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Article

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Counterproductive Behavior at Work: A Comparison of Blue Collar and White Collar Workers

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Abstract

Counterproductive behavior at workplace has emerged as a major area of concern for researchers, theorists and managers in organizations due to its heavy cost and disruptive nature. Every organization thus endeavors to limit the effects and pervasiveness of these detrimental behaviors. This research investigates the magnitude of counterproductive work behaviors in a group of 400 blue collar and white collar workers. Three self-reported instruments used in this study are, Minnesota Job Satisfaction Scale, the Interpersonal Conflict Scale (ICAW) and the Counterproductive Work Behavior Checklist (CWB-C). Results are deduced by applying several techniques of descriptive and inferential statistics such as mean rank analysis, independent samples t-test, Pearson correlation and regression. Results show that a statistically significant difference exists in the magnitude of counterproductive work behaviors (CWBs) in blue and white collar workers. A high degree of job satisfaction and minimal degrees of interpersonal conflicts and counterproductive work behaviors are found in white collar workers. While, low level of job satisfaction and high degrees of interpersonal conflicts and counterproductive work behaviors are reported in blue collar workers. The results of the study also bring forward the predictability of CWB on the basis of the magnitude of interpersonal conflicts and job satisfaction. It is concluded that the job satisfaction has a diminishing effect on counterproductive behaviors.

Keywords: counterproductive work behavior; job satisfaction; interpersonal conflicts; blue collar workers; white collar workers, comparison.

1. Introduction

In the dawn of competition, employee behavior has emerged as an important concern of organizations. (Gruys & Sackett, 2003). It refers to what people say and do at their workplaces (Robbins & Coutler, 2002; Sims, 2002; Hiriyappa, 2008). These behaviors can be classified into those that benefit the organization and those that harm it. The former contributes positively towards organizational performance; whereas, the latter is detrimental to the organizations (Spector & Fox, 2002).

These detrimental or dysfunctional behaviors have been labeled differently by different researchers. For instance, anger (Neuman & Baron, 1997; Spector, 1978), workplace violence (Barling, Dupré, & Kelloway, 2009; Kelloway, Barling & Hurrell, 2006), deviation (Hollinger, 1986; Robinson & Bennett, 1995), retaliation (Skarlicki & Folger, 1997), revenge (Bies, Tripp & Kramer, 1997), bullying (Hoel, Rayner & Cooper, 1999), emotional cruelty (Keashly, 1998), mobbing (Zapf & Einarsen, 2005) theft (Greenberg, 1990), sabotage (Ambrose, Seabright & Schminke, 2002), service sabotage (Harris & Ogbonna, 2002), impoliteness (Andersson & Pearson, 1999) protest (Kelloway et al., 2010) and revenge (Bies & Tripp, 2005).

An analysis of these labels reveals that all are counterproductive in nature, that is why are termed as counterproductive work behaviors (CWB). Thus, CWB can be defined as the behavior that goes against the goals and objectives of organizations (Spector et al., 2006). It is the set of different behaviors that are opposed to mandated behaviors and can harm the employees, organization and its stakeholders such as; clients, coworkers, customers and supervisors (Spector & Fox, 2005; Sackett, 2002) and can even put the stability of organization at risk (Martinko et al., 2002).

CWB can be consequence of personal traits personality traits like narcissism (Penney & Spector, 2002), and agreeableness (Mount, Ilies & Jhonson, 2006) dissatisfaction (Fatima et al., 2012; Muafi, 2011), envy (Khan, Quratulain & Peretti, 2009) and negative emotions (Krischer, Penney & Hunter, 2010; Khan, Peretti & Quratulain, 2010). Besides, unclear job description, employment insecurity, lack of internal career opportunities and inappropriate appraisal system (Shamsudin, Subramaniam & Ibrahim, 2011), lack of motivation (Osezua et al; 2009), abusive supervision (Shoss et al., 2013), stressful conditions ,intent to quit and company contempt (Muafi, 2011), injustice (Fatima et al., 2012), un-acceptance of peer group (Wing lo et al., 2011), job stress (Aftab & Javed, 2012) and leader mistreatment (Mayer et al., 2011) are some other stimulus of CWB.

CWB can take many forms such as theft, sabotage, verbal abuse, withholding of effort, lying, refusing to cooperate, and physical assault (Robinson & Bennette, 1995). These occur either at i) interpersonal level or ii) organizational level; at interpersonal level these include behaviors (such as aggression, verbal abuse, favoritism and gossip etc.) that affect employees within the organization. At the organizational level, these refer to the behaviors (absenteeism, misuse of the employer's assets and withdrawal) that affect the organization (Bashir et al., 2012; Chang & Smithikrai 2010; Galperin, 2002; Robinson and Bennett, 1995; Sackett, 2002).

