call volumes. Frenkel and Donoghue (1996) also found that the stressful work condition of call centers occurred as a result of the competing pressures felt by many call center agents to maintain quality service standards and to meet quantitative goals set by the organization, at the same time being constantly monitored by the management added the pressures.

2.3.1. Responsibility Pressure

Having too much responsibility for people, process, or products and insufficient human or material assistance would cause stress to employees at all level. It is harder for employees to solve any problems at work place that impose stress on them without the support from supervisors, colleagues, or subordinates. Research found that the rate of absence would consequently increases due to low workplace

support (Melchior et al., 2003; Vahtera et al., 2000; Niedhammer et al., 1998; North et al., 1996). Another study found that the most commonly reported cause of stress is due to the manager-subordinate relationship (Tepper, 2000; Curphy and Hogan, 1994).

2.3.2. Quality Concern

According to World Health Organization (2004) stress is a consequence of employees' ability to cope with work has been challenged due to a mismatch between the demands and pressures on the employees, and their knowledge and abilities. The problem rise in situations where the workers are not able to cope with the pressure from excessive work, or the worker feels that their knowledge and abilities are not adequately utilized in doing their job. It consequently may contribute to rising concerns on the quality of work done by the employees as they may not do the work well, or as good as they should be doing or need to do. In addition, rapid scientific and technological advancement causes constant changing in modern working life (WHO, 2007). As a consequent, employees are required to learn new skills and they need to adopt new methods of working, and they have to face the demands for increased quality of work due to the rapid changes in production systems. Employees must also face the pressure of the demand for higher productivity, the time pressure is greater and jobs are more hectic. In addition, workers may experience increased job uncertainty and receive less remunerations due to higher job competition (WHO, 2007).

2.3.3. Role Conflict

According to Gullahorn (1956), role conflict takes place when an individual or a group are placed with dissenting demands because of his/its role connections with two or more groups. In general, the persons involved find it impossible to completely

act in accordance with the opposing obligations although on the inside they feel the compulsion to meet the conflicting demands, and at the same time they are threatened by the potential sanctions if they are unsuccessful to fulfil either demand. A study conducted by Kammeyer-Mueller and Wanberg (2003) found that absenteeism and tardiness are decreased when a role is clearly defined while Allen and Meyer (1990) established in their study that greater effective commitment have been expressed by employees that are comfortable in their roles and job in comparison to others that did not.

2.3.4. Job vs. Non-Job Conflict

An individual may has many roles in life (e.g. wage earner, family member etc.), only one of which is typically associated with work. The disagreement between work and life roles is identified as a form of interrole conflicts where there is interference in one domain like work obligations when a person perform the demands of other roles such as family responsibilities or other activities in the social life (Greenhaus & Beutell, 1985). These roles may represent conflicting demands that become sources of stress (Hellriegel & Slocum, 2004). The pressures experience by family members in order to balance work and family that has been well recognized are conflict due to multiple roles that causes overload as they have too little time to do everything (Lewis & Cooper, 1987). When inequitable demands from family and work generated problems in fulfilling the demands of other field, it led to work-family conflict (Gary, 1991).

Additionally, Messersmith (2007) draw attention to the fact that work stress generates work-life conflict that can take several forms of invasiveness into family time, free time activities, or some general failure to mentally disconnect from one's world of work. Serious organizational outcomes can form as a result from work–family conflict

experienced by employees (Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005) such as decreased job satisfaction (Bruck, Allen, & Spector, 2002) and increased turnover intentions (Greenhaus, Parasuraman, & Collins, 2001). In another study, it has been shown that employees tend to react by violating organizational norms when they experience increased conflict between work and family roles (Darrat et al. 2010).

2.3.5. Workload

Having insufficient time and/or resources to complete the tasks at hand can be stressful. A lot of stressful jobs may be in a constant state of role overload when work demands go beyond the capability of employee to meet them effectively (Hellriegel & Slocum, 2004). Workload has been associated to a diverse of physiological, psychological, and behavioral strain symptoms (Beehr & Newman, 1978; Roberts et al., 1997; Miller & Ellis, 1990). In addition, Greenhaus et al. (1978) noted that job stress is a result of an individual's psychological well-being decreasing due to heavy workload.

2.4. Occupational Stress and Deviant Workplace Behavior

Research has been done by previous researchers to study the occurrence of work related stress and the occurrence of deviant workplace behavior on separate occasions. Wallace et al. (2000) has conducted a research at the call center agent level in order to examine the pressure originating from the contradicting goals of efficiency and service. According to Wallace et al. (2000) the pressure in the middle of achieving efficiency and quality service is more prominent in a call center, in comparison to other routes of service delivery. Their investigation was conducted to look at the strategies adopted by four large call centers that were involved in the study, and they noticed that the four observed call centers have similarities in the work structures where the call

center employees must contribute a significant amount of emotional labor by appearing caring, pleasant, and sympathetic towards the clients but at the same time they have to be obligated to attend to a large number of calls. Thirty percent from all of the calls directed at the call centers requires the agents to deal with complaints from the clients, thus making the emotional labor aspect to be anticipated.

From the study done by Wallace et al. (2000) it is found that the perceived objectives of the call centers are not consistent with the advocated objectives, since the employees each call centers involved in the research perceived that the main organizational management priority was to be delivered productivity based on low cost but high volume calls, instead of adhering to the principal official written and championed strategic objectives of delivering high levels of customer service and ensuring customer satisfaction. Apart from that, the researchers found that in the control systems of the call center the schedule of all agents and their availability to receive calls as well as the agents activities are supervised using the information technology systems where the workers of the call center had precise targets for talk time, wrap up time, and the rates of abandonment of calls. In addition, the agents' superiors also observed the subordinates on a regular manner with regard to service standards, and customer satisfaction surveys were in place to complement the monitoring program.

However, according to Wallace et al. (2000) all four call centers involved in the study are being heavily dependent on task-focused management and measurement systems despite the constant monitoring on the quality service and varying degrees of customer satisfaction because in the end of the day the call centers' performance objectives and performance management agendas were biased in the direction of numerical quotas and targets for employees efficiency and speed.

When confronted with a job stressor such as a shortage of resources, employees may either (a) engage in forms of coping that are destructive to other employees and/or the organization (deviant behavior) or (b) engage in constructive forms of coping such as problem-focused strategies (as in finding a way to compensate for the shortage) (Spector, 2002). While workplace deviance may be an adaptive response to occupational stress in the short-term, it may lead to maladaptive consequences, such as organizational or even criminal reprimands in the long-term (Grant, 2013).

Furthermore, unlike problem-focused coping strategies which seek to alleviate job stressors directly, workplace deviance is essentially an avoidance coping strategy; it provides immediate relief from negative emotions, but ultimately the causal agent or source of stress is left unchanged (Grant 2013). An early study of police officers (Violani & Marshall, 1983) found that although workplace deviance was one of the most commonly used coping strategies, it failed to reduce stress and actually introduced additional organizational pressures. In addition, workplace deviance may have a cascading effect throughout organizations, whereby employees who are targeted by the deviant behavior develop their own stress and productivity related problems (Henle et al., 2005).

To a degree individual stress is widespread and cannot be entirely eradicated (Ortega et al., 2007). The same situation can be said to ensue in terms of workplace deviance. On the other hand, training and education can be applied in order to reduce the pressure (Waters and Ussery, 2007). It is imperative to handle workers' constant exposure to stress effectively as it can be damaging to the employees in terms of the quality of their work and their physical and mental condition, as well as for the organization where they work (Maslach, 2003).

CHAPTER THREE
METHODOLOGY

3.1. Introduction

The research methodology adopted to carry out this study is discussed in this chapter. It begins with the research framework followed by hypotheses of the study. This chapter explains the research design, operational definition of variables, instrumentation and measurement of variables, population and sample of research and the sampling method implemented, data collection technique, as well as elaborates the data analysis technique.

3.2. Research Framework

The research framework of this study is developed by the researcher based on the researcher's previous experience of working in a call center for two years, combined with the disparity in previous studies concerning the factors influencing deviant workplace behavior as illustrated in Figure 3.1. It is the conceptual framework developed by Litzky et al. (2006) to help in the understanding of some of the causes, types, and implications of workplace deviance which did not include occupational stress as one of the triggers. For that reason, the research framework for this study is designed to revolve around the idea of relationship of work stress towards workplace deviance of call center employees in Malaysia. The research framework of this study is illustrated in Figure 3.2.

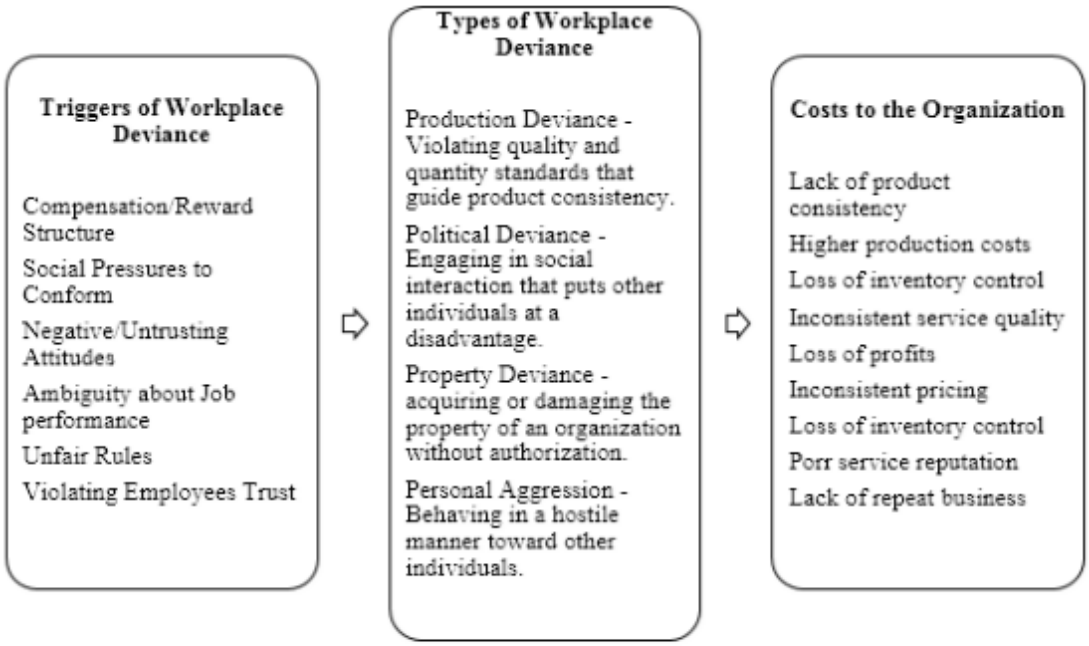

Figure 3.1
Causes and Costs of Workplace Deviance
Source: Litzky et al., 2006

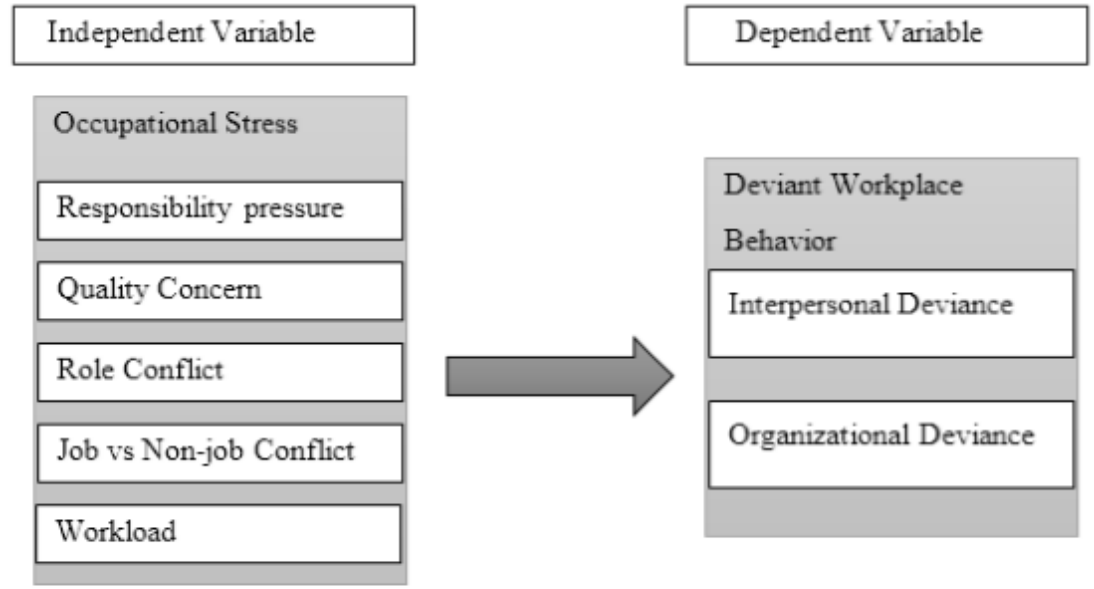

Figure 3.2
Research Framework

3.3. Research Hypotheses

This study is aimed in examining the relationship between work stress and deviant workplace behavior in a Malaysian customer call center. Statistical Package for Social Science (SPSS) version 19.0 was utilized. A ray of statistical tests will be conducted to process the data. Therefore, the hypotheses suggested in this study are:

Hypothesis a: Occupational stress is significantly correlated to deviant workplace behavior.

Hypothesis a_1: Responsibility pressure is significantly correlated to organizational deviance.

Hypothesis a_2: Quality concern is significantly correlated to organizational deviance.

