RELATION OF PERCEPTION OF SAFETY CLIMATE AND JOB SATISFACTION IN INDUSTRIAL SECTOR OF KARACHI

Khalida Rauf1 and Nusrat Jabeen2

Abstract

The present study attempts to investigate the relationship between worker’s perception of workplace safety and job satisfaction. 375 participants were approached through convenient sampling from different enterprises. The study design was correlational. Worker’s perception of workplace safety was measured through Safety Culture Perception Survey (2009) and job satisfaction was measured through job satisfaction scale (1954). Posited within the framework of reciprocity theory, it was hypothesized that there would be a positive correlation between perception of workplace safety and job satisfaction. The relationship between the variables was calculated through Pearson product moment correlation. Results showed significant correlation between the two variables, furthermore, age difference was also explored through t test, which was also found significant between the two groups.

Keywords: Perception, Job Satisfaction, Industrial Sector, Work Place.

JEL Classification: E120

Introduction

Safety related concepts have been considered important in the workplace as it leads to injury reducing behavior (Zohar, 2010). The inculcation of safety climate in the workplace is an effort of management commitment to workers’ safety. The role of perception of safety plays an important role if seen within the framework of social exchange theory founded by Blau (1960), which states that in any interdependent relationship contract between two parties is based on the concept of reciprocity. If any party is treated favorably, feels obligated to behave similarly and vice versa that is in a reciprocal manner (Gouldender, 1960). The concept of social exchange theory has been widely studied in the workplace by Eiseberger, Fasolo and Davis-LaMastro, (1990), Dejoy, Schaffer, Wilson, Vandenberg and Butts (2004) and Mearns, Hope, Ford and Tetrick (2010).

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Management’s effort to promote safety in the workplace can be seen as reciprocity dynamic, i.e. when employees perceive organization behaving positively towards their safety they in turn respond similarly (Hoffman, 2003). Shen, Ju, Koh, Rowlinson and Bridge (2017) stated that transformational leadership has direct impact on safety behavior resulting in safety compliance and leader participation, participative leaders have been perceived as supportive.

Workplace safety has been studied with regard to safety outcomes like reduced injury rate and following of safety tactics. But it has not been studied widely with regard to employee outcomes like turnover and work engagements. Little attention has been focused on psychosocial factor like job satisfaction. Job satisfaction as an attitudinal variable affects various facets of the job (Judge & Kameyer-Mueller, 2012). It seems to affect variables like work performance, work engagement and turnover which has many human resource implications (Judge, Thorosen, Bono & Patton, 2001; Rekitta, 2008; Tett & Mayer, 1993). As the perception of workplace safety has been upraised by many researchers as affecting job satisfaction which in turn affects many human resource variables in a latent manner (Huang, Lee, McFadden, Murphy, Robertson, Cheung & Zohar, 2016).

The present study attempts to fill the gap between safety climate and work attitude like job satisfaction as most of the literature is focused on studying safety outcomes.

**Literature Review**

Long before the emergence of positive psychology in the workplace, Maslow (1970) identified safety as one of the basic needs of humans and animals in his hierarchy of needs. No doubt, humans earn bread and butter as a result of their employment which satisfies their basic need of hunger and thirst and then move onto the next stage to secure resources for himself and his young ones. In other words, he looks for safer ways to secure resources for his survival.

Concerns for employees, be it health and safety, financial, physical and psychological have been the focus of attention even before the early 20th century. First, it was discussed under the heading of workers’ comfort, later during the mid of 20th century job satisfaction was identified as a precursor of good performance. With the passage of time the same concept was considered as an important economic variable (Freeman, 1978). However, concern for employees went through another development during the last part of the 20th century, this time it was discussed as an integrated ability to work, which means there should be a balance between worker’s capacity and work demand (Gould, Iimarinen, Jarvisalo & Koskinen, 2008). Implication of such ideas may result in job satisfaction, which is an affective variable resulting from perceived working condition (Locke, 1969).