A plethora of studies have been conducted to study myriad perspectives of CWB. However, no attempt has yet been made to compare the pervasiveness of CWB in blue collar and white collar workers. Therefore, this research is aimed at investigating and comparing the magnitude of counterproductive behaviors, in blue and white collar workers. This study also considers the magnitude and correlates of job satisfaction and interpersonal conflicts of these workers with CWB.

2. Literature Review and Conceptual Framework

2.1 Counterproductive work behavior and its dimensions:

Literature on counterproductive work behavior is vast. Many theorists and researchers have conceptualized it differently. A closer look of the prior scholarships reveals a sheer agreement the way by which CWB has been defined. That is, CWB is a set of negative

behaviors that are destructive to the organization by disturbing its operational activities or assets, or by hurting workers in such a way that will overcome their efficiency (Ambrose, Seabright & Schminke, 2002; Bashir et al., 2012; Fox et al., 2001; Galperin, 2002; Giacalone & Greenberg, 1997; Hollinger, 1986; Idiakeuea & Obetoh., 2012; Keashly, 1998; Robins, 2008; Skarlicki & Folger, 1997; Spector & Fox 2005; Zapf & Einarsenn, 2005).

Researchers have found that CWB is a consequence of many factors. Such as: personality traits like narcissism (Penney & Spector, 2002), and agreeableness (Mount, Ilies & Jhonson, 2006) dissatisfaction (Fatima et al., 2012; Muafi, 2011), envy (Khan, Quratulain & Peretti, 2009) and negative emotions (Krischer, Penney & Hunter, 2010; Khan, Peretti & Quratulain, 2010). Besides, unclear job description, employment insecurity, lack of internal career opportunities and inappropriate appraisal system (Shamsudin, Subramaniam & Ibrahim, 2011), lack of motivation (Osezua et al; 2009), abusive supervision (Shoss et al., 2013), stressful conditions (Fox et al., 2001) intent to quit and company contempt (Muafi, 2011), injustice (Fatima et al., 2012), un-acceptance of peer group (Wing lo et al., 2011), job stress (Aftab & Javed, 2012) and leader mistreatment (Mayer et al., 2011) are some other stimulus of CWB.

CWB embraces a variety of acts including: absenteeism, spreading of nasty rumors, sabotage, verbal abuse, theft, physical assault, stealing from coworkers, or coming late to workplace, lying, refusing to cooperate, physical assault, withdrawal, and withholding of efforts (Bashir et al., 2012; Chang & Smithikrai 2010; Coffin, 2003; Galperin, 2002 Robinson and Bennett, 1995; Sackett 2002). Spector et al., (2006) have classified variety of these detrimental behaviors in into five major categories called dimension including: abuse, production deviation, sabotage, theft and withdrawal.

2.1.1 Abuse against others:

Abuse means treating others violently; it consists of explicit harmful behaviors of an employee towards coworkers and organizational members (Izawa, Kodama & Noumra, 2006). Bitterness in behaviors, confrontational deeds or assertive conduct, telling malicious stuff, teasing and humiliating co-workers, spreading rumors and unfair criticism or even physical assault are some facets of abuse (Farrell, 1997; Sackett, 2002). Abuse against others can either be physical or psychological (Spector et al., 2005; Spector & Fox, 2006). Physical abuse is more severe .It includes using a weapon, pushing, heaving, stabbing, punching, or setting a body trap against co-workers or even harassing them sexually(Farrell, 1997).

Researchers argue that this dimension of CWB emerges from aggression (Neuman & Baron, 1998; Fox & Spector, 1999), job stressors (Chen & Spector, 1992; Fox et al., 2001), workplace deviance (Bennett & Robinson, 2003), or from antisocial behavior (Giacalone & Greenberg, 1997).

But, it is mostly determined by aggression which can be classified as i) Hostile aggression and ii) Instrumental aggression. Hostile aggression is connected with negative emotions, such as anger and frustration. Instrumental aggression, on the other hands is connected with emotions that are intended to harm the organization and its members (Berkowitz, 1998; Pearson, Andersson, & Porath, 2005; Porath & Erez, 2009). And if corrective measure are not taken timely, organizations have to eventually bear its cost in the form of low productivity and increased turnover (Coccia, 1998).