Hypothesis a_3: Role conflict is significantly correlated to organizational deviance.

Hypothesis a_4: Job vs non-job conflict is significantly correlated to organizational deviance.

Hypothesis a_5: Workload is significantly correlated to organizational deviance.

Hypothesis a_6: Responsibility pressure is significantly correlated to interpersonal deviance.

Hypothesis a_7: Quality concern is significantly correlated to interpersonal deviance.

Hypothesis a_8: Role conflict is significantly correlated to interpersonal deviance.

Hypothesis a_9: Job vs non-job conflict is significantly correlated to interpersonal deviance.

Hypothesis a_{10}: Workload is significantly correlated to interpersonal deviance.

Hypothesis b: Occupational stress has a significant influence towards deviant workplace behavior.

Hypothesis b_1: Responsibility pressure has a significant influence towards organizational deviance.

Hypothesis b_2: Quality concern has a significant influence towards organizational deviance.

Hypothesis b_3: Role conflict has a significant influence towards organizational deviance.

Hypothesis b_4: Job vs non-job conflict has a significant influence towards organizational deviance.

Hypothesis b_5: Workload has a significant influence towards organizational deviance.

Hypothesis b_6: Responsibility pressure has a significant influence towards interpersonal deviance.

Hypothesis b_7: Quality concern has a significant influence towards interpersonal deviance.

Hypothesis b_8: Role conflict has a significant influence towards interpersonal deviance.

Hypothesis b_9: Job vs non-job conflict has a significant influence towards interpersonal deviance.

Hypothesis b_{10}: Workload has a significant influence towards interpersonal deviance.

3.4. Research Design

The understanding and applying the suitable research methods are important to all researchers. There are generally two approaches in conducting research used namely, quantitative and qualitative research approaches (Neil, 2009). Neil (2009) describes research design as the overall arrangement and methods applied in conducting the test to prove the hypothesis according to the standards maintained for data collection and analysis. Qualitative research is a research design used by the researchers to have an in depth understanding of the events without using numerical measurements (Zikmund, 2003). This approach is generally used by researches applying oral interviews to gather information on respondent's views and feelings regarding the situations (Uma & Roger, 2009).

Quantitative research on the other hand, is the research done based on data that is descriptive in nature and not qualified (Uma & Roger, 2009). This research method looks more at establishing generalizable relationship between dependent variable and independent variable in a given population (Zikmund, 2003). Zikmund (2003) further explains that both the approaches are equally important, and the choice is made based on the nature of the research. Therefore the present study makes use of quantitative approach, in order to test the hypothesis that an association exist between occupational stress and deviant workplace behavior among customer service employees in Malaysian call centers. According to Uma and Roger (2009), a cross sectional data collection refers to collecting data from the intended sample group once.

The quantitative approach can be categorized in to descriptive or experimental. In this study, the researcher opted to descriptive research; to apply this approach, the demographic characteristic of the respondents were measured in order to establish an association between independent and dependent variable. The independent variables

are those variables that influence the dependent variable (Uma & Roger, 2009) and are under the control of the researchers' needs and manipulation. Normally what the researchers thinks will effect or influence the dependent variable. It could also assume to be the input that will be modified by the framework to change the output known as dependent variable.

The independent variable in this study is the work stress with five dimensions namely responsibility pressure, quality concern, role conflict, job vs. non-job conflict, and work load. They will be tested and analyzed in order to examine their influence on deviant workplace behavior.

3.5. Operational Definition

3.5.1. Deviant Workplace Behavior

Voluntary behavior that violates significant organizational norms, customs, policies, or internal regulations and threatens the well-being of the organization or its members.

3.5.2. Responsibility Pressure

Having too much responsibility for people, process, or products and insufficient human or material assistance.

3.5.3. Quality Concern

Having concern about not being able to do as good work as one could or should.

3.5.4. Role Conflict

Receiving ambiguous and/or conflicting expectations from others at work.

3.5.5. Job vs. Non-Job Conflict

Feeling that the job interferes with non-work (e.g., family) life.

3.5.6. Workload

Reporting a large quantity of work and frequent time pressure.

3.6. Measure of Variables/Instrumentation

3.6.1. Questionnaire Design

The data used in this study were collected through the survey questionnaires distributed to the call center employees. The questionnaire consists of 3 parts. Part A measured the occupational stress, then Part B focused on measuring the deviant workplace behavior, and Part C on demographic profile. All the questions in each section A and B were measured by using Likert Formatted Scale. All of these measures were adopted from the previous researchers. Additionally, the questionnaire is translated to Bahasa Malaysia to facilitate the respondents in answering the survey. A representative from the call center requested for a bi-language questionnaire as it would help some of the employees with weak command of English to better understand the questionnaire. An introductory letter was attached with the questionnaire introducing the researcher and the purpose of research, and assuring the anonymity of the respondents.

3.6.2. Occupational Stress Scale

The instrumentation for occupational stress was adopted from House, McMichael, Wells, Kaplan, and Landerman (1979). It measures the occurrence with which workforces are troubled by stressful incidences. There are five subscales in the measure intending to evaluate the level of work related stress resulting from the following dimensions: job responsibilities, quality concerns, role conflict, job vs. non-job conflict, and workload. Each dimension features three items, which makes the whole item of 15. Responses to the items for responsibility pressure, quality concerns,

role conflict, and job vs. non-job conflict are obtained using a 5-point Likert-type scale where 0 = not at all, 1 = rarely, 2 = sometimes, 3 = rather often, and 4 = nearly all the time. Responses to workload items coded 0 = never, 1 = rarely, 2 = sometimes, 3 = fairly often, and 4 = very often.

Coefficient alpha values ranged from .59 to .76 for responsibility pressure, and from .56 to .76 for job vs. non-job conflict (Holder & Vaux, 1998; House et al., 1979). Alpha for quality concerns was .72. Alpha was .70 for role conflict and .73 for workload stress (House et al., 1979).

3.6.3. Deviant Workplace Behavior

The instrumentation for deviant workplace behavior was adopted from Bennet and Robinson (2000). The initial scales featured 28 items, however the finalized items developed by Bennett and Robinson (2000) contained 19 items measuring two dimensions of workplace deviance. Interpersonal deviance is measured through 7 items and organizational deviance is measured through another 12 items. Responses to all 19 items in the instrument are obtained using a 7-point Likert-type scale where 1 = never, 2 = once a year, 3 = twice a year, 4 = several times a year, 5 = monthly, 6 = weekly, and 7 = daily.

Coefficient alpha values for interpersonal deviance was .78 whereas coefficient alpha values for interpersonal deviance was .81. Table 3.1 shows the summary of Cronbach alpha for each variables in this study.

3.6.4. Demographic Information

This section contained 5 items that are gender, age, education, work experience and monthly income.

Table 3.1
Summary of variables

Variables		Items	Researchers	Cronbach's Alpha
Dependent	Interpersonal deviance	7	Robinson and Bennett (2000)	.78
	Organizational deviance	12		.81
Independent	Responsibility pressure	3	Holder & Vaux (1998), House et al. (1979)	.59 to .76
	Quality concerns	3	House et al. (1979)	.72
	Role conflict	3	House et al. (1979)	.70
	Job vs. non-job	3	Holder & Vaux (1998), House et al. (1979)	.56 to .76
	Workload	3	House et al. (1979)	.73

Source: *Taking the Measure of Work: A Guide to Validated Scales for Organizational Research and Diagnosis* (Fields, 2002)

3.7. Population and Sample

The total number of people, event or things that the researcher wants to examine is referred to as a population (Uma & Roger, 2009) that share a common characteristic required by the researcher (Zikmund, 2003). It is also the total category of a matter which is the focus of attention on a particular research subject. In this study the population is 400 customer service employees of a selected call center in Malaysia.

Sample is the subset of the population (Zikmund, 2003; Uma & Roger, 2009), which is studied in order for the research to be generalized on the overall population of study (Creswell, 2008). This is because it is not absolutely realistic to gather all the data from this population, hence the determination of the size of the sample is important (Zikmund, 2003). In order to decide the actual sample size of this type of study, the table for determining sample size for a given population developed by Krejcie and Morgan (1970) is referred and a sample of 196 respondents is suggested. The table for determining sample size for a given population is shown in Table 3.2. Based on the table the researcher decides to use 200 as the sample size of this study.

Table 3.2
Table for Determining Sample Size for a Finite Population

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

3.7.1. Sampling Method

According to Zikmund (2003), sampling is an important characteristic of every research that entails in-depth examination. The function of sampling in business research is to estimate unidentified characteristics of the population (Zikmund, 2003). There are various sampling techniques used in the academic research domain. Basically, they can be categorized into two that is, probability and non-probability sampling (Zikmund, 2003; Uma & Roger, 2009).

In probability sampling, every element in the population has a known, nonzero probability of selection; while in nonprobability sampling, the probability of any particular member of the population being chosen is unknown (Zikmund, 2003). Probability sampling includes simple random sampling, systematic sampling, stratified sampling, cluster sampling and multistage sampling. Nonprobability sampling includes convenience sampling, judgment sampling, quota sampling, and snowball sampling. According to Zikmund et al. (2010) probability sampling is preferred over nonprobability sampling as no appropriate statistical techniques exist for measuring random sampling error from a nonprobability sample, which makes projecting the data beyond the sample is statistically inappropriate.

In this study, the researcher opted to use simple random sampling method to collect the data. Simple random sampling is a sampling design in which k distinct items are selected from the n items in the population in such a way that every possible combination of k items is equally likely to be the sample selected (Thompson, 2012). The employees participating in this study were selected randomly by the representatives of the call center from their database and the participants were not allowed to answer the questionnaire more than once. However due to the irregular working hours in the customer call center, the data collection processes had to be carried out with the assistance of representatives from the organization. Employees in the customer call center began working as early as 8 am until 4 or 5 pm, while the last shift time is 3 pm until 12 pm. Their shift schedules are constantly changing from day to day, and their scheduling of leave vary among each other. The inconsistency of work schedules posed restriction on the distribution and collection of questionnaires, thus resulted in a longer data collection period.

3.8. Data Collection Technique

Collecting data is the fundamental process of this research. The procedures afford guiding principles for the collection, processing, analysis as well as reporting of intended information. There are basically two methods of collecting data, which is primary, and secondary data collection (Uma & Roger, 2009). According to Kothari (1985) primary data is original information collected for the first time. On the other hand secondary data is information that has been collected previously and that has been put through the statistical process. Secondary data gathered and recorded by someone else, prior to, and for purposes other than the current research are usually already assembled and require no access to respondents or subjects (Zikmund et al., 2010). Primary data which are collected for the first time given in the form of raw materials and need the application of statistics methods for the purpose of analysis and interpretation by the researcher. In this study, primary methods were used to collect data as the questionnaire distribution was done directly to the employees at their work place.

3.8.1. Data Collection Procedures

Since primary methods were selected to be used to collect data in this study, the researcher with assistance from two representatives from the call center disseminated 200 questionnaire to the employees present during the distribution period and obtained the completed questionnaire later on with the help of two representatives from the call center. Data collection process lasted around three months, from the end of November 2014 to the end of February 2015. A total of 156 questionnaire found completed and returned resulting in an overall 78 percent response rate. The call center executives did not return 44 questionnaire because some call center agents are not willing to take part in the study. Their reasons include time constraints between works,

not being comfortable with revealing information they deemed personal and fearing non-confidentiality.

3.9. Data Analysis Technique

The data analysis processes in this study were performed using the Statistical Package for the Social Sciences (SPSS) version 19.0. The data collected from the call center was analyzed by means of descriptive statistics and inferential statistics which include correlation analysis and multiple regression analysis. Table 3.3 shows the summary of data analysis technique that will be used in this study.

Table 3.3
Summary of data analysis technique

Objective	**Analysis applied**
i. The level of deviant workplace behavior among the customer services employees of call center.	Mean/standard deviation
ii. The level of occupational stress among the customer services employees of call center.	Mean/standard deviation
iii. The correlation of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) and deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.	Correlation
iv. The influence of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) towards deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.	Regression

3.9.1. Data Cleaning

Data cleaning was executed prior to statistical analyses. The normality, detection of missing data and outliers was also assessed. Data screening was carried out to examine the uniqueness of the respondents so as to respond to question about correctness of data qualify for statistical supposition, data transformation has to be carried out (Mayers, Gamst and Guarino, 2006). Upon completion of data entry, data cleaning processes were carried out using statistical software to detect and correct any error in the data set. Any missing data or incorrect data was removed so that the data would precisely replicate the answers completed by the respondents of this research.

This process would ensure all data are in place and accounted for, and no data absent or missing. Data cleaning undertaken would identify any uncommon or extreme responses existing in the data set that may mislead the understanding of the occurrences being studied. In addition it would ensure the data meet the statistical assumptions that underline the multivariate technique which will be used later in the study. This process is the initial and most essential steps in any data processing task as a verification that the data values are correct or, at the very least, conform to some a set of rules. For example, a variable called ‘gender’ would be expected to have only two values; a variable representing height in inches would be expected to be within reasonable limits. In addition, the coded data must go through a verification process to ensure the appropriateness of numerical codes for the values of each variable. This process can be referred to as code and value cleaning. It enables researchers to determine whether each variable contains only legitimate numerical codes or values and whether these codes look reasonable.