Well being in the workplace has gone through long historical development. Not only the human friendly tools, machines and buildings are designed to enhance performance, rather improving atmosphere, machines and ergonomics provide a way to capitalize on the skill of aging work force.
On a broader perspective, well being seems to have strategic implications (Zwetanen & Pat, 2004; Thun, Grobler & Miczka, 2007; Perca, 2011; Ilmarinen & Rantanen, 1999).

Numerous researchers identified several workplace characteristics like health and safety practices, work designs, ergonomics, workplace violence, workplace harassment, addiction and even relationship with colleagues have well being implications (Patterson, 1957; Hoke, 1997; Neuman & Baron, 1997; O’Leary-Kelly, Griffin & Glev, 1996; Blanchard, 1993; Cooper & Cartwright, 1994). By removing all these perils from the dangerous work situations, organizations can have positive impact on health and well being (Cooper & Marshal, 1998).

Danna and Griffin (1999) identified work related, personality and occupational stress related variables leading to workplace health, be it physical or psychological which results in individual consequences (in terms of physical and psychological health) and organizational consequence in terms of health insurance cost, absenteeism, productivity and lawsuits. Cooper and Cartwright (1994) pointed organizational consequences of well being and health can affect the income of the organization. Moreover, Neville (1998) brought to light that workplace hazards can result in low productivity and efficiency which results from the wages for lost time of uninjured workers. According to Conrad (1988) Cooper and Cartwright (1994) the employee benefit soared from 30% to 50% of national health bill, whereas, Elkin and Rosch (1990) reported that 54% of absences in the workplace were stress related and replacing these employees may result in huge cost. Workplace stress induced injury claims are the most common out of ten injury categories in workers’ compensation statement (McElveen, 1992; Esters, 1997).

Skov, Borg and Orhede (1996) discovered that high job demands, lack of control and lack of support among sales personnel resulted in musculoskeletal symptoms. Esters (1997) reported the case of 1996 product liability lawsuit against Digital Equipment Corporation due to which company had to pay six million to three women whose injuries resulted from the use of company’s keyboards. That is why, companies have become aware of “human factor” in the workplace, few considered it expensive but ergonomic adjustment resulted in workers’ efficiency and productivity. Modern organizational literature reported that concern for human factor and ergonomic adjustments have resulted in more efficiency and productivity decreasing the number of uncomfortable moves like bending, stretching, leaning and pushing (Larson, 1998).

Most researches focus on traditional outcomes of safety, whereas, Huang, Lee, McFadden, Murphy, Robertson, Cheung and Zohar (2016) used social exchange theory to study how safety climate perception is related to employee outcome and the mediating effect of job satisfaction on safety climate and human resource outcomes. As proposed by need theory of Maslow (1954) their results indicate that safety climate ensures employees that their company cares for them. According to social exchange theory, they perceive that their safety needs are met, hence report more satisfaction and try to pay back by engaging more and more.
Moreover, LaBar (1997) and Champ (1951) maintained that responsibility for safety should be a part of every employee’s job, at every level which only signifies safety culture. This culture is strengthened by management’s commitment or non-commitment (Manuelle, 1997). The relationship between perception of safety climate and management’s commitment has been reported by Cohen (1977) and Zohar (1980) as high rank of safety officers, safety training, safety inspection and promotion and recognizing of safety. This relationship is again based on social exchange theory that employees who perceive organizational commitment to safety as beneficial for their well being and reciprocate positively by engaging in safe behavior (Hofmann et al., 2003).