2.1.2 Production deviance

Production deviance is the failure to perform the job tasks effectively the way they are supposed to be completed (Hollingers, 1986). In this, the employee intentionally affects the efficiency of the organization by slowing down the quantity and quality of work (Hollinger and Clark 1982). When employee decisively does not perform a task which one is capable of performing; one is indulged in production deviance (Spector et al. 2006). This is also a serious dimension of CWB; because it affects organizational performance by deliberately creating problems against organizational success (coffin, 2003).

Production deviance occurs due to inadequate technology, inappropriate environment, and heavy workload, leaving early, taking excessive breaks, and intentionally working slowly (Robinson and Bennett, 1995). Some researchers point out that production and property deviance is more likely to involve employees in workplace deviance (Baucus and Near, 1991). Production deviance is also caused by aggression at workplace; but it is more inactive than sabotage, is less visible and can be difficult to prove (Spector et al. 2006).

Research has reported that the employees who are young and new to their job, work part-time, and having low-paying places are more likely to involve in Production deviance and property deviance (Baucus and Near, 1991). Having low level jobs and dissatisfaction may also result in production deviance Sims (2002).

2.1.3 Sabotage

Sabotage, in its literal meanings refers to damaging the physical property or assets of an organization or employer (Chen & Spector, 1992; Spector et al., 2005, Spector & Fox, 2006). It is the behavior of employees that intends to: reduce the productivity of the organization, coerce higher authority for special consideration by the means of tampering with equipment, intentionally damaging assets and humiliating customers. Production deviance and sabotage are the two types of behaviors that signify i) failure to do a task or do it correctly ii) intentionally destroying something. Although, production deviance is a passive and sabotage is active approach, but in fact, both are entangled (Spector et al. 2006). Misuse of information and communication technology beside organizational concerns is also an aspect of sabotage (Weatherbee, 2010).

Production deviance is less severe than sabotage (Neuman & Baron, 1997). Sabotage happens mainly due to instrumental aggression, frustration and anger (Ambrose, Seabright, & Schminke, 2002).

2.1.4 Theft

Theft is stealing the physical property or assets of an organization or employer (Chen & Spector, 1992). Galperin, (2002) figures theft as one of the facets of counterproductive behavior that compels individuals towards the breach of the organizational norms. By theft employees intend to intentionally harm the organizations for the fulfillment of their instrumental motives (Niehoff & Paul, 2000; Spector et al., 2006). Theft can take many forms such as of misleading records, deception and stealing cash (Gabbidon et al., 2006). Mustaine & Tewksbury (2002) argue that theft is caused by three major reasons: economic need, job dissatisfaction, and injustice. Organizational & interpersonal conflicts

anger and other negative emotions are some other reasons that can also cause theft (Bolin & Heatherly 2001; Kulas et al. 2007; Fox et al., 2001).

Another reason of theft is the improper control system due that employees start perceiving that they will not be caught. In USA alone, each year billions of dollars are misplaced due to employee theft, organization should focus on controlling theft by establishing best possible policies and well planned security system.(Spector et al., 2006).

2.1.5 Withdrawal

Withdrawal consists of those negative behaviors that reduce the amount of working time than the required time by the organization (Spector et al. 2006; Kulas et al., 2007). It includes coming late at work or leaving early from the workplace, absenteeism, and taking longer breaks than officially permitted. Absenteeism is the basic form of withdrawal which occurs due to psychological disorders, stress, social norms, culture conflict, and individual differences. Withdrawal is that behavior by which an employee attempts to avoid a situation rather than harming the organization and its members (Spector et al. 2006).

CWBs such as; employee theft and fraud are common occurrences in an organization (Case, 2000), costing U.S. organizations an estimated loss of \$50 billion annually and are responsible for about a 20 % of failure of businesses . It has also been estimated that 33% to 75% of all employees have engaged in behaviors such as Abuse against others, Production deviance, Sabotage, Theft, Withdrawal etc (Coffin, 2003).

2.2 *Counterproductive work behaviors in blue and white collar workers*

A group of positions that are identical with respect to their major tasks and responsibilities form a job (Byars & Rue 2000; Weather & Davis, 2005). Job is thus, a group of homogeneous tasks characterized by similarity of functions and consistent patterns of some psychological and behavioral outcomes (Fried & Ferris, 1987). Every job is based on different characteristics which refer to the activities and responsibilities associated with it. On the basis of these characteristics, an employee perceives his/her work as being meaningful (Bartelett, 2008).