According to Hair et al. (2010), prior to processing data, it is vital to assess the detection of outliers. Mayers et al. (2006), further assert that severe cases or strange

values on a singular disparity or a mixture of discrepancy are considered to be outliers. Multivariate outliers will be carried out for the purpose of this research. In addition to recognizing possible outliers, it is imperative to test the possibility underlying large number of multivariate techniques.

3.9.2. Normality

The preliminary analysis for normality distributions of the data was acquired using the statistical software in which the normality distribution of the data were described through skewness (the symmetry of a distribution) and kurtosis (the clustering of scores toward the center of a distribution). Skewness and kurtosis are the most popular ways used by many researchers to describe the shape of the data distribution. These methods are referring to the range of distribution, which is used with the interval, and the ratio of level data. If the observed distribution is exactly normal, the values of skewness and kurtosis will be zero. The positive values of skewness indicate a positive skew while the positive values of the kurtosis show a peaked (leptokurtic) distribution. Otherwise, if the values of skewness are negative, then it shows a negative skew and the negative values of kurtosis indicate a flatter (platykurtic) of distribution.

According to Mayers (2006) a variety of opinions can be found concerning what is an unacceptable level of skewness and kurtosis for a particular variable; some statisticians are more comfortable with a conservative threshold of ± 0.5 as indicative of departure from normality (e.g., Hair et al., 1998; Runyon et al., 2000), whereas others prefer a more liberal interpretation of ± 1.00 for skewness, kurtosis, or both (e.g., George & Mallery, 2003; Morgan et al., 2001). According to Hair et al. (1995), the skewness values must not be more than 2.58 at sig. 1% and 1.96 at sig. 5%. For the kurtosis, a curve is too peaked when the values exceed +3 and is too flat when it is below -3.

Another way for checking that the data has a normal distribution is through visual inspection from plots or graphs. The output of a normal Q-Q Plot can be used in order to determine normality graphically. Data that has achieved the normal distribution on a normal probability plot will align the plots in a straight line (Coakes & Steed, 2003).

In addition, box plot or also known as box and whisker diagram can provide graphical illustration of the data distribution. It is a standardized way of displaying the distribution of data based on the five number summary: minimum, first quartile, median, third quartile, and maximum. In the simplest box plot the central rectangle spans the first quartile to the third quartile (the interquartile range or IQR). A segment inside the rectangle shows the median and "whiskers" above and below the box show the locations of the minimum and maximum.

3.9.3. Reliability Analysis

Reliability and validity are two principal criteria normally used in testing the goodness of measure. According to Sekaran and Bougie (2010), reliability is a measuring instrument that measures the consistency of an instrument in measuring the intended construct. Schindler and Cooper (2003) define reliability as representing the internal consistency demonstrating the homogeneity of an item in the measure, measuring the variables. The validity of the instrument is to identify if the item measures the exact concept the way it was designed to measure (Sekaran & Bougie, 2010). Sekaran (2003) further emphasizes in identifying the internal reliability of variables Cronbach Alpha as the most commonly used reliability coefficient. Cronbach alpha is designed to identify the internal consistency or the average correlation of the items in the survey instruments to measure its reliability (Cronbach, 1951). A reliability test was conducted on the scales used to measure responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload.

In addition instruments used to test the dependent variable, deviant workplace behavior questionnaire was also tested for reliability. Fornell and Lacker (1981) have suggested a composite reliability of .70 as satisfactory. Hair et al. (2010), asserts that a loading above .50 to be significant. Research also supports .40 to be sufficient for a study (Atyeo, Adamson and Cant, 2007). For exploratory study Cronbach Alpha of 0.60 or higher is suggested by Hair et al. (2010) as significant. Even though, some researchers use a different cut off like 0.8 or 0.6 (Garson, 2002) for this study value above .70 will be agreed as significant as suggested by Nunnally and Bernstein (1994). Items that fulfilled the Cronbach Alpha requirements were used to complete the analysis.

3.9.4. Factor Analysis

Factor analysis helps in identifying if each item is able to measure what it is intended to measure, as well as to verify the construct validity of the items. In particular, factor analysis can be used to explore the data for patterns, confirm our hypotheses, or reduce the many variables to a more manageable number. This study conducted a factor analysis, and the respondents were submitted to SPSS for factor analysis using principal component analysis method and a Varimax rotation method.

In conducting the factor analysis, priority is given to the readings of KMO (Keiser-Meyers-Oklin) of the dimensions of the organizational justice used in this study. To allow any dimensions to be used in the study, the KMO value has to be registered close to 1.0 and qualifies to be used in factor analysis.

This preceded Anti Image Matrices, by analyzing the value of anti image correlation with an ‘a-square. The researcher follows the requirements advised by Atyeo, Adamson and Cant (2007) to acquire a minimum factor loading of 0.5 for anti-image

to be included in the factor analysis. Any item that registers below 0.5 will be removed from the study.

After that the researcher will consider the cumulative variance in order to ascertain the level that the items in each dimension spread out. Under normal circumstances, the higher the cumulative variance, the better the correlation between items in each variable.

3.9.5. Descriptive Statistics

Descriptive statistics is the term given to the analysis of data that helps describe, show or summarize data in a meaningful way such that, for example, patterns might emerge from the data. Descriptive statistics do not, however, allow researcher to make conclusions beyond the data that have analyzed or reach conclusions regarding any hypotheses that might have made. They are simply a way to describe the data.

Descriptive statistics are very important because it would help to visualize what the data is showing, especially if there was a lot of it. Descriptive statistics therefore enables researchers to present the data in a more meaningful way, which allows simpler interpretation of the data. Typically, there are two general types of statistic that are used to describe data:

i. Measures of central tendency: these are ways of describing the central position of a frequency distribution for a group of data. The frequency distribution is simply the distribution and pattern of data from the lowest to the highest. We can describe this central position using a number of statistics, including the mode, median, and mean.
ii. Measures of spread: these are ways of summarizing a group of data by describing how spread the data set is. To describe this spread, a number of

statistics are available to us, including the range, quartiles, absolute deviation, variance and standard deviation.

When descriptive statistics is used, it is useful to summarize the group of data using a combination of tabulated description (i.e., tables), graphical description (i.e., graphs and charts) and statistical commentary (i.e., a discussion of the results).

3.9.6. Inferential Statistics

Inferential statistics are techniques that allow researchers to use samples to make generalizations about the populations from which the samples were drawn. It is, therefore, important that the sample accurately represents the population. The process of achieving this is called sampling. Inferential statistics arise out of the fact that sampling naturally incurs sampling error and thus a sample is not expected to perfectly represent the population. The methods of inferential statistics are the estimation of parameter(s) and testing of statistical hypotheses. The common types of inferential statistics used are Pearson Correlation and Multiple Regression, provided that the sample is normally distributed. In the event that the sample is not normally distributed, the estimation of the degree of association between two quantitative variables can be done using Spearman's Rank Correlation.

3.9.6.1. Pearson Correlation

Correlation measures the degree to which two quantitative variables, X and Y, are in mutual agreement that is the relationship between two or more classes of variables. When a higher value of X is associated with a higher value of Y, a positive correlation exists. In a relationship where high value of X is linked with low value of Y, a negative correlation occurs. Pearson Correlation coefficient is the most currently used measures of dependence between two quantities. Correlation coefficient

indicated by symbol r with array of -1 to +1 to signify positive and negative relationship respectively. When the entire distribution fall directly on a line with an upward incline r = -1. Strong correlations are connected with dotted clouds that stick imaginary to the trend line. Therefore the closer r is to +1, the stronger the positive correlation and the closer r to -1 the stronger the negative correlation (Salkind, 2009). Correlation coefficients are often categorized on a scale from very strong to very weak in order to interpret their magnitude. The table 3.4 summarizes the strengths of the correlation as explained by Salkind (2009). However when the value of r is 0 or close to zero, it implies only that there is no linear relationship between the variables, but the data may be related in some other nonlinear way. Furthermore, correlation does not necessarily imply causation (Bluman, 2014). Strength of correlation classification is shown in Table 3.4.

Table 3.4
Strength of correlation

Very Weak	Weak	Moderate	Strong	Very Strong
0.00 – 0.20	0.30 – 0.40	0.40 – 0.60	0.60 – 0.80	0.90 – 1.00

Source: Salkind, 2009

3.9.6.2. Spearman Correlation

Spearman's rank correlation coefficient is a method to measure the non-parametric correlation between variable which evaluate how well a random monotonic function could designate the connection between two variables, without creating any assumptions about the frequency distribution of the variables (Bolboacă & Jäntschi, 2006). Normally the Spearman correlation coefficient is abbreviated using the Greek letter ρ (rho). According to Bland (1995) the Spearman's rank correlation is difficult to be interpreted as a measure of the strength of the relationship, however it is acceptable for testing the null hypothesis of no relationship. Variables have to be

converted to ranks first in order to compute the Spearman rank correlation coefficient, where in the process of rank assignment, the lowest value is assigned with the lowest rank. If there are two equal values for two different combinations (for measured and/or estimated inhibitory activity), the associated rank had equal values and has to be calculated as means of corresponding ranks. Cohen's standard will be used to evaluate the correlation coefficient to determine the strength of the relationship, or the effect size, where coefficients between .10 and .29 represent a small association; coefficients between .30 and .49 represent a medium association; and coefficients above .50 represent a large associate or relationship (Cohen et al., 2003).

3.9.6.3. Multiple Regression

Regression analysis is used to predict the value of one or more responses from a set of predictors. Multivariate regression is a technique that estimates a single regression model with more than one outcome variable. When there is more than one predictor variable in a multivariate regression model, the model is a multivariate multiple regression. More precisely, multiple regression analysis helps us to predict the value of Y for given values of X1, X2, …, Xk. Once a multiple regression equation has been constructed, one can check how good it is (in terms of predictive ability) by examining the coefficient of determination, R2. R2 always lies between 0 and 1. The closer R2 is to 1, the better is the model and its prediction.

Multiple regression analysis will be conducted in this study to examine which among the five dimensions in independent variable is the most important dimension in explaining the deviant workplace behavior.

CHAPTER FOUR
DATA ANALYSIS

4.1. Introduction

Analyses of data and findings of the research are described in this chapter. It presents complete results and analyses of the study. In the following sections, the researcher uses various research methods to analyze data, in order to make conclusion on the research question and hypothesis. Among the procedures utilized are reliability analysis, factor analysis, anti-image analysis, mean and standard deviation of the variables, correlation analysis and regression analysis. The key information for is highlighted in the form of figures or tables, and the results of hypothesis testing are presented in this chapter as well.

4.2. Normality

The data used for the study has been put through the normality test. Table 4.1 presents skewness and kurtosis test, which is obtained based on total items in the each construct of the variables. Purpose of preparing this is to make a comparison between graphic and statistical data. The skewness value for occupational stress is 0.659 while the kurtosis value is -1.795. This indicates that the values for skewness and kurtosis for occupational stress are within the acceptable range by taking the value suggested by Hair et al. (1995). However, the skewness and kurtosis values for workplace deviance are 7.464 and 5.409, which are way exceeding the acceptable range.

Table 4.1
Summary of the Skewness and Kurtosis Values of the Variables

Variables	Skewness		Kurtosis	
	Statistic	Std. error	Statistic	Std. error
Occupational Stress	.128	.194	-.693	.386
Deviant Workplace Behavior	1.448	.194	2.088	.386

(Please refer Appendix B for detail Output)

Figure 4.1 and 4.2 shows the normality plots of the dimensions for each variable tested in this study. The output results on the normal Q-Q plot for occupational stress indicate normal distribution, with some data moved away from the normality line. Essentially the distributions for occupational stress are acceptable. Some plots moved away from the normality line could be caused by the respondent's response to the items in the questionnaire. Differences in the response pattern effects the overall plot of response.

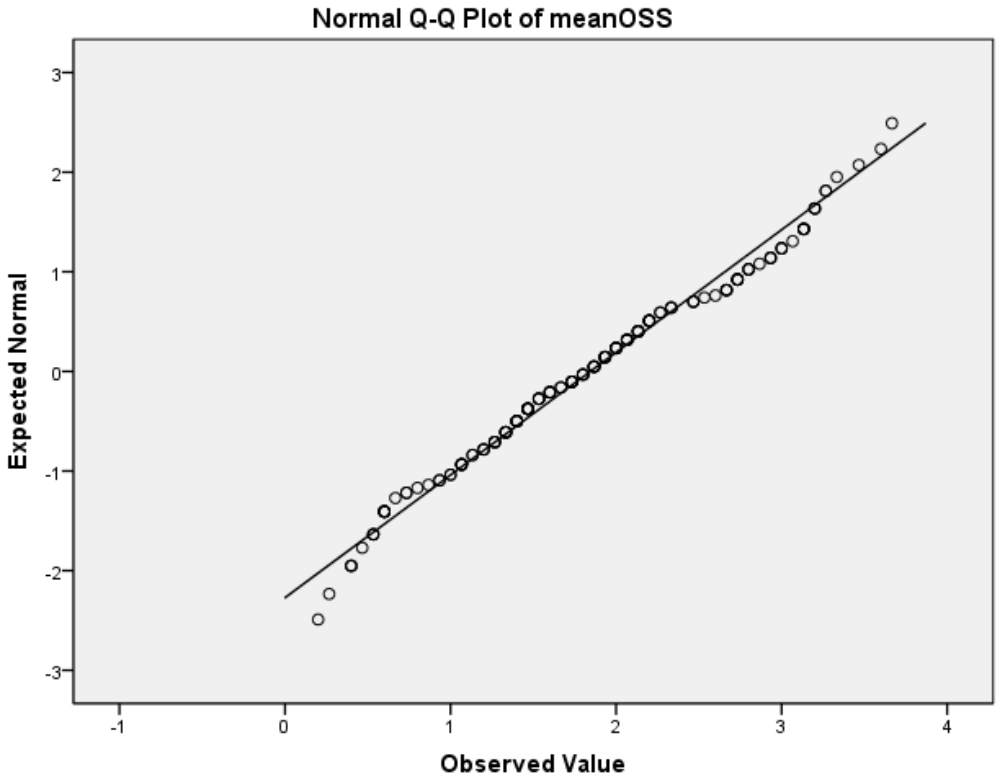

Figure 4.1
Normality of items in Occupational Stress

However the normal Q-Q plot for deviant workplace behavior does not indicate normal distribution. The output results on the normal Q-Q plot for deviant workplace behavior indicate skewed distribution, with some data moved farther away from the normality line. Basically the distributions for deviant workplace behavior indicate that the parametric data analysis method would not be suitable. Some plots moved away from the normality line could be caused by the respondent's response to the items in the questionnaire. It will be discussed in next chapter. Detailed output can be referred in Appendix B.