Satisfaction with workplace environment or workplace policies is perceptual in nature, i.e., if workplace is perceived as safe only then it can lead to satisfaction. In other words, job satisfaction and organizational climate seem to play a mediating role in workplace accidents. This could also be explained in the light of reciprocity theory (Gouldener, 1960) which states that when workers perceive the environment as safe then accident frequency is likely to be low rather satisfied workers also perceive their supervisors as supportive and consider their management’s role as crucial in their safety. Moreover, Robin and Walker (2000), Sumrani and Seoprihanto (2000) found that companies sometimes provide occupational safety and health not only to increase sense of security among employees rather to enhance their satisfaction level. Yousuf, Eliyana and Sari (2012) discovered that changes in occupational safety and health also bring changes in the satisfaction level of employees. Stoilkovska, Pancovska and Mijoski (2015) studied the effect of perceived safety climate and job satisfaction with age as a moderating variable, results no relationship between age and job satisfaction with regard to safety.

Keeping the above literature in mind it was thought that these variables of workplace safety and satisfaction of employees be explored in Pakistani culture. As the above literature is mainly drawn from developed countries that is why it was decided to explore these variables in local culture as our country is not that advance and prosperous to spend much on safety aspects.

It was hypothesized that there will be a positive correlation between perception of workplace safety and job satisfaction. There would be a difference in different age groups.

**Methodology**

**Sample:** 375 employees were approached conveniently from different industries of Karachi. The age range of the respondents was from 20 to 50 years, which was further divided into two groups of 20-35 and 36-50.

**Study Design:** The correlational study design was followed to find the relationship between perception of workplace safety and job satisfaction.
**Measures:** Perception of workplace safety was measured through Safety Culture Perception Survey by Simon and Cistario (2009), which is 7 item 5 point likert type scale ranging from 1 not true to 5 definitely true. Job Satisfaction was measured through Job Satisfaction Scale by Ganguli (1954), which is three item 7 point likert type scale, ranging from 1 that is strongly disagree to 7 that is strongly agree, high score showing greater satisfaction with job.

**Procedure:** 375 people working in different industries of Karachi were approached individually, by contacting their management. Permission was granted after the reason for data collection was explained. Reluctance on the part of respondent was overcome by giving assurance of unanimity of data.

**Ethical consideration:** Employees were assured of confidentiality. Their reluctance was overcome by telling them that the data is meant for research purpose only. They were also assured that they can withdraw at any stage of research.

**Statistics:** Pearson Product Moment Correlation was calculated through SPSS 19.00. Regression model was also carried out to find the predictive relationship between the two variables. Furthermore, age difference was calculated through t test for independent sample.

**Time frame:** The data was collected during the year 2014 and 15, the write-up was completed in 2016.

**Operational Definition**

**Job Satisfaction**

Job Satisfaction has been defined by Locke (1976) “as a pleasurable and positive emotional state resulting from the appraisal of one’s job or job experiences and as a function of the perceived relationship between what one wants from one’s job and what one perceives it as offering.”

**Perception of safety culture**

Perception of safety culture has been defined by Piers, Montin and Balk (2009) as “a set of enduring values and attitudes regarding safety issues, shared by member of every level of an organization.”
Results

Table 1
Showing descriptive statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>St Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>375</td>
<td>3.00</td>
<td>22.00</td>
<td>14.276</td>
<td>5.5401</td>
</tr>
<tr>
<td>Safety</td>
<td>375</td>
<td>7.00</td>
<td>38.00</td>
<td>23.0404</td>
<td>7.248</td>
</tr>
</tbody>
</table>

Table 2
Pearson’s Correlation between Job Satisfaction & Safety

<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.608**</td>
</tr>
<tr>
<td>Sig. 1-Tailed</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>322</td>
<td>322</td>
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<td>N</td>
<td>322</td>
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</tbody>
</table>

**Correlation is significant at the .000 Level (1-tailed)

Table 3
Regression model expressing the predictive relation between perception of safety and job satisfaction

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std.Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.561</td>
<td>.819</td>
<td>4.348</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>.465</td>
<td>.034</td>
<td>.608</td>
<td>13.716</td>
<td>.000</td>
</tr>
</tbody>
</table>
Job satisfaction: dependent variable

The model result states that increase in safety measures is related to increase in job satisfaction. Results show that safety positively affects job satisfaction ($p = .000$, $\beta = .680$, $R^2 = .370$, which means the model is 37% explained.