Five characteristics are common to each job including: skill variety, task identity, task significance, autonomy, and feedback (Raju & Srivastava, 1986). Unique combination of these characteristics constitutes the distinct nature of each job, which includes everything that forms part of employees' involvement with the work itself, such as the relationship with co-workers and supervisors, organizational culture and room for personal development (Weather & Davis, 2005).

Jobs are classified and arranged into different classes, groups or families according to a systematic schema which explains the roles and organization of employees for accomplishment of specific tasks This classification scheme is based on organizational lines of authority, technology, human behavior and the job content this classification scheme is categorized as: i) white collar jobs (the managerial and professional people) and, ii) blue collar jobs (the physical and factory laborers) (Bernardin & Russell, 1998).

White collar jobs include performing the non-manual work; that is dealing with information, not the things .These jobs demand specialized experience and rigorous education (Ypallilos, 2009). Those, who perform these jobs are called white-collar

workers and bear job titles like: accountants, bankers, attorneys, real estate agents, professional consultants, supervisors, clerks, professionals and managers (Scott, 20013).

Blue collar jobs, on the other hand, involve performing the manual work which requires physical involvement and efforts (Ypallilos, 2009). These jobs require technically skilled personnel who are formally trained and certified like: engineers, mechanics, plumbers, electricians and structural workers. Blue collar jobs can also be performed by low-skilled people who are designated to perform simple tasks such as cleaning, maintenance and assembly line work (Scott, 2013). The main titles given to the blue collar workers vary according to the places where these employees are hired; their responsibilities also vary as their titles vary. Their primary responsibility is to ensure the proper use of organizational resources, so that organization can increase their productivity (Herman & Abraham, 2000).

Blue and white-collar employees differ significantly from each other on the basis of their job characteristics and their behavior; white-collar employees have higher levels jobs, and blue-collar workers on the other hand perform low level jobs (Spiegelaere et al., 2012). Both differ in the way they estimate various aspects of a job, white-collar employees are traditionally found to value the intrinsic aspects of the job, whereas the blue collar workers attach more importance to extrinsic aspects such as rewards or job security (Locke, 1973). It has been reported that the central motivational factors of blue-collar workers are the extrinsic job aspects such as: the job security, and rewards. The white collar workers value intrinsic aspects of their jobs like autonomy and task significance (Centers & Bugental, 1966).

Researchers report that the intentions to come late and leave early, taking longer breaks, skipping tasks, vandalism, absenteeism, stealing have been found more in blue collar worker; blue collar workers are usually less satisfied, are more quarrelsome, and have poor interpersonal relationship than their white collar counterparts (Martinko et al. 2002; Yin, 2010). White collar employees commit minor wrongdoings because of strict social and work norms (Bayram et al., 2009; Yin, 2010). Capitalizing on these arguments, the following hypotheses are articulated for testing;

- *H₁: White collar workers exhibit less CWB than blue collar workers.*
- *H₂: White collar workers are more satisfied in their jobs than blue collar workers.*
- *H₃: White collar workers enjoy good interpersonal relationships and have less interpersonal conflicts than blue collar workers.*

3. Methodology

3.1 Participants and procedure

Initially, 600 questionnaires were distributed randomly amongst the individual employees of public and private sector organizations in Quetta city. Out of this number, 300 questionnaires were given to blue collar workers and 300 to white collar workers. A total of 400 (N = 400) individuals voluntarily participated in this study by returning back the survey instrument. Thus, the response rate was 67%. Other details of participants have been summarized in the result section of this paper.

This study was conducted in Quetta, the largest and capital city of Balochistan Province in Pakistan. The data was collected from various public and private sector organizations such as banks, hospitals, telecommunication companies, NGOs, etc. The concern heads of these organizations were approached to seek permission for data collection. After obtaining the permission; respondents were approached randomly and informed that their participation in the study was voluntary and they could terminate their participation at any time or stage of data collection and that their responses will be kept anonymous and in strict confidentiality. All participants were thoroughly briefed about CWB, job satisfaction and interpersonal relationships/conflicts before the distribution of

3.2 Survey Instruments

3.2.1 The Counterproductive work behavior-Checklist (CWB-C)

The 32- item version of CWB-C developed by Spector and Fox (2005) was used to determine the magnitude of CWB. The respondents were required to respond on a five item category scale ranging from 1 to 5 where 1, 2, 3, 4 & 5 stands for Never, Once or Twice, Once or Twice per month, Once or Twice per week, and Everyday respectively. This scale is divided into five subscales Abuse (nine items), Sabotage (three items), Production Deviance (three items) Theft (five items), and Withdrawal (four items). The reliability statistics of these dimensions are reported as; Abuse ($\alpha = 0.771$), Sabotage ($\alpha = 0.812$), Production Deviance ($\alpha = 0.836$), Theft ($\alpha = 0.831$) and Withdrawal ($\alpha = 0.883$). The overall reliability (Cronbach's alpha) of this scale (all/32 items) in this study is reported as .84 which shows that the internal consistency is high and the scale is reliable.