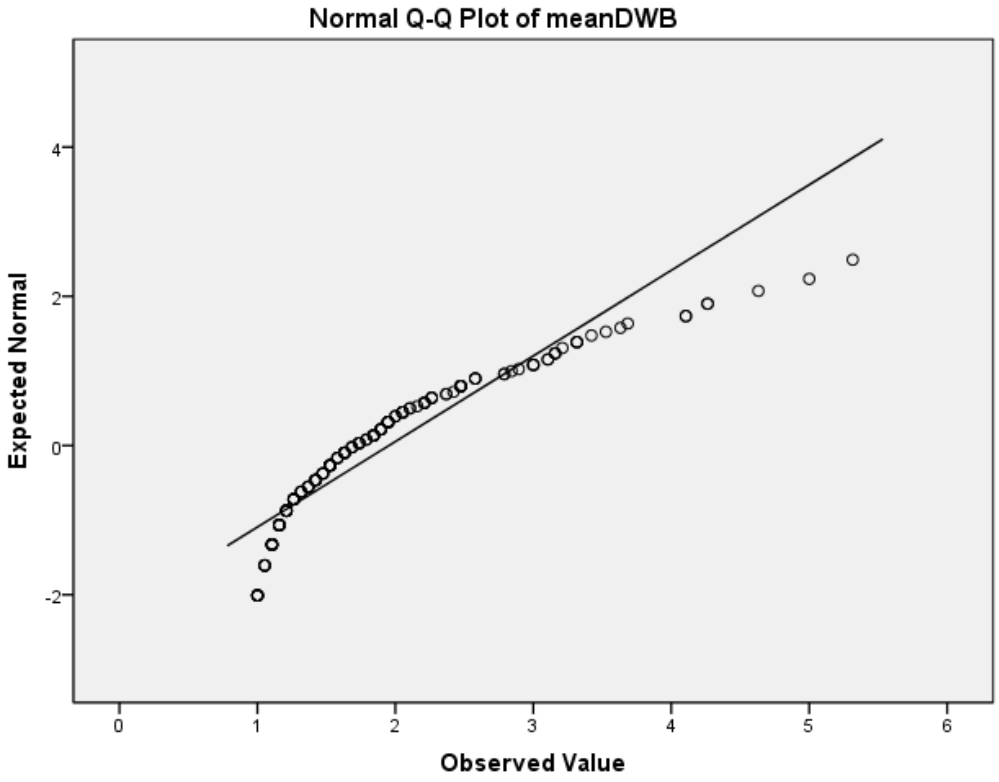

Figure 4.2
Normality of Deviant Workplace Behavior

Based on the plot registered, researcher would carry out the data analysis using both parametric and non-parametric method to continue the study. However, the researcher suggests there would be low association resulting from the data analysis.

4.3. Reliability Analysis

In this part, 156 respondents were analyzed where importance was given to Cronbach alpha values. Based on the analysis carried on the 156 obtained data, Cronbach alpha .93 was recorded for occupational stress and .92 for deviant workplace behavior as a whole. The Cronbach alpha for each dimensions in the variable are as following: interpersonal deviance .89, organizational deviance .87, responsibility pressure .83, quality concerns .80, role conflict .76, job vs. non-job .87, and workload .70. .All variables achieved Cronbach alpha value .70, which is acceptable to continue the research (Sekaran, 2003; Salkind, 2009). According to Salkind (2009), reliability of 0.70 and above is sufficient to conduct the study. Table 4.2 shows the summary of the reliability level which is acceptable for this study.

Table 4.2
Summary of reliability test

Variables		Items	Cronbach Alpha	
Dependent	Interpersonal deviance	7	(whole) .92	.89
	Organizational deviance	12		.87
Independent	Responsibility pressure	3	(whole) .93	.83
	Quality concerns	3		.80
	Role conflict	3		.76
	Job vs. non-job conflict	3		.87
	Workload	3		.70

(Please Refer Appendix C for detail output)

4.4. Factor Analysis

In conducting the factor analysis for the variables in this study, the first step is to determine the KMO (Keiser-Meyers-Oklin) value. The KMO test recorded a value of .869, close to 1.0, with sig. value 0.000. The value of KMO rules out factor loading analysis for the variables. Table 4.3 shows the KMO and Bartlett's Test for this study.

Table 4.3
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.869
Bartlett's test of Sphericity	Approx. Chi-Square	3341.059
	df	561
	Sig.	.000

The factor analysis was conducted involving all the variables. Analysis categorized these items into two component and all the items were recognized. The study also did not find any anti-image value below 0.5; this shows distribution of the values is standard. Table 4.4 shows component matrix for occupational stress and deviant workplace behavior.

Table 4.4
Rotated Component Matrix for Occupational Stress and Deviant Workplace Behavior

	Items	Comp 1	Comp 2
IDB1	Made fun of someone at work.	.700	
IDB2	Said something hurtful to someone at work.	.753	
IDB3	Made an ethnic, religious, or racial remark or joke at work.	.802	
IDB4	Cursed at someone at work.	.655	
IDB5	Played a mean prank on someone at work.	.676	
IDB6	Acted rudely toward someone at work.	.725	
IDB7	Publicly embarrassed someone at work.	.695	
ODB8	Taken property from work without permission.	.619	
ODB9	Spent too much time fantasizing or daydreaming instead of working.	.630	
ODB10	Falsified a receipt to get reimbursed for more money than you spent on business expenses.	.696	
ODB11	Taken an additional or a longer break than is acceptable at your workplace.	.677	
ODB12	Come in late to work without permission.	.548	
ODB13	Littered your work environment.	.521	
ODB14	Neglected to follow your boss' instruction.	.572	
ODB15	Intentionally worked slower than you could have worked.	.690	
ODB16	Discussed confidential company information with an unauthorized person.	.720	
ODB17	Use an illegal drug or consumed alcohol on the job.	.636	
ODB18	Put little effort into your work.	.536	
ODB19	Dragged out work in order to get overtime.	.519	

Table 4.4 (Continued)

OSR1	Feeling you have too much responsibility for the work of others.		.684
OSR2	Having to do or decide things where mistakes could be quite costly		.772
OSR3	Not having enough help or equipment to get the job done well.		.755
OSQ4	Thinking that the amount of work you have to do may interfere with how well it gets done.		.797
OSQ5	Feeling that you have to do things that are against your better judgment.		.792
OSQ6	Feeling unable to influence your immediate supervisor's decisions and actions that affect you.		.724
OSC7	Thinking that you'll not be able to meet the conflicting demands of various people you work with.		.683
OSC8	Not knowing what the people you work with expect of you.		.686
OSC9	Having to deal with or satisfy too many people.		.739
OSJ10	Feeling that your job tends to interfere with your family life.		.782
OSJ11	Being asked to work overtime when you don't want to.		.732
OSJ12	Feeling trapped in a job you don't like but can't get out of.		.745
OSW13	How often does your job require you to work very fast?		.543
OSW14	How often does your job require you to work very hard (physically or mentally)?		.731
OSW15	How often does your job leave you with little time to get everything done?		.624

(Please refer Appendix D for detail output)

4.5. Response Rate

The data collection, which was done through questionnaire, was distributed to a total of 200 employees in a call center. 156 responses were received, bringing the percentage of responses by 78%. According to Hair et al. (2010) a response rate above 50% is generally acceptable to conduct the study therefore the registered 78% is sufficient to complete the analysis. All of the collected questionnaires were accepted and can be used for analysis. Table 4.5 shows the summary of response rate.

Table 4.5
Summary of response rate

	Total	Percentage (%)
Distributed Questionnaires	200	100
Collected Questionnaires	156	78%
Incomplete Questionnaires	0	0%
Accepted Questionnaires	156	100%
Uncollected Questionnaires	44	22%

4.6. Descriptive Statistics

Descriptive analysis is being used to identify the overall range of answers for each construct in the form of mean and standard deviation. The analysis enable the researcher to achieve objective 1 and objective 2 of the study which are to determine the level of occupational stress behavior at the selected call center and to determine the level of deviant workplace behavior at the selected call center.

4.6.1. Respondent Demographic Information

This is the preliminary step to obtain the summary of demographic information from the respondents. The demographic variables include gender, age, education, work experience and monthly income. The frequency distribution, percentages, and summary statistics of the respondents are computed using descriptive statistics and as shown in Table 4.6.

From the 78% of responses recorded, 22.4% were male employees and 77.6% were female employees. The highest number of respondents recorded from age 27 to 29 forming 39.1%, followed by 34.0% of respondents between 24 to 26 years old and 14.1% from age 30 to 32. The least responses were received from employees from age group of 33 and above, 3.8%, followed by 9.0% of respondents between 21 to 23 years old. None of the respondents age less than 21 years old. The highest responses in education level among the respondents recorded for bachelor degree (77.6%) and

followed by diploma (17.3%). Respondents with other certificate and master degree made up 2.6% each, while none of the respondents with SPM qualification recorded.

Table 4.6
Summary of respondent demographic

Variables	Category	Frequency	Percentage (%)
Gender	Male	35	22.4
	Female	121	77.6
	Total	156	100
Age	Less than 21	0	0.0
	21-23	14	9.0
	24-26	53	34.0
	27-29	61	39.1
	30-32	22	14.1
	33 and above	6	3.8
	Total	156	100
Education	SPM	0	0.0
	Other Certificate	4	2.6
	Diploma	27	17.3
	Bachelor	121	77.6
	Master	4	2.6
	Total	156	100
Work Experience	Less than 6 months	3	1.9
	6-18 months	25	16.0
	2-4 years	94	60.3
	5 years and above	34	21.8
	Total	156	100
Monthly Income	Less than RM1500	0	0.0
	RM1500-RM1999	1	0.6
	RM2000-RM2499	17	10.6
	RM2500-RM2999	93	59.6
	RM3000 and above	45	28.8
	Total	156	100

Respondents with work experience between 2 to 4 years in the call center registered the highest number of responses, which is 60.3%, followed by 5 years above, which is 21.8%. Employees with work experience between 6 to 18 months made up 16.0% of the responses and the least number of work experience recorded at 1.9% for less than 6 months. None of the respondents received less than RM1500 monthly income while 59.6% respondents received a monthly income between RM2500 to RM2999. The least amount of monthly income recorded between RM1500 to RM1999 at 0.6%, and

followed by RM2000 to RM2499 at 10.9%. The remaining 28.8% of the respondents received more than RM3000 per month.

4.6.2. Mean and Standard Deviation of Variables of Study

Table 4.7 shows the mean and standard deviation for workplace deviance and occupational stress, and for every dimension in both variables.

Table 4.7
Descriptive Statistics

Variables	**Mean**	**Standard Deviation**
Deviant Workplace Behavior	1.9531	0.87192
Occupational Stress	1.8449	0.81231
Dimensions	**Mean**	**Standard Deviation**
Interpersonal Deviance	1.9963	1.13197
Organizational Deviance	1.9279	0.82626
Responsibility Pressure	1.3739	1.02747
Quality Concern	1.6517	0.99197
Role Conflict	1.9017	0.87352
Job vs Non-Job Conflict	1.8312	1.10554
Workload	2.4658	0.73488

From the table, it was found that the mean values for deviant workplace behavior and occupational stress are 1.95 and 1.84 with standard deviations of .87 and .81 respectively. In addition, the values of mean for the dimensions are as follows: interpersonal deviance 1.996, organizational deviance 1.93, responsibility pressure 1.37, quality concern 1.65, role conflict 1.90, job vs. non-job conflict 1.83, and workload 2.47. Their standard deviations are 1.13, .83, 1.03, .99, .87, 1.11, and .73 respectively. From the result, the highest level of occupational stress dimension is workload while the lowest level is responsibility pressure. The level of deviant workplace behavior dimensions do not differ much, with interpersonal deviance level is slightly higher than organizational deviance level. However, the mean values do not necessarily depict the actual level of work stress and workplace deviance since mean values are likely to be strongly affected by extreme values or outliers in the data set.