Table 4

<table>
<thead>
<tr>
<th>Age groups</th>
<th>N</th>
<th>Mean</th>
<th>Std Dev</th>
<th>Df</th>
<th>T</th>
<th>Sig</th>
<th>95% confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-35</td>
<td>168</td>
<td>19.24</td>
<td>7.36</td>
<td></td>
<td></td>
<td></td>
<td>2 7.934 0.000 8.42 14.00</td>
</tr>
<tr>
<td>36-50</td>
<td>207</td>
<td>35.73</td>
<td>9.92</td>
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</tbody>
</table>

Discussion

The impact of safety management practices is such that it promotes positive workplace perception, thereby making workers follow safety practices. The present study attempts to explore the relation of perception of workplace safety and job satisfaction. Results revealed strong and positive correlation significant at .000 level, table no.2. Results support the related literature and existing hypothesis that there will be a positive correlation between perception of safety and job satisfaction.

Furthermore, it was also analyzed whether safety practices predict satisfaction at the workplace, regression model was carried out which strengthens the assertion that safety practices predict job satisfaction, $R^2 = .370$, which means the model is 37% explained, table no.3. Wachter & Yorio (2014) stated that safety management system could be predictor of lost time injuries and illnesses as an outcome and the same predictor seems to be related to the safety climate; justice climate and safety related behaviors as a mediator. They concluded out of their research that system of safety management practices significantly predicted all of the employee safety perceptual and behavioral constructs. At yet another place, these two authors in 2013 stated that perceived level of safety management negatively predict injuries.

Adjeckum (2014) studied perception of safety among students of aviation program, his study revealed that freshmen had favorable perception of safety culture as compared to senior students and it was attributed to different operations which they had to perform.
These results are further supported by Gyeke’s (2005) results, which state that highly satisfied workers consider their work to be safe. Moreover, they consider their colleagues’ efforts toward safety as worthy and encourage others to behave safely. Past and recent, both studies have shown relationship between safety climate and job satisfaction (Gouldener, 1960). Moreover, job satisfaction in conjunction with organizational commitment mediates the relationship between safety climate and safety behavior (Clark, 2010).

Champ (1997) stated that responsibility for safety rests with everyone in the organization from top to bottom, which is how culture ensures it. Huang, Ghen, Krauss and Rogets (2004) stated that company’s safety and health policy is basically an investment in human resource because it cut down injury cost rather it increases job satisfaction and cut down turnover rate. Promoting health and safety issues plays a pivotal role in improving the well being of employees.

With regard to age, Aronowitz (1973) found that younger workers expect more from workplace, if their expectations are not met with they become frustrated and dissatisfied. Qureshi and Sarki (2014) proved that there exists a relationship between age and job satisfaction. The present study also supports the existing literature with t-value significant at .000 level.

**Conclusion**

It is safely concluded that no doubt safety and job satisfaction seem correlated, but there is a lot that needs to be improved like building, location, machinery, equipment and so on. Change and improvement with regard to work is not constant, since stability is something that can never be achieved ideally. With regard to the accompanying variables like human resources, like job performance, work engagement, turnover and absenteeism that are indirectly affected by job satisfaction as an implication of perception of workplace safety. The current study proves the relationship between work attitudes like job satisfaction and perception of safety climate in the workplace. It also provides impetus to future researchers and human resource professionals to look into the application of safety policies and practices to impact not only attitudes rather work motivation, turnover and absenteeism.

**Limitations and Recommendations**

The data was collected from different types of companies that makes it difficult to generalize. Satisfaction and perceptual measures are subjective in nature; efforts should be made to include objective measures. Constructs like work setting variables and individual and organizational consequences can be assessed objectively. The study was also restricted to just one work attitude like job satisfaction, because the time spent in filling out a form was considered a barrier to work or time consuming despite the shortness of scales, therefore it is recommended for future research to include a few more variables like motivation, turnover and engagements.
References