3.2.2 Minnesota Job Satisfaction Scale:

The short form of Minnesota Job Satisfaction Scale (MSQ) developed by Weiss, Davis, England and Lofquist, (1967) was used to gauge the job satisfaction of respondents. This is a 20 items scale with a five point rating scale ranging from very dissatisfied (1) to very satisfied (5). This questionnaire measures the satisfaction level of individuals with various aspects of work and work environment. The possible score range of this scale is 20-100. The low scores represent low level of satisfaction and high scores show high level of job satisfaction. This scale is subdivided into two subscales: i) intrinsic satisfaction (from work) and, ii) extrinsic satisfaction (from work environment) with 10 items each. Sum of these subscales measures general job satisfaction. The reliability statistics of these subscales in this study are reported as; intrinsic satisfaction ($\alpha = 0.843$) and extrinsic satisfaction ($\alpha = 0.797$). The reliability statistics of both subscales show a high level of internal consistency. This reliability statistic of general satisfaction (all/20 items) is reported as .72 ($\alpha = .721$) which is highly reliable.

3.2.2 The Interpersonal Conflict Scale (ICAW)

The second instrument used in this was the interpersonal conflict scale (ICAW) by Spector and Jex (1998). It is a four items scale that measures the interpersonal relationships and conflicts at workplaces with 5 response options ("0" once per month to several times per day, coded "5") after each statement. The scores can range from 4-20. High scores of this scale show frequent conflicts and bad interpersonal relationship with others, while low scores represent rare conflicts and good interpersonal relationships. The reliability statistics of this scale was calculated as .71 ($\alpha = .710$) which shows that the instrument is reliable.

4. Results

400 individuals participated in this study. This sample of 400 was comprised of 283 males (71.75%) and 117 females (29.25%). 38.75% (155) respondents belonged to private sector organizations and 61.25% (245) from public sector organizations. 14.5% of the respondents were of 20 & less years of age, 38.6% of participants were aged between 21-31 years, 28.3% were aged between 31-40 years, and 18.6% of participants were from the age group of 41 years and above. The experience range of 30.5% of respondents was 1-5 years; 24.0% of the respondents were experienced from 6-10 years and 22.0% from 11-15 years, and the experience of 23.5% was above 16 years. 49% of the participants were white collar workers (Directors, Deputy Directors, Assistant Directors, Managers, Assistant Managers, Office Managers, Superintendents, Accountants, Information Officers etc.). Whereas, 51% of the sample were blue collar workers (technicians, laboratory assistants, mechanics, electricians, plumbers etc.).

Table 1: Construct validity of CWB through correlation

Variables	1	2	3	4	5	6
1) Abuse	1					
2) P. Deviance	0.543**	1				
3) Sabotage	0.793**	0.672**	1			
4) Theft	0.488**	0.529**	0.443**	1		
5) Withdrawal	0.560**	0.446**	0.481**	0.475**	1	
6) CWB	0.824**	0.863**	0.815**	0.803**	0.801**	1.000

The construct validity of the survey instruments was tested by applying Pearson correlation prior to conducting further analysis.

Table 1 displays inter-correlations among the subscales/dimensions of counterproductive work behaviors. There exists a statistically significant positive correlations between counterproductive work behavior and its entire dimension; CWB & abuse ($r = 0.824$, $p < 0.01$), CWB & production deviance ($r = 0.863$, $p < 0.01$), CWB & sabotage ($r = 0.815$, $p < 0.01$), CWB & theft ($r = 0.803$, $p < 0.01$) and CWB & withdrawal ($r = 0.801$, $p < 0.01$). The patterns of these correlations between the CWB and its dimensions reveal that the construct of CWB is valid.

Table 2: Construct Validity of Job Satisfaction through correlation

Variables	1	2	3
1) Intrinsic Satisfaction	1		
2) Extrinsic Satisfaction	.806**	1	
3) Job Satisfaction	.853**	.879**	1

**Correlation is significant at the 0.01 level (2-tailed), N = 400

The construct job satisfaction is based on two subscales that are; intrinsic and extrinsic satisfaction. The association of these subscales with job satisfaction is presented in Table 2. A statistically significant and strong positive correlation exists between job satisfaction and intrinsic Satisfaction ($r = 0.853$, $p < 0.01$). Extrinsic satisfaction is also strongly

correlated with job satisfaction ($r = 0.879$, $p < 0.01$). This strong pattern of relationships proves the construct of job satisfaction is valid.