Table 4.8 shows the comparison of mean and standard deviation for each item in the instrument for deviant workplace behavior. For interpersonal deviance, cursed at someone at work recorded the highest level (M = 2.90, SD = 1.91) followed by made fun of someone at work (M = 2.47, SD = 1.83), made an ethnic, religious, or racial remark or joke at work (M = 2.01, SD = 1.45), said something hurtful to someone at work. (M = 1.98, SD = 1.43), played a mean prank on someone at work (M = 1.74, SD = 1.38), and acted rudely toward someone at work (M = 1.60, SD = 1.18). Publicly embarrassed someone at work recorded the lowest level for interpersonal deviance (M = 1.26, SD= .77). For organizational deviance, taken an additional or a longer break

Table 4.8
Mean and standard deviation for each item in DWB

	Item	**Mean**	**Standard Deviation**
IDB1	Made fun of someone at work.	2.4744	1.8297
IDB2	Said something hurtful to someone at work.	1.9808	1.4345
IDB3	Made an ethnic, religious, or racial remark or joke at work.	2.0128	1.4546
IDB4	Cursed at someone at work.	2.9038	1.9135
IDB5	Played a mean prank on someone at work.	1.7372	1.3824
IDB6	Acted rudely toward someone at work.	1.6026	1.1787
IDB7	Publicly embarrassed someone at work.	1.2628	0.7714
ODB8	Taken property from work without permission.	1.6795	1.1639
ODB9	Spent too much time fantasizing or daydreaming instead of working.	2.1859	1.5484
ODB10	Falsified a receipt to get reimbursed for more money than you spent on business expenses.	1.8077	1.3398
ODB11	Taken an additional or a longer break than is acceptable at your workplace.	2.7051	1.5543
ODB12	Come in late to work without permission.	2.3077	1.3032
ODB13	Littered your work environment.	1.8846	1.1638
ODB14	Neglected to follow your boss' instruction.	2.2244	1.3799
ODB15	Intentionally worked slower than you could have worked.	2.0641	1.3897
ODB16	Discussed confidential company information with an unauthorized person.	1.8397	1.3125
ODB17	Use an illegal drug or consumed alcohol on the job.	1.2308	0.7435
ODB18	Put little effort into your work.	1.9487	1.4538
ODB19	Dragged out work in order to get overtime.	1.2564	0.7859

than is acceptable at your workplace level is the highest (M = 2.70, SD = 1.55) while use an illegal drug or consumed alcohol on the job level is the lowest (M = 1.23, SD = .74). The second highest level in organizational deviance is come in late to work without permission (M = 2.31, SD = 1.30), followed neglected to follow boss' instruction (M = 2.22, SD = 1.38), spent too much time fantasizing or daydreaming instead of working (M = 2.19, SD = 1.55), intentionally worked slower (M = 2.06, SD = 1.39), put little effort into work (M = 1.95, SD = 1.45), littered the work environment (M = 1.88, SD = 1.16), discussed confidential company information with an unauthorized person (M = 1.84, SD = 1.31), falsified a receipt for more money than spent on business expenses (M = 1.81, SD = 1.34), taken property from work without permission (M = 1.68, SD = 1.17), and dragged out work in order to get overtime (M = 1.26, SD = .79).

Table 4.9 shows the comparison of mean and standard deviation for each item in the instrument for occupational stress scale. For responsibility pressure, the item with the highest level is having too much responsibility for the work of others (M = 1.53, SD = 1.29), followed by not having enough help or equipment to get the job done well (M = 1.31, SD = 1.06). The lowest level for responsibility pressure is having to do or decide things where mistakes could be quite costly (M = 1.29, SD = 1.20). For quality concern, the item with the highest level is feeling unable to influence immediate supervisor's decisions and actions (M = 1.92, SD = 1.10), followed by thinking that the amount of work to be done may interfere with how well it gets done (M = 1.81, SD = 1.15). The lowest level for quality concern is having to do things against better judgement (M = 1.22, SD = 1.27). Role conflict item with the highest level is having to deal with or satisfy too many people (M = 2.37, SD = .99) while the lowest level is

not knowing people's expectations (M =1.41, SD = 1.20) and not being able to meet the conflicting demands of various people comes second (M = 1.92, SD = 1.00).

Table 4.9
Mean and standard deviation for each item in OSS

	Item	Mean	Standard Deviation
OSR1	Feeling you have too much responsibility for the work of others.	1.5256	1.2924
OSR2	Having to do or decide things where mistakes could be quite costly	1.2885	1.1968
OSR3	Not having enough help or equipment to get the job done well.	1.3077	1.0633
OSQ4	Thinking that the amount of work you have to do may interfere with how well it gets done.	1.8141	1.1461
OSQ5	Feeling that you have to do things that are against your better judgment.	1.2179	1.2715
OSQ6	Feeling unable to influence your immediate supervisor's decisions and actions that affect you.	1.9231	1.0986
OSC7	Thinking that you'll not be able to meet the conflicting demands of various people you work with.	1.9295	0.9975
OSC8	Not knowing what the people you work with expect of you.	1.4103	1.1961
OSC9	Having to deal with or satisfy too many people.	2.3654	0.9908
OSJ10	Feeling that your job tends to interfere with your family life.	1.6090	1.2212
OSJ11	Being asked to work overtime when you don't want to.	2.1987	1.2097
OSJ12	Feeling trapped in a job you don't like but can't get out of.	1.6859	1.2992
OSW13	How often does your job require you to work very fast?	3.1154	0.8267
OSW14	How often does your job require you to work very hard (physically or mentally)?	2.3013	0.9117
OSW15	How often does your job leave you with little time to get everything done?	1.9808	1.0440

Being asked to work overtime involuntarily is the highest level for job vs. non-job conflict (M = 2.20, SD 1.21), followed by feeling trapped in a detested job (M = 1.69, SD = 1.30), and feeling the job tends to interfere with family life (M = 1.61, SD = 1.22). For workload, the highest level is job requires to work very fast (M = 3.12, SD .83), followed by job requires to work very hard (M = 2.30, SD = .91), and having

little time to get everything done (M = 1.98, SD = 1.04). The summary of these results is shown at the end of this chapter.

4.7. Inferential Statistics

This section describes the analysis done to achieve third and fourth objective of the study, which are to determine the correlation of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) and deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center, and to determine the association of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) and deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center. The results for hypotheses testing is summarized at the end of this chapter.

4.7.1. Correlation

Correlation analysis is done to achieve the third objective of the study. Since the data for deviant workplace behavior is skewed, the researcher proceed with Spearman correlation as the nonparametric version of Pearson correlation. Table 4.10 shows the Spearman correlation between occupational stress and deviant workplace behavior. The value of ρ for Spearman correlation is 0.056 and the two-tailed value of

Table 4.10
Spearman Correlation between Occupational Stress and Workplace Deviance

Spearman's rho		Rank of OSS	Rank of DWB
Rank of OSS	Correlation Coefficient	1.000	.056
	Sig. (2-tailed)	.	.484
	N	156	156
Rank of DWB	Correlation Coefficient	.056	1.000
	Sig. (2-tailed)	.484	.
	N	156	156

(Please refer Appendix E for detail output)

p is 0.484. By normal standards, the correlation between the two variables would not be considered statistically significant. Therefore, the researcher carried out the analysis using the Pearson correlation and the result is shown in Table 4.11. The value r for Pearson correlation is 0.149. Although technically it shows a positive correlation, the correlation between the variables is very weak (the nearer the value is to zero, the weaker the relationship). The value of R squared, the coefficient of determination, is 0.022. The P value is 0.063. The result is not significant at $p < 0.05$ but significant at $p < 0.10$.

Table 4.11
Pearson Correlation between Occupational Stress and Workplace Deviance

		OSS	DWB
OSS	Pearson Correlation	1	.149
	Sig. (2-tailed)		.063
	N	156	156
DWB	Pearson Correlation	.149	1
	Sig. (2-tailed)	.063	
	N	156	156

(Please refer Appendix E for detail output)

The breakdown of Pearson correlation between each dimensions of the two variables are shown in Table 4.12. The highest Pearson correlation coefficient is registered between interpersonal deviance and role conflict (r = .226**, p = .005) followed by correlation coefficient between interpersonal deviance and responsibility pressure (r = .219**, p = .006). The third highest is r = .217** (p = .006) recorded correlation between interpersonal deviance and workload. However, all the correlation coefficient values documented fall into the weak category. No significant correlation found between organizational deviance dimension and the other dimensions in the independent variable in this study.

Table 4.12
Summary of Pearson Correlation between All Dimensions

	OSR	OSQ	OSC	OSJ	OSW	IDB	ODB
Responsibility Pressure (OSR)	1						
Quality Concern (OSQ)	.741**	1					
Role Conflict (OSC)	.676**	.798**	1				
Job vs. Non-Job Conflict (OSJ)	.632**	.698**	.590**	1			
Workload (OSW)	.597**	.666**	.657**	.617**	1		
Interpersonal Deviance (IDB)	.219**	.153	.226**	.045	.217**	1	
Organizational Deviance (ODB)	.135	.069	.100	-.020	.153	.721**	1

**. Correlation is significant at the 0.01 level (2-tailed).
(Please refer Appendix E for detail output)

4.7.2. Regression

In the previous segment, correlation analysis has been completed to identify whether a correlation exists between the variables and the strength of the correlation between the independent variable, which is occupational stress and its dimensions, to the dependent variable, which is deviant workplace behavior and its dimensions. In this section, regression analysis is done to achieve the fourth objective of the study. The multiple regression was conducted to see if responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload predicted the occurrence of deviant workplace behavior (interpersonal deviance and organizational deviance).

Table 4.13 looks at the association between the occupational stress variable towards deviant workplace behavior. A simple linear regression was carried out to predict

deviant workplace behavior based on occupational stress level. A regression equation was found ($F(1, 154) = 3.498$, $p < .063$), with an R2 of .022 and $R^2_{Adjusted}$ of 0.016. However, the analysis shows that occupational stress as one construct did not significantly predict the deviant workplace behavior ($\beta = .149$, $t(154) = 1.87$, ns).

Table 4.13
Regression analysis of Occupational Stress to Deviant Workplace Behavior

Independent Variable	Beta (β)	Sig.
Occupational Stress	.149	.063

$P < 0.05$, $R^2 = 0.022$, $R^2_{Adjusted} = 0.016$, $F = 3.498$
(Please refer Appendix F for detail output)

Table 4.14 displays the association between the dimensions of occupational stress towards deviant workplace behavior. Using the enter method it was found that responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload level explain a significant amount of the variance in the deviant workplace behavior ($F(5, 150) = 2.884$, $p < .05$, $R^2 = 0.088$, $R^2_{Adjusted} = 0.057$). In addition, the analysis shows that responsibility pressure, quality concern, role conflict, and workload not significantly predict value of deviant workplace behavior (responsibility pressure $\beta = .218$, $t(150) = 1.78$, ns; quality concern $\beta = -.099$, $t(150) = -.63$, ns; role conflict $\beta = .106$, $t(150) = .78$, ns; workload $\beta = .221$, $t(150) = 1.94$, ns), however job vs non-job conflict did significantly predict value of deviant workplace behavior ($\beta = -.258$, $t(150) = -2.23$, $p < 0.05$).

Table 4.14

Multiple Regression analysis of Occupational Stress dimensions to Deviant Workplace Behavior

Independent Variable	Beta (β)	Sig.
Responsibility Pressure	.218	.077
Quality Concern	-.099	.529
Role Conflict	.106	.437
Job vs. Non-Job Conflict	-.258	.027
Workload	.221	.054

$P < 0.05$, $R^2 = 0.088$, $R^2_{Adjusted} = 0.057$, $F = 2.884$

(Please refer Appendix F for detail output)

Table 4.15 shows the association between the dimensions of occupational stress towards interpersonal deviance. Using the enter method it was found that responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload level explain a significant amount of the variance in the interpersonal deviance ($F(5, 150) = 3.412$, $p < .05$, $R^2 = 0.102$, $R^2_{Adjusted} = 0.072$). Additionally, the analysis shows that responsibility pressure, quality concern, role conflict, and workload not significantly predict value of interpersonal deviance (responsibility pressure $\beta = .215$, $t(150) = 1.77$, ns; quality concern $\beta = -.119$, $t(150) = -.77$, ns; role conflict $\beta = .190$, $t(150) = 1.40$, ns; workload $\beta = .189$, $t(150) = 1.68$, ns), however job vs non-job conflict did significantly predict value of interpersonal deviance ($\beta = -.236$, $t(150) = -2.06$, $p < 0.05$).

The next table, Table 4.16, shows the association between the dimensions of occupational stress towards organizational deviance. Using the enter method it was found that responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload level explain a significant amount of the variance in the organizational deviance ($F(5, 150) = 1.982$, $p < .05$, $R^2 = 0.062$, $R^2_{Adjusted} = 0.031$).

Table 4.15
Multiple Regression analysis of Occupational Stress dimensions to Interpersonal Deviance

Independent Variable	Beta (β)	Sig.
Responsibility Pressure	.215	.079
Quality Concern	-.119	.444
Role Conflict	.190	.162
Job vs. Non-Job Conflict	-.236	.041
Workload	.189	.096

$P < 0.05$, $R^2 = 0.062$, $R^2_{Adjusted} = 0.031$, $F = 1.982$
(Please refer Appendix F for detail output)

Still, the analysis shows that responsibility pressure, quality concern, role conflict, and workload not significantly predict value of interpersonal deviance (responsibility pressure $\beta = .193$, $t(150) = 1.55$, ns; quality concern $\beta = -.07$, $t(150) = -.440$, ns; role conflict $\beta = .026$, $t(150) = .185$, ns; workload $\beta = .218$, $t(150) = 1.89$, ns), however job vs non-job conflict did significantly predict value of organizational deviance ($\beta = -.243$, $t(150) = -2.07$, $p < 0.05$).