Table 3: Descriptive Statistics

Variables	Possible Range	Observed Range		Mean			SD
		B.C	W.C	B.C	W.C	B.C	W.C
1) JS	20-100	20-100	20-100	47.84	73.21	11.009	07.885
2) ICWA	04-20	04-20	04-20	13.20	06.28	05.563	04.112
3) Abuse	09-45	09-40	09-28	3.67	1.71	0.8673	0.6512
4) P. Deviance	03-15	03-13	03-10	2.75	1.43	0.9459	0.7856
5) Sabotage	03-15	03-12	03-08	2.88	1.32	0.7931	0.5190
6) Theft	05-25	05-21	05-14	3.54	1.17	0.6086	0.3937
7) Withdrawal	04-20	04-18	04-12	2.46	1.79	0.8164	0.6279
8) CWB	32-160	32-160	32-120	3.060	1.484	0.5419	0.3954

Note: JS = Job Satisfaction, ICWA = Interpersonal Conflicts. P. Deviance = Production Deviance, B.C = Blue Collar Worker, W.C = White Collar Worker.

Descriptive statistics of major variables in this study are summarized in Table 3. The column 'possible range' represents the minimum-maximum score range of individual responses. For instance, in Minnesota Job Satisfaction Scale; a respondent can respond by rating all items as 'very dissatisfied' or 'very satisfied' which if quantified, equals a total score 20 and 100 respectively. Whereas, the column 'observed score range' indicates the reported response range (minimum-maximum) of all respondents. The composite means (average of all items on scale) and standard deviations of job satisfaction, interpersonal conflicts, and subscales of CWB have been presented in the last two columns of the table.

It is clear from the table 1 that the mean score of job satisfaction of white collar workers is high (73.21) as compared to the mean score of blue collar workers that is 47.84. The mean scores of interpersonal conflict scale indicate that white collar workers enjoy good interpersonal relationships and with a low degree of interpersonal conflicts (Mean = 6.28). The mean score of 13.20 on the same scale indicates that the blue collar workers have poor interpersonal relationships and therefore are more into the interpersonal conflicts. Table 1 also shows that the magnitude of CWB is higher in blue collar workers (Mean = 3.060) as compared to the white collar workers (Mean = 1.484).

Table 4: Mean Ranks of CWB dimensions

Dimensions	Mean		Mean Ranks	
	B.C	W.C	B.C	W.C
1) Abuse against others	3.67	1.71	1	2
2) Production Deviance	2.75	1.43	4	3
3) Sabotage	2.88	1.32	3	4
4) Theft	3.54	1.17	2	5
5) Withdrawal	2.46	1.79	5	1

The mean ranks of the major dimensions of CWB in the groups of blue collar and white collar workers and their comparison is presented in table 4. Analysis of this mean ranks

shows that abuse against others is the most reported counterproductive behavior among blue collar workers followed by theft, , sabotage ,production deviance and withdrawal. On the other hand, withdrawal is the most frequent occurring counterproductive behavior in the group of white collar workers. Abuse against others, production deviance, sabotage and theft are ranked as second, third, fourth and fifth in frequency of occurrence.

Table 5: Correlation between JS, ICAW and CWB

Variables	1	2	3
1) JS	1		
2) ICAW	.1141**	1	
3) CWB	-.7623**	.559*	1

Note: JS= Job Satisfaction, ICAW= Interpersonal Conflicts, CWB= Counterproductive work behavior, ** $p < 0.01$, * $p < 0.05$, $N = 400$

Pearson correlation was applied to determine the relationship between major variables. The correlation coefficients (r) are presented in table 3. A statistically significant relationship exists between job satisfaction, ICAW and CWB. The strong negative relationship ($r = -.7623$) between job satisfaction and CWB reveals that job satisfaction has a diminishing effect on CWB. In contrast, a statistically significant positive relationship between interpersonal conflicts and CWB ($r = .5106$) indicates that CWB will increase if interpersonal conflicts are high. Surprisingly, a weak relationship was reported between job satisfaction and interpersonal conflicts ($r = .1141$).

Three major hypotheses were articulated for testing. An independent samples t-test was applied to test the claimed differences in each hypothesis. The first hypothesis claims that the white collar workers are less engaged in CWB than blue collar workers. The independent samples t-test measure reports that blue collar workers are more engaged in CWB ($M = 3.060$, $SD = 0.54197$) than the white collar workers ($M = 1.484$, $SD = 0.39542$), $t = 2.749$, $p < .005$. Therefore, we accept the hypothesis that the magnitude of CWB is different in blue collar and white collar workers.

In the second hypothesis, we claimed that white collar workers are more satisfied than their blue collar counterparts. The results of independent samples t-test show that white collar workers are more satisfied in their jobs ($M = 73.21$, $SD = 07.855$) than blue collar workers ($M = 47.84$, $SD = 11.009$, $t = 3.130$, $p < .005$). Hence, we accept the hypothesis that job satisfaction is high in white collar workers as compare to the blue collar workers.

It was also claimed that the interpersonal relationships of white collar workers with their counterparts are good and they have less interpersonal conflicts at work places than blue collar workers. Results indicate a statistically significant difference in the magnitude of interpersonal conflicts in two groups of white collar and blue collar workers. Blue collar workers have more interpersonal conflicts ($M = 13.20$, $SD = 5.563$) than white collar workers ($M = 6.28$, $SD = 4.112$), $t = 4.511$, $p < 0.05$.

After determining the relationships among major variables and testing of hypotheses, we tested the basic assumptions of regression by applying several tests (Kolmogorov-Simernov, Collinearity Statistics, Condition Index, and Durbin-Watson). Details of normality and multicollinearity these are summarized in table no. 6, & 7, the information about auto correlation is reported in table no. 8 & 9 along with the regression results.

Table. 6 Normality Statistics

Variables	Test	Value
Job Satisfaction (JS)	Kolmogorov-Smirnov Z	2.252
	Asymp. Sig. (2-tailed) ^a	0.000
Interpersonal Conflicts(ICAW)	Kolmogorov-Smirnov Z	1.772
	Asymp. Sig. (2-tailed) ^b	0.001
CWB	Kolmogorov-Smirnov Z	2.109
	Asymp. Sig. (2-tailed) ^c	0.000

a, b, c = Distribution is normal, $p < 0.05$

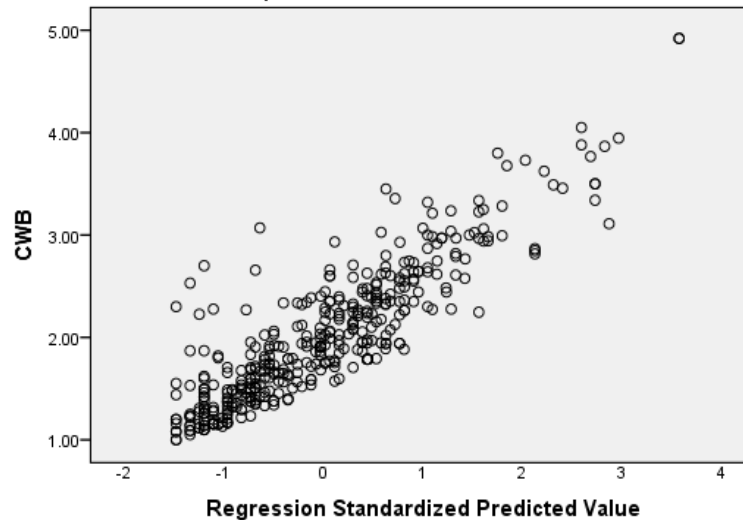
Table 7: Multicollinearity Diagnosis

	Collinearity Statistics		Eigen Value	Condition Index
	Tolerance	VIF		
(Constant)				
Job Satisfaction	.419	2.3866	4.825	1.000
Interpersonal Conflicts	.688	1.4534	.675	2.674

Dependent Variable = CWB

Scatterplot

Dependent Variable: CWB

**Figure 1: Scatter Plot Diagram**

It is clear from table 6 that all variables (job satisfaction, interpersonal conflicts and CWB) are normally distributed. The co-linearity statistics (Tolerance and VIF) show that the problem of multicollinearity does not exist between independent variables. Condition index of both variables is also below 15 which also verify that there is no multicollinearity. Figure 1 proves a linear relationship exists among major variables and the data is free of heteroskedasticity.