Table 4.16
Multiple Regression analysis of Occupational Stress dimensions to Organizational Deviance

Independent Variable	Beta (β)	Sig.
Responsibility Pressure	.193	.124
Quality Concern	-.070	.661
Role Conflict	.026	.853
Job vs. Non-Job Conflict	-.243	.041
Workload	.218	.061

$P < 0.05$, $R^2 = 0.062$, $R^2_{Adjusted} = 0.031$, $F = 1.982$
(Please refer Appendix F for detail output)

4.9. Summary

Table 4.17 shows summary of the overall results for this study and Table 4.18 shows the results of hypotheses testing.

Table 4.17
Summary of results

Objective	**Results**
i. The level of deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.	DWB: m = 1.95, sd = .87 IDB4: m = 2.90, sd = 1.91 ODB11: m = 2.71, sd = 1.55
ii. The level of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) among the customer services employees of call center.	OSS: m = 1.84, sd = .81 OSR1: m = 1.53, sd = 1.29 OSQ6: m = 1.92, sd = 1.10 OSC9: m = 2.37, sd = .99 OSJ11: m = 2.20, sd = 1.21 OSW13: m = 3.12, sd = .83
iii. The correlation of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) and deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.	Spearman coefficient $\rho = 0.056$, $p = .484$ Very weak, not significant. Pearson coefficient $r = 0.149$, $p = .063$ Very weak, not significant.
iv. The influence of occupational stress (responsibility pressure, quality concern, role conflict, job vs non-job conflict, and workload) towards deviant workplace behavior (interpersonal deviance and organizational deviance) among the customer services employees of call center.	$\beta = .149$, $p = 0.063$ $R^2 = 0.022$ $R^2_{Adjusted} = 0.016$, $F = 3.498$ Weak, not significant.

Table 4.18
Results of hypotheses testing

	Hypothesis	**Results**
Ha:	Occupational stress is significantly correlated to deviant workplace behavior.	**Rejected**
Ha_1:	Responsibility pressure is significantly correlated to organizational deviance.	**Rejected**
Ha_2:	Quality concern is significantly correlated to organizational deviance.	**Rejected**
Ha_3:	Role conflict is significantly correlated to organizational deviance.	**Rejected**
Ha_4:	Job vs non-job conflict is significantly correlated to organizational deviance.	**Rejected**
Ha_5:	Workload is significantly correlated to organizational deviance.	**Rejected**
Ha_6:	Responsibility pressure is significantly correlated to interpersonal deviance.	**Accepted**
Ha_7:	Quality concern is significantly correlated to interpersonal deviance.	**Rejected**
Ha_8:	Role conflict is significantly correlated to interpersonal deviance.	**Accepted**
Ha_9:	Job vs non-job conflict is significantly correlated to interpersonal deviance.	**Rejected**
Ha_{10}:	Workload is significantly correlated to interpersonal deviance.	**Accepted**

Table 4.18 (Continued)

Hb:	Occupational stress has a significant influence towards deviant workplace behavior.	**Rejected**
Hb_1:	Responsibility pressure has a significant influence towards by organizational deviance.	**Rejected**
Hb_2:	Quality concern has a significant influence towards organizational deviance.	**Rejected**
Hb_3:	Role conflict has a significant influence towards organizational deviance.	**Rejected**
Hb_4:	Job vs non-job conflict has a significant influence towards organizational deviance.	**Accepted**
Hb_5:	Workload has a significant influence towards organizational deviance.	**Rejected**
Hb_6:	Responsibility pressure has a significant influence towards interpersonal deviance.	**Rejected**
Hb_7:	Quality concern has a significant influence towards interpersonal deviance.	**Rejected**
Hb_8:	Role conflict has a significant influence towards interpersonal deviance.	**Rejected**
Hb_9:	Job vs non-job conflict has a significant influence towards interpersonal deviance.	**Accepted**
Hb_{10}:	Workload has a significant influence towards interpersonal deviance.	**Rejected**

CHAPTER FIVE
DISCUSSION AND CONCLUSION

5.1. Introduction

This study aimed at examining the relationship between the occupational stress and deviant workplace behavior of customer services employees of a selected call center in Malaysia. Centered on this objective, hypotheses were formulated from the research questions. The research questions were expressed so as to be able to reveal the most important determinants that contribute to deviant workplace behavior of the employees in the selected call center. The outcome of the hypotheses testing was highlighted in the previous chapter and will be discussed further in this chapter.

5.2. Summary of Findings

The objective of this study was to look at the level of deviant workplace behavior and the level of work related stress and the effects to the study; and to investigate the correlation between occupational stress and deviant workplace behavior and to what extent the occupational stress influences workplace deviance among the selected call center employees.

The level of deviant workplace behavior in the selected call center are cursed at someone at work and taken an additional or longer break than is acceptable at the workplace. Meanwhile the level of work related stress in the selected call center are prominent in the aspect of employees having too much responsibility for the work of others (responsibility pressure), feeling unable to influence immediate supervisor's decisions and actions that affect the employees interests (quality concern), employees having to deal with or satisfy too many people (role conflict), being asked to work

overtime when they do not want to (job vs non-job conflict), and the job often require the employees to work very fast (workload).

The study was conducted to test the five dimensions of occupational stress put forward by House et al. (1979) and deviant workplace behavior make known by Robinson and Bennett (1995). In order to examine the suggested framework in the selected call center, 156 sample data was collected from the customer services employees from a selected call center.

The result of the analysis indicated that the correlation between occupational stress and deviant workplace behavior among the selected call center employees is very weak and not significant. The regression results also showed that occupational stress has no significant association with the employees' deviant workplace behavior. When the dimensions of the variables were tested separately, responsibility pressure, role conflict, and workload presented significant correlation with interpersonal deviance. Meanwhile, only job vs. non-job conflict register a significant association with the call center employees' deviance workplace behavior, interpersonal deviance, and organizational deviance. These results will be further discussed in this chapter.

5.3. Level of Deviant Workplace Behavior

In this section, the main objective is to determine the level of deviant workplace behavior in the selected call center, which is the first objective. Workplace deviance was defined by Robinson and Bennett (1995) as voluntary behavior that violates significant organizational norms and threatens the well-being of an organization, its members, or both. This variable was assessed with the Workplace Deviance Scale, measuring the extent to which the participants had engaged in deviant workplace behavior such as taking property from work without permission, making fun of

someone at work, or cursing at someone at work. The results obtained from this study demonstrated that deviant workplace behavior among workers in the customer call center are low. However, since the employees responded to a self-report instrument on the workplace deviance scale, the results may be subjected to a number of potential validity problems (Barker et al., 2002). According to Barker et al. (2002) the data are personal and idiosyncratic and thus may bear little relationship to ‘‘reality” and more importantly, people are not always truthful by means of they may deceive themselves, such as when an alcoholic cannot admit his dependency to himself, or they may deceive the researcher, such as when a young offender does not want to reveal his socially undesirable thoughts or behavior. Furthermore, Barker et al. (2002) pointed out that research participants may not be able to provide the level of detail, or use the concepts, that the researcher is interested in. This may explain the skewness in the collected data for deviant workplace behavior which has exceeded the standard acceptable level.

In spite of that, the results acquired from this study may suggest that the highest level of interpersonal deviant workplace behavior among the selected call center workers is cursed at someone at work, while taking an additional or longer break than is acceptable at the workplace is the highest level of organizational deviant workplace behavior committed by the employees. The employees engaging in swearing or wishing to invoke evil, calamity, injury, or destruction upon others at work can be said to have been involved with personal aggression, which leans toward serious deviance in interpersonal deviant behavior based on the typology as illustrated by Robinson and Bennett (1995). This result is in support of the belief among some researchers that verbal, passive, and subtle acts represent the largest portion of deviant workplace behaviors, and need to be studied further because they may lead to more intense,

overtly aggressive, and / or violent acts (Baron & Neuman, 1996; Folger & Baron, 1996; Neuman & Baron, 1998). Meanwhile, employees who are involved in taking an additional or longer break than is acceptable at the workplace can be said to have been involved with production deviance, which inclines toward minor deviance in organizational deviant behavior based on the typology as illustrated by Robinson and Bennett (1995). The type of organizational deviance is minor compared to interpersonal deviance may be explained by the fact that employees realized the risk of immediate consequences of reacting against the organization which may be too costly (i.e., result in being taken disciplinary action or being fired), while reacting out toward others was believed to be a less risky reaction (Burroughs, 2001).

5.4. Level of Occupational Stress

In this section, the main objective is to determine the level of occupational stress among the employees in the selected call center, which is the second objective. Kaplan (1975) had defined stress as any characteristic of the job environment that poses a threat to the individual's well-being while Beehr and Newman (1978) had defined stress as a situation which will force a person to deviate from normal functioning due to the change (i.e. disrupt or enhance) in his/her psychological and/or physiological condition. This variable was assessed with the Occupational Stress Scale, measuring the extent to which the respondents had experienced work related stress such as not having enough help or equipment to get the job done well, having to deal with or satisfy too many people, and feeling that the job tends to interfere with family life. The instrument measures the frequency with which employees are bothered by these stressful occurrences through five subscales that assess the extent of occupational stress due to job responsibilities, quality concerns, role conflict, job vs. non-job conflict, and workload.

From the results of this study, the researcher identified that employees in the selected call center related their stress with having too much responsibility for the work of others (responsibility pressure), feeling unable to influence immediate supervisor's decisions and actions that affect the employees interests (quality concern), employees having to deal with or satisfy too many people (role conflict), being asked to work overtime when they do not want to (job vs. non-job conflict), and the job often requires the employees to work very fast (workload). The employees related their stress the most to the workload dimension, where the job at the call center require them to work very fast. This is in the side of Frenkel and Donoghue (1996) who found that call center agents were caught between the needs to deliver quality customer service and to maintain productivity, and they were feeling the stress of competing pressures between maintaining quality service standards and meeting quantitative goals. Furthermore the workload dimension is highly relatable with the environment of call centers that have generally been associated with stressful and hectic work environment as according to Deery et al. (2002) and Kjellberg et al. (2010) because agents are under constant pressure to meet their productivity goals while at the same time deliver quality customer service.

5.5. Correlation between Occupational Stress and Deviant Workplace Behavior

This segment will discuss the correlation between occupational stress and deviant workplace behavior, which is the third objective of this study. Despite the fact that the result of this research showed there is a very weak relationship between these two variables, and it is not significant, three of the dimensions in the occupational stress showed a significant correlation to the interpersonal deviance dimension. The three dimensions of occupational stress are responsibility pressure, role conflict, and

workload presented significant correlation with interpersonal deviance. The outcome for the correlation between the dimensions of occupational stress and interpersonal deviance is in support with the previous research from Appelbaum et al. (2007). Responsibility pressure, role conflict, and workload are closely related to company task structure, which can predict the probability of deviant workplace behavior.

According to Appelbaum et al. (2007) well organized activities and those that are assigned to employees will make them feel responsible for their own tasks as activities that are well structured are less likely to provide possibilities to commit deviant acts. Keeping workers occupied with tasks that they take responsibility for diminishes the chance of engaging in counterproductive activities (Appelbaum, 2007). If individuals are already too occupied doing conventional work, they will not have any time to engage in such deviant behavior. In addition, the risk of employee violence and aggression can be linked to job characteristics. According to Fleet & Griffin (2006), jobs that are highly at risk to bear acts of violence involving interaction with the public, supervision of others, disciplining others, making decisions that affect other people's lives and exercising security functions. As the customer services employees of a call center, the respondents are as a matter of fact interacting with the public and making decisions that affect the customers' lives on daily basis. Therefore, it is particularly reasonable that the employees of the selected call center are implicated with the interpersonal deviance at their workplace, which might be a way of coping with the stress arising from their work. However, interpersonal deviance as a matter of course involve other workers and as Henle et al. (2005) noted it may have a cascading effect throughout organizations as employees who are targeted by the deviant behavior develop their own stress and productivity related problems.

5.6. Influence of Occupational Stress towards Deviant Workplace Behavior

The fourth objective of the research achieved from the findings of the influence between occupational stress and deviant workplace behavior through multiple regression analysis. The researcher found that the job vs. non-job conflict has the significance in anticipating the deviant workplace behavior (including interpersonal and organizational deviance) of employees in the selected call center. This result is such for the reason that it might be contributed by the nature of the job in the selected call center that require the employees to work in irregular working hours. Employees in the customer call center began working as early as 8 am until 4 or 5 pm, while the last shift time is 3 pm until 12 pm. Their shift schedules are constantly changing from day to day, and their scheduling of leave vary among each other. The inconsistency of work schedules may have been a restriction on the employees to participate in normal day to day activities with their family, or other responsibilities outside of work. This might lead to workplace deviance among the employees as they would find ways to be able to partake in the other responsibilities during working hours, most probably by taking an additional or a longer break than is acceptable at the workplace, which explained the its highest occurrence in the level of organizational deviance in previous section.

The researcher gained additional insight from the representatives of the employees in the selected call center regarding this matter. It is said that the call center once provide alternative working hours for employees with children to have a fixed working hours between 10 am to 10 pm, while they can go out in the day between 1 pm to 5 pm to pick up their children from school or from the day care services. However, the practice has been discontinued by the call center management due to the large amount of calls coming in during the allocated period, thus resulting in inadequate work force to

accommodate the customer requests if the employees are constantly out of office in that particular hours. Therefore, the as alternative measures to meet the need for responsibilities to their family, the employees take additional break or longer break than the time that has been allocated by the call center management.

5.7. Implications of Study and Recommendations

This study has found that job vs non-job conflict is the most significant predictor for deviant workplace behavior among the employees of customer services at the selected call center. These finding suggest that the customer services workers of the selected call center would not be involved in deviant workplace behavior unnecessarily, unless they have no other means to cope with the pressure arising from their work and the pressure from their other roles in life. Some organization spent more time making policies that focusing on customers' benefit without considerable thought of employees' interests, thus the employees would inadvertently engage in workplace deviance as a coping mechanism, even temporarily. As Violani & Marshall (1983) stated in their research, although workplace deviance was one of the most commonly used coping strategies, it failed to reduce stress and actually introduced additional organizational pressures. Therefore, management can priorities areas of improvement based on the result.

It is essential for organizations to tackle work related stress among its employees in order to overcome any deviant workplace behavior among the workers. The organization should show their concern for the welfare of workers, especially through its policies. If the workers have the impression that their companies are supporting them, they will experience less pressure from their work and they will be more likely to refrain themselves from cursing at the workplace, taking excessive and longer breaks and other deviant behavior at the workplace. On the contrary, the employees

would be willing to contribute more to the organization if they are contented with the environment at the workplace, and feel that they are supported by the organization.

In addition, the call center management can revise its customer services employees' task structure, which can contribute to the probability of deviant workplace behavior to be committed in the organization. As has been stated by Appelbaum et al. (2007) employees will feel accountable for their own tasks and assignments through well organized activities since they are less likely to engage in deviant behavior because there is less opportunities available in the well-structured activities. Connor and Worley (1991) listed the suggestions that can be adapted by the management. The call center management can reduce role ambiguity and role conflict issues by clarifying employees work roles. In addition, the organization can reduce the issues concerning role ambiguity and unbalanced workload by setting appropriate performance standards and then communicate the related information to the employees.

On top of that, the management can set individual goals to employees and it can help to reduce the stress from time pressures and deadlines. The workers should also be allowed to take time outs doing activities such as meditating, relaxing, and power-napping to take a break for a while from their tasks to enable them to reduce the stress from repetitive work, dealing with public, workload, and responsibility for others. Additionally, the effective and continuous use of feedback and performance evaluation can assist employees to improve in their job. On the other hand, the stress caused by monotonous tasks can be reduced through job restructuring or job rotation, and the stress from time pressures, deadlines, and workload can be reduced by practicing good time management. Management should also apply thorough monitoring on employees activities at work. However, it must be done with precaution as excessive monitoring would pose additional pressure on employees and it would beat the purpose. The

management should also revise the scheduling method as it might be the main cause of loopholes in the task structure that contribute to the opportunities of committing workplace deviance among the call center employees. A more structured and organized scheduling systems would allow a more comprehensive supervision and control on the employees' activities.

On the theoretical side further research will provide additional empirical evidence concerning the existence and description of different dimensions of deviant workplace behavior. Additional research will also further substantiate the relationship of deviant behavior and its dimensions in other studies while giving insight into the specific relationship between deviant behavior and its dimensions. An understanding of the deviant behavior construct and its impact on employees and organizations can also be gained. Further research should be carried out to further investigate how organizations can minimize the effect of deviant behavior as well their origins, and how organizations can establish a less stressful work environment for the employees especially in a call center.

This study can be improved in the case of the selected call center by taking into consideration the other personal factors that may influence the deviant workplace behavior among the customer services employees, in line with the previous studies by Vardi & Wiener (1996), Boye & Jones (1997), and Vardi (2001).

5.7. Conclusion

From the results it shows that the interpersonal deviance level in the selected call center is linked with the pressure arising from the task structure in the work environment which are contributed by the responsibility pressure, role conflict and workload dimensions. On top of that, the occurrence of workplace deviance is significantly associated with the job vs non-job conflict among the employees. Ignoring these issues may cause a decrease in the work performance of the customer services employees, causing the organization valuable performance and profitability. It is much more important to maintain a quality work force with productive effort. By improving in creating less pressurized work environment the call center management can create a positive environment for the call center workforce and produce positive changes to the employees and eventually eliminate or reduce the occurrence of workplace deviance.

REFERENCES

Abdul Rahman A. R., & Aizat M. N. (2008). Trust in organizational and WD behavior, the moderating effect of locus of control. International Journal of Business, 10, 211-235.

Abdul Rahman, A. R. (2008). Predictors of WD behavior in Malaysia. Unpublished Doctoral Thesis. Universiti Sains Malaysia, Malaysia.

Allen N.J. and Meyer, J.P. (1990), "The measurement and antecedents of affective, continuance and normative commitment to the organization", Journal of Occupational Psychology , Vol.63, 1-18.

Ananda, R.A. (2008). The relationship of service climate, intrinsic motivation, organizational commitment and service quality of call centre agents in Malaysia. Universiti Malaya.

Andersson, L. M., & Pearson, C. M. (1999). Tit for Tat? The Spiraling Effect of Incivility in the Workplace. *The Academy of Management Review*, 452-471.

Appelbaum, S. H., Iaconi, G. D., & Matousek, A. (2007). Positive and negative deviant workplace behaviors: causes, impacts, and solutions. *Corporate Governance: The international journal of business in society*, 586 - 598.

Appelbaum, S. H., Deguire, K. J. & Lay, M. (2005). The relationship of ethical climate to deviant workplace behavior. Corporate Governance, 5, 43-65.

Astro Customers Complain Of Major Service Disruption. (2014). Retrieved from http://malaysiandigest.com/news/515217-astro-customers-complain-of-major-service-disruption.html

Asian Contact Center Industry Benchmark Report. (2006). Retrieved from http://www.dimensiondata.com/Global/Global-Microsites/CCBenchmarking

Atyeo, J., Adamson, B. and Cant, R. (2007). Managerial Skills for new practitioners. In Medical Radiation Sciences in Australia: implication for the Tertiary Education Sector. Radiography Journal (7), 235-247.

Avaya Contact Center Consumer Index (2010). Retrieved from http://www.cio.com.au/mediareleases/11022/avaya-launches-next-generation-contact-center/

Awanis, K. I. (2006). The relationship between deviant behavior among Mara employees in northern Malaysia and its predictors. Unpublished Master Thesis. Universiti Sains Malaysia, Malaysia.

Azhar, M. (2010). *Malaysia contact centres improve.* Kuala Lumpur: The New Straits Times Press (M) Berhad.

Bamfield, J. (2007). Global retail theft barometer. Nottingham: Centre for Retail Research.

Barker, C., Pistrang, N. and Elliott, R. (2002) Self-Report Methods, in Research Methods in Clinical Psychology: An Introduction for Students and Practitioners, Second Edition, John Wiley & Sons, Ltd, Chichester, UK.

Baron, R. A., & Neuman, J. H. (1996). Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. Aggressive Behavior, 22, 161-173.

Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health and organizational effectiveness: A facet analysis, model and literature review. Personnel Psychology, 31, 665–699.

Bennett, R. J., & Robinson, S. L. (2000).Development of a measure of workplace deviance. Journal of Applied Psychology, 85: 349-360.

Bennett, R. J., & Robinson, S. L. (2003). The past, present and future of workplace deviance research. In J. Greenberg (Ed.), Organizational behavior: The state of the science (2nd ed., pp. 247 – 281). Mahwah, NJ: Erlbaum.

Bland J. M. (1995). Methods based on rank order. In: An Introduction to Medical Statistics, Oxford University Press; Oxford, New York, Tokyo, p. 205-225, 1995.

Bluman, A. G. (2014). Elementary Statistics: A Step by Step Approach (9th ed). McGraw-Hill Higher Education, New York.

Bolboacă, Sorana-Daniela. & Jäntschi, Lorentz. (2006). Pearson versus Spearman, Kendall's Tau Correlation Analysis on Structure-Activity Relationships of Biologic Active Compounds. Leonardo Journal of Sciences, 179-200.

Bolin, A., & Heatherly, L. (2001). Predictors of employee deviance: The relationship between bad attitudes and bad behavior. Journal of Business and Psychology, 15(3), 405–418.

Bordia, P., Restubog, S. L. D., & Tang, R. L. (2008). When employees strike back: Investigating mediating mechanisms between psychological contract breach and workplace deviance. Journal of Applied Psychology, 93, 1104–1117.

Boye, M. W., & Jones, J. W. (1997). Organizational culture and employee counterproductivity. In R. A. Giacalone & J. Greenberg (Eds.), Antisocial behavior in organizations (pp. 172–184). Thousand Oaks, CA: Sage.

Bruck, C. S., Allen, T. D., & Spector, P. E. (2002). The relation between work-family conflict and job satisfaction: A finer-grained analysis. Journal of Vocational Behavior, 60, 336-353.

Bruk-Lee, V., & Spector, P. E. (2006). The social stressors-counterproductive work behaviors link: Are conflicts with supervisors and coworkers the same? Journal of Occupational Health Psychology, 11, 145–156.

Burroughs, S.M. (2001). The Role of Dispositional Aggressiveness and Organizational Injustice on Deviant Workplace Behavior. ProQuest Information and Learning, USA

Callaghan, G. and Thompson, P. (2001), “Edwards revisited: technical control and call centres”, Economic and Industrial Democracy, Vol. 22 No. 1, pp. 15-37.

Chappell, D. & Di Martino, V. (2006). Violence at work (2nd ed.). Geneva: International Labour Organisation.

Chraif, M. (2008). Predicting counterproductive work behavior in fast-food organizations, in the volume of the International Conference with international participation, “Titu Maiorescu” University 27 November 2008, Bucharest: Publisher House University "Titu Maiorescu".

Chraif, M. (2010). Counterproductive behavior at work place, Bucharest: Universitar.

Chen, P. Y., & Spector, P. E. (1992). Relatinships od work stressors with aggression, withdrawal, theft and substance use: an exploratory study. *Journal of Occupatinal and Organizational Psychology*, 177-184.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297-334.

Coakes, S.J. and Steed, L.G. (2003). SPSS: Analysis without Anguish. Australia: John Wiley & Sons, Ltd.

Coccia, C. (1998). Avoiding a toxic organization. *Nursing Management*, 32-34.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences. (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Cohen-Charash, Y., & Mueller, J.S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? *Journal of Applied Psychology*. 92, 666-680.

Colbert, A. E., Mount, M. K., Harter, J. K., Witt, L. A., & Barrick, M. R. (2004). Interactive effects of personality and perceptions of the work situation on workplace deviance. Journal of Applied Psychology, 89(4), 599-609

omputerworl (2008). Retrieved from http://www.computerworld.co.nz/

Connor, P.E. and Worley, C.H. (1991), “Managing Organizational Stress”, Business Quarterly (1986-1998), Vol. 56, pp. 61-67.

Creswell, J.W. (2003). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (second ed.), Sage, Beverly Hills, CA

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. Journal of Management, 31, 874–900.

Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. Journal of Applied Psychology, 90(6), 1241-1255.

Darrat, M., Amyx, D., & Bennett, R. (2010). An investigation into the effects of work–family conflict and job satisfaction on salesperson deviance. Journal of Personal Selling & Sales Management, 3(3), 239-251.

Das, D. (2012). Effects of identity variables and job performance on employee intentions to leave: an empirical study in Indian call centres. *International Journal of Management*, 368-378.

Deery, S., Iverson, R. D., & Walsh, J. (2010). Coping Strategies in Call Centres: Work Intensity and the Role of Co-Workers and Supervisors. *British Journal of Industrial Relations*, 181-200.

Deery, S., Iverson, R., & Walsh, J. (2002). Work relationships in telephone call centres: Understanding emotional exhaustion and employee withdrawal. *Journal of Management Studies*, 471-496.

Dunlop, P. D., & Lee, K. (2004). Workplace deviance, organizational citizenship behavior, and business unit performance: The bad apples do spoil the whole barrel. Journal of Organizational Behavior, 25(1), 67-80.

Eby, L. Casper, W., Lockwood, A., Bordeaux, C & Brinley, A. (2005). Work and family research in IO/ OB: Content analysis and review of the literature (1980 ñ 2002). Journal of Vocational Behavior, 66, 124-197.

Ellison, K. (2004). Stress and the police officer. New York: Charles C. Thomas, Ltd.

Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. Journal of Managerial Psychology, 18, 8-21.

Fornell, C., and Lacker, D. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. Journal of Marketing Research, 18(1), 39-50

Folger, R. & Baron, R.A. (1996). Violence and hostility at work: A model of reactions to perceived injustice. In G.R. VandenBos & E.Q. Bulatao (Eds.), Violence on the job: Identifying risks and developing solutions (pp. 51-85). Washington, DC: American Psychological Association.

Fox, S., Spector, P. E., & Miles, D. (2001). counterproductive work behavior (CWB) in response to job stressors and organizational justice: some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 291-309.

Fox, S., Spector, P. E., Goh, A., & Bruursema, K. (2007). Does your coworker know what you're doing? Convergence of self- and peer-reports of counterproductive work behavior. International Journal of Stress Management, 14, 41–60.

Frank, R. H. (1989). How passion pays: Finding opportunities in honesty. *Business and Society Review* , 20-28.

Frenkel, S. and Donoghue, L. (1996), Call Centres and Service Excellence, CCC Paper No. 066, Sydney, Australian Graduate School of Management, University of New South Wales.

Garson, G. D. (2002). Guide to Writing Empirical Papers, Theses, and Dissertations. Taylor & Francis.