Table 8: Regression Analysis - Model 1

	Standardized Beta	R ²	t	Sig.	F	Sig.	Durbin-Watson
CWB	-.7631	.581	-3.897	0.000	25.187	0.000	1.93761

Predictor/Independent Variable = Job Satisfaction, Dependent Variable = CWB

Table 8 displays the results of regression analysis between job satisfaction (constant OR Predictor) and CWB (dependent variable). Results show that job satisfaction can predict CWB ($\beta = .581$, $t = -3.897$). Job satisfaction has also explained a significant proportion of variance in CWB ($R^2 = .581$, $F = 25.187$, $p < .05$). The reported Durbin-Watson statistics of the model approximates 2 which mean that there is no problem of auto correlation.

Table 9: Regression Analysis - Model 2

	Standardized Beta	R ²	t	Sig.	F	Sig.	Durbin-Watson
CWB	.559	.312	3.568	0.000	12.733	0.000	1.86459

Predictor/Independent Variable = Interpersonal Conflicts, Dependent Variable = CWB

Regression results between interpersonal conflicts and CWB dependent variable are reported in table 8. Results indicate that interpersonal conflicts can also predict CWB ($\beta = .559$, $t = 3.568$), and can cause a significant degree of variance in CWB, ($R^2 = .312$, $F = 12.733$, $p < .05$). The model is also free of autocorrelation problem as the Durbin-Watson statistics approximates the value of 2.

Hence, it can be claimed that job satisfaction and interpersonal conflicts at workplaces can significantly predict counterproductive work behaviors.

5. Discussion and Conclusion

On review of the relevant literature, some hints were found regarding the potential impacts job characteristics on CWB. That is, the nature of job and some personal variables such as job satisfaction and interpersonal conflicts affect deviant behaviors including but not limited to: skipping tasks, vandalism, taking longer breaks, absenteeism, theft, spreading nasty rumors, humiliating colleagues. But no clear relationships were reported by prior scholarships except Bayram et al., (2009). They only investigated the dimensionality of CWB in white collar workers and did not take into account the other category of workers that is the blue collar workers. Hence a gap existed in the literature. Therefore, we undertook this study with the pivotal aim of confirming the prior findings by investigating and comparing the magnitude and dimensionality of counterproductive work behaviors, job satisfaction and interpersonal conflicts in blue and white collar workers.

The results support all hypothesized notions. The magnitude of CWB varies among blue and white collar workers. It is found that blue collar workers are more counterproductive as compare to the white collar workers. The mean score of CWB (abuse, production deviance, sabotage, theft and withdrawal) in blue collar workers is 3.060 which represents "once or twice per month". The most frequent reported type of CWB in blue

collar workers is abuse against others. It is due to the fact that this category of workers is less educated and is more quarrelsome as argued by Martinko et al. (2002) and Yin (2010). That is why, they are more abusive. The second most frequent reported form of CWB in blue collar workers is theft. Blue collar workers usually perform lower level jobs and earn less. Fewer earnings induce them to steal. Other possible reasons of theft in such workers are dissatisfaction and revenge behaviors. Sabotage and production deviance are on fourth and fifth ranks in the frequency of CWB occurrence respectively. Abusive supervision is the prime reason of these deviant behaviors. Withdrawal is the least ranked type behavior in the rank order of five. It is also found that blue collar workers are less satisfied with their jobs; have poor interpersonal relationships and encounter frequent interpersonal conflicts at workplaces.

In contrast, the CWB in white collar workers is minimal with the mean score of 1.484 which represents "Never" on a five point scale. The most frequent reported kind of counterproductive behaviors in these workers is withdrawal. Abuse against others is found as second most observed category of CWB. Production deviance, sabotage and theft are ranked third, fourth and fifth respectively. This negligible magnitude of CWB is because of the facts that white collar workers are more responsible, earn more, have high level of self-esteem and high degree of satisfaction.

It is also found in this study that white collar workers are more satisfied on the jobs than blue collar workers. White collar workers earn more; enjoy more autonomy, more freedom, task significance, recognition, higher degree of self-esteem and face strict social and workplace norms. That is why; they are more satisfied in their jobs, enjoy amicable relationships with their coworkers and rarely encounter interpersonal conflicts at work.

The interrelationship of job satisfaction, interpersonal conflicts also surfaced several facts. Job satisfaction has a diminishing effect on CWB; that is, the higher the job satisfaction, the lesser will be the CWB. Hence, it is concluded that the managers must try to ensure the factors that increase job satisfaction and minimize CWB. Secondly, the significant positive relationship between interpersonal conflicts and CWB implies that frequent interpersonal conflicts mount up the counterproductive behaviors. Thus, it is established that the organizations that want to enhance productivity must endeavor to ensure harmonious relationships among coworkers so that interpersonal conflicts remain minimal and conducive working environment prevail.

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