Gary L. H.(1991), "Balancing work and family: A literature and resource review". Family relations, 40 (3), 348-353

George, D., & Mallery, P. (2003). SPSS for Windows step by step: A simple guide and reference.11.0 update (4th ed.).Boston: Allyn &Bacon.

Giacolone, R. A., & Greenberg, J. (1997). *Antisocial Behavior in Organizations.* Thousand Oaks, CA: Sage Publishing.

Greenberg, J. (1997). A social influence model of employee theft: Beyond the fraud triangle. In R.J. Lewicki, R.J. Bies & B.H. Sheppard (Eds.), Research on negotiation in organizations (vol 6, pp. 29-51). Greenwich: Jai Press Inc.

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. Academy of Management Review, 10, 76–88.

Greenhaus, J.H., Sugalski, T., & Crispin, G. (1978). Relationships between perceptions of organizational size and the organizational choice process. Journal of Vocational Behavior, 113-125.

Greenhaus, J. H., Parasuraman, S., & Collins, K. M. (2001). Career involvement and family involvement as moderators of relationships between work-family conflict and withdrawal from a profession. Journal of Occupational Health Psychology, 6(2), 91-100.

Hair,J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. (1995) Multivariate Data Analysis. New York: Macmillan.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). Multivariate Data Analysis. Upper Saddle River, NJ: Prentice Hall

Hair, J.F., Black, W.C., Babin, B.J., and Anderson, R.E. (2010). Multivariate Data Analysis (7th ed.). Upper Saddles River, NJ:Pearson Education.

Harris, L. C., & Ogbonna, E. (2006). Service sabotage: A study of antecedents and consequences. Journal of the Academy of Marketing Science, 34(4), 543-558.

Harper, D. C. (1990). Spotlight abuse - save profits. (employee theft and fraud). *Industrial Distribution*, 47-51.

Hellriegel, D. and J. W. Slocum (2004), Organizational Behavior, 10th ed, Cincinnati, Ohio : South-Western.

Henle, C. A. (2005). Predicting workplace deviance from the interaction between organizational justice and personality. Journal of Managerial Issues, 17, 247-263

Henle, C. A., Giacalone, R. A., & Jurkiewicz, C. L. (2005).The role of ethical ideology in workplace deviance. Journal of Business Ethics, 56, 219-230.

Hepburn, C. G., Loughlin, C. A., & Barling, J. (1997). Coping with chronic work stress. In B. H. Gottlieb (Ed.), Coping with chronic stress (pp. 343–366). New York: Plenum.

Hogan, R. T., Curphy, G. J., & Hogan, J. (1994). What we know about leadership: Effectiveness and personality. American Psychologist, 49, 493-504.

Holder, J.C., & Vaux, A. (1998). African American Professionals: Coping with Occupational Stress in Predominantly White Work Environments. Journal of Vocational Behavior, 315-427.

Hollinger, R. C., & Clark, J. P. (1983). *Theft by Employees.* Lexington, MA: LexingtonBooks.

House, J.S., Wells, J.A., Landerman, L.R., McMichael, A. J., & Kaplan, B.H. (1979). Occupational Stress and Health among Factory Workers. Journal of Health and Social Behavior. American Sociological Association. 139-160.

Jex, S. M. (1998). Stress and job performance: Theory, research and implications for managerial practice. Thousand Oaks, CA: Sage.

Jurutera tidak puas hati rujuk TTPM (2015). Retrieved from http://www.utusan.com.my/berita/mahkamah/jurutera- tidak-puas-hati-rujuk-ttpm-1.43746

Joseph, C. (n.d.). *What Are Common Kinds of Workplace Deviance?* Retrieved from chron.com.

Kammeyer-Mueller J.D., & Wanberg, C.R. (2003). Unwrapping the Organizational Entry Process: Disentangling Multiple Antecedents and Their Pathways to Adjustment. APA. 779-794

Kaplan, H. B. (1975). *Self-attitudes and deviant behavior.* Oxford, England: Goodyear.

Karasek, R. A., & Theorell, T. (1990). Healthy work: Stress, productivity and the reconstruction of working life. New York: Basic Books.

Kinnie, N., & Deery, S. (2004). Introduction: The Nature and Management of Call Centre Work. In N. Kinnie, & S. Deery, *Call centres and human resource management : a cross-national perspective.* (pp. 1-22). Basingstoke: Palgrave Macmillan.

Kjellberg, A., Toomingas, A., Norman, K., Hagman, M., Herlin, R.M. and Tornquist, E.W. (2010), "Stress, energy and psychosocial conditions in different types of call centres", Work, Vol. 36 No. 1, pp. 9-25.

Kothari, C.R. (1985). Research Methodology- Methods and Techniques, New Delhi, Wiley Eastern Limited.

Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement. 30. 607-610.

Lewis, S. N. C., & Cooper, C. L. (1987). Stress in two-earner couples and stage in the life-cycle. Joumal of Occupational Psychology, 60, 289-303.

Litzky, B.E., Eddleston, K.A., & Kidder, D.L. (2006). The good, the bad, and the misguided: How managers inadvertently encourage deviant behaviors. *Academy of Management Perspectives*, 20, 91-103

Magione, T.W. & Quinn, R.P. (1974). Job satisfaction, counterproductive behavior, and drug use a work. Journal of Applied Psychology.

Mangione, J., & Quinn, R. (1975). Job satisfaction, counter-productive behavior and drug use at work. *Journal of Applied Psychology*, 114-116.

Marcus B, Schuler H. (2004). Antecedents of counterproductive behavior at work:Ageneral perspective. Journal of Applied Psychology, 89, 647–660.

Maslach, C. (2003). Job burnout: new directions in research and intervention. Current Directions in Psychological Science, 12(5), 189-192.

Mawritz, M. B., Mayer, D. M., Hoobler, J. M., Wayne, S. J., & Marinova, S. V. (2012). A trickle-down model of abusive supervision. Personnel Psychology, 65(2), 325-357.

Mayers, L.S., Gamst, G., and Guarino, A.J. (2006). Applied Multivariate Research Design and Interpretations. Thousand Oaks: Sage

Melchior, M., Niedhammer, I., Berkman, L. F., & Goldberg, M. (2003). Do psychosocial work factors and social relations exert independent effects on sickness absence? A six year prospective study of the GAZEL cohort. Journal of Epidemiology and Community Health, 57, 285-293.

Messersmith, J. (2007). Managing work-life conflict among information technology workers. Human Resource Management, Wiley InterScience, 46, 3, pp. 429–451.

Miller, L. (2005). Practical police psychology: Stress management and crisis intervention for law enforcement. New York: Charles C. Thomas, Ltd.

Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. Journal of Applied Psychology, 92, 1159–1168.

Muafi. (2011). Causes and Consequence Deviant Workplace Behavior. *International Journal of Innovation, Management and Technology*, 123-126.

My unpleasant experience with Astro (2013), Retrieved from http://www.freemalaysiatoday.com/category/opinion/2013/09/30/my-unpleasant-experience-with-astro/

Niedhammer, I., Bugel, I., Goldberg, M., Leclerc, A., & Gueguen, A. (1998). Psychosocial factors at work and sickness absence in the Gazel cohort: A prospective study. Occupational and Environmental Medicine, 55, 735-741.

Neil, J. (2009). Exploring Research: New Jersey: Pearson Education International, Inc.

Neuman, J. H., & Baron, R. A. (1998). Workplace violence and workplace aggression: Evidence concerning specific forms, potential causes, and preferred targets. Journal of Management, 24, 391–419.

North, F. M., Syme, S. L., Feeney, A., Shipley, M., & Marmot, M. (1996). Psychosocial work environment and sickness absence among British civil servants: The Whitehall II study. American Journal of Public Health, 86, 332-340.

Nunnally, J.C., and Bernstein, J.H. (1994). Psychometric Theory (3rd edition). New York: McGraw-Hill.

Ortega, A., Brenner, S. O., and Leather, P. (2007). Occupational stress, coping and personality in the police: An SEM study. International Journal of Police Science and Management, 9 (1), 36-50.

Pitariu H. D, Radu I.& Chraif M., (2009). Selection and psychological evaluation of personnel, Supplement for The Journal of Human Resources Psychology, Cluj: Editura Asociatiei de Stiite Cognitive.

Pitariu H.D.&Chraif M. (2009). Assessing professional performance, Supplement for The Journal of Human Resources Psychology, Cluj: Editura Asociatiei de Stiinte Cognitive.

Peterson, D. K. 2002.Deviantworkplace behavior and the organization's ethical climate. Journal of Business and Psychology, 17: 47-61.

Penney, L. M., & Spector, P. E. (2005). Job stress, incivility and counterproductivework behavior (CWB): The moderating role of negative affectivity. *Journal of Organizational Behavior*, 777-796.

Roberts, T. J., Marsh, R. L., Weyand, P. G. and Taylor, C. R. (1997). Muscular force in running turkeys: the economy of minimizing work. Science 275, 1113-1115.

Robinson, S. L., & Bennett, R. J. (1995). A Typology of Deviant Workplace Behaviors: A Multidimensional Scaling Study. *The Academy of Management Journal*, 555-572.

Robinson, S. L., & Greenberg, J. (1998). Employees behaving badly: dimensions, determinants and dilemmas in the study of workplace deviance. *Trends in Organizational Behavior*, 1-30.

Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. Journal of Applied Psychology, 87, 66–80.

Runyon, R.A., Haber, A., Pittenger, D.J. (2000). Fundamentals of Behavioral Statistics. (9th. ed.). New York: The MacGraw-Hill Companies, Inc.

Salkind, N.J. (2009). Exploring Research (5th ed.). New Jersey: Prentice Hall.

Schindler, P. S. & Cooper, D. R., (2003). Business Research Methods. McGraw Hill Companies, Inc., New York, NY

Sekaran, U. (2003). Research Methods for Business. A Skill Building Approach (4th ed.). NY: John Wiley and Sons, Inc.

Sekaran, U., & Bougie, R. (2010). Research Methods for Business: A Skill Building Approach (5th ed.). West Sussex: John Wiley.

Spector, P. E. (2002). Employee control and occupational stress. Current Directions in Psychological Science, 11, 133–136.

Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. Human Resource Management Review, 12, 269–292.

Spector, P. E., & Fox, S. (2005). A model of conterproductive work behavior. In P. E. Spector, & S. Fox, *Counterproductive Work Behavior* (pp. 151-174). Washington D.C.: APA.

Spector, P. E., & Fox, S. (2005). *Counterproductive workplace behaviour: Investigations of actors and targets.* Washington, DC: APA.

Spector, P.E., Fox, S., Penney, L.M., Bruursema, K., Goh, A., & Kessler, S. (2006). The dimensionality of counterproductivity: Are all counterproductive behaviors created equal? Journal of Vocational Behavior, 68, 446-460.

Stinchcomb, J. B. (2004). Police stress: Could organizational culture be the culprit. Paper presented at the Law Enforcement Executive Forum, 4 (3) 151-163.

Strank, J.W. (2005). Stress at Work: Management and Prevention. Amsterdam: Elsevier Publishing.

Taylor, A. (2007). Gambling at work 'costs employers £300M a year'. Financial Times. Retrieved from http://www.ft.com/cms/s/0/55009c0e-a43d-11db-bec4-0000779e2340.html#axzz2mZJbxzmB

Tepper, B. J. (2000). Consequences of abusive supervision. Academy of Management Journal, 43, 178–190

Thompson, S. K. (2012). Sampling. 3rd edition. Wiley.

Toch, H., Bailey, F. Y., and Floss, M. (2002). Stress in policing. American Psychological Association, Washington, DC.

Trevino, L. K., & Youngblood, S. A. (1990). Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology*, 378-385.

Uma, S., and Rogers, B. (2009). Research Methods For Business: A Skill Building Approach. 5th ed, Wiley.

URCOT. (2000). *Call Centres: What kind of future workplaces?* Victoria, Australia: RMIT School of Social Sciences and Planning.

Vahtera, J., Kivimäki, M., Pentti, J., Theorell, T. (2000). Effect of change in the psychosocial work environment on sickness absence: A seven year follow up of initially healthy employees. Journal of Epidemiology and Community Health, 54, 484-493.

Vardi, Y. (2001). The effects of organizational and ethical climates on misconduct at work. *Journal of Business Ethics*, 325-337.

Vardi, Y., & Wiener, Y. (1996). Misbehavior in Organizations: A Motivational Framework. *Organization Science*, 151-165.

Violani, J. M., & Marshall, J. R. (1983). The police stress process. Journal of Police Science and Administration, 11, 389–394.

Wallace, C.M., Eagleson, G. and Waldersee, R. (2000), "The sacrificial HR strategy in call centers", International Journal of Service Industry Management 11(2), pp. 174-84.

Waters, J. A., and Ussery, W. (2007). Police stress: History, contributing factors, symptoms, and interventions. Policing: An International Journal of Police Strategies and Management, 30 (2), 169-188.

World Health Organization WHO (2004). Retrieved from http://www.who.int/occupational_health/topics/stressatwp/en/

World Health Organization WHO (2007). Retrieved from http://www.who.int/occupational_health/publications/stress/en/

Zeithaml, V.A. and Bitner, M.J. (2000), Services Marketing: Integrating Customer Focus across the Firm, 2nd ed.,McGraw-Hill, New York, NY

Zikmund, W.G. (2000). Business Research Methods. Mason, OH: Thompson South Western.

Zikmund, W.G., Babin, B.J., Carr, J.C., Griffin, M. (2010). Business Research Methods (9th Ed.) South Western.