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## Conceptualization of Safety Leadership in Malaysia's Manufacturing Companies.

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### Abstract

In the new global economy, workplace safety has become a central issue among companies all over the world. It is becoming difficult to ignore that this trend has also been happening in Malaysia especially the manufacturing sector. The worrying trend can be seen from the increasing number of workplace accident reported by Department of Occupational Safety and Health (DOSH), Malaysia in manufacturing companies. In recent years, researchers have shown an interest in studying the role of safety leadership to reduce workplace accidents. It is found that safety leadership plays a significant role in ensuring a safe and sound workplace. Due to this concern, this paper attempts to provide a conceptualization of safety leadership from the perspective of Malaysia's manufacturing sector. It is proposed that positive safety leadership leads to reduction of workplace accidents. In response to this matter, it is hypothesized that the higher level of safety leadership will affect the lower level of workplace accidents. A questionnaire from Wu *et al.* (2008) will be adopted to explain the conceptualization of safety leadership, it is expected that the concept of safety leadership practiced in Malaysia's manufacturing sector has a similar meaning from the perspective of western researchers.

**Keywords:** *Safety leadership; Workplace accidents, Malaysia's Manufacturing Sector*

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### 1. Introduction

In this era of globalization, almost all of the world's countries are in pursuit of development (Tharaldsen *et al.*, 2010). The advancement of technologies all over the world had leads to the raising awareness of peoples towards safety issues (Li *et al.*, 2009), which has made workplace safety issues headline news all over the world (Wameedh *et al.*, 2011). For example, accident statistics have reported as many as 591000 cases of non-fatal injuries in the years 2011/2012 in the United Kingdom (Health and Safety Executive, 2012a). In addition, the United States recorded 760000 workplace accidents during 2011 (U.S. Bureau of Labor Statistics, 2012). Based on Health and Safety Executive (2012b), there is a decreasing trend in workplace accidents in United Kingdom. However, the total number of reported cases of workplace accidents is not reassuring. In light of these numbers, issues concerning safety have become a central issue for many safety researchers (Choudhry *et al.*, 2009; Wameed *et al.*, 2011; Shang and Lu, 2009).

### 2. Overview of Safety

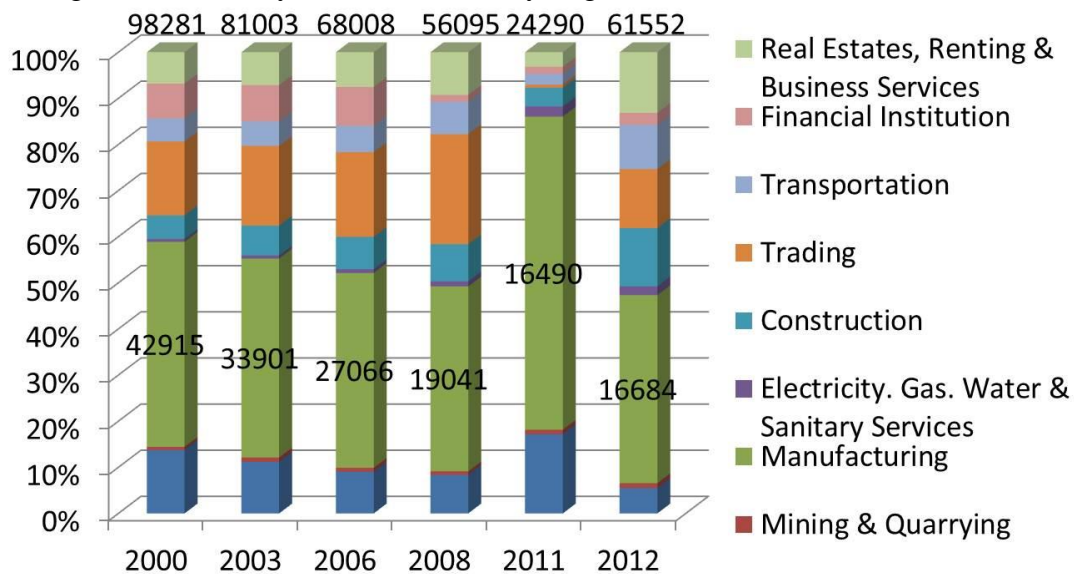
Accidents have been defined as the events whose are unwanted, unplanned and unforeseen, which resulting the loss of cost, and even life (Alicia, 2009). Efforts to overcome workplace accidents were used to inhibit accidents from happening and improve workplace safety (Wu *et al.*, 2007). Several studies have been conducted on safety, vary from 1990s ( Kennedy and Kirwan, 1998; Hofmann and Morgeson, 1999) to 2000s (Wu *et al.*, 2007; Wu *et al.*, 2008; Fernandez-Muniz *et al.* 2007;Cooper and Phillip, 2004 ; Tam et al., 2004), and finally, 2010s ( Kapp, 2012; Lu and Yang, 2010). Within this paper, safety leadership shall

be discussing as it was proposed by Griffin and Hu (2013) that there are lack of specific actions of leadership has been studied for their contribution in workplace safety.

### 3. Workplace Accident in Malaysia

Years by years, Malaysia has developed and climbed to its robust position in the new global economy despite the challenges regarding safety issues (Ministry of Human Resources Malaysia, 2009). Refer to Figure 1, the accidents rates is actually experiencing a downward trends from year 2000 to year 2011 (2000= 98281 cases; 2003= 81003 cases; 2006= 68008 cases; 2008= 56095 cases; 2011= 24290) (Department of Safety and Health, 2012; Social Security Organization, 2011). Nevertheless, total accidents from year 2011 to year 2012 experiencing an upturn trend, boosted from 24290 cases to 61552 cases (Department of Safety and Health, 2013).

While total accidents in Malaysia illustrated a downturn trend, there is a controversy when the focus swift to the sector of manufacturing. Refer to the evidences, manufacturing sector reported an increased number from 2002 until 2012 (2000= 43.67%; 2003= 41.85%; 2006= 39.80%; 2008= 33.94% ; 2011=67.89%; 2012= 27.1%). However, referring to the figure, it can be clearly seen that among all of the sectors, manufacturing sector recorded the higher numbers of accidents among the sectors in Malaysia (Department of Safety and Health, 2013). Therefore, there is a need to identify the problems of safety issues within manufacturing sector in Malaysia (Social Security Organization, 2011).



**Figure 1: Workplace Accidents in Malaysia, 2000 to 2012 (Department of Safety and Health, Malaysia, 2013)**

### 4. Safety Leadership and Its Relation to Workplace Accidents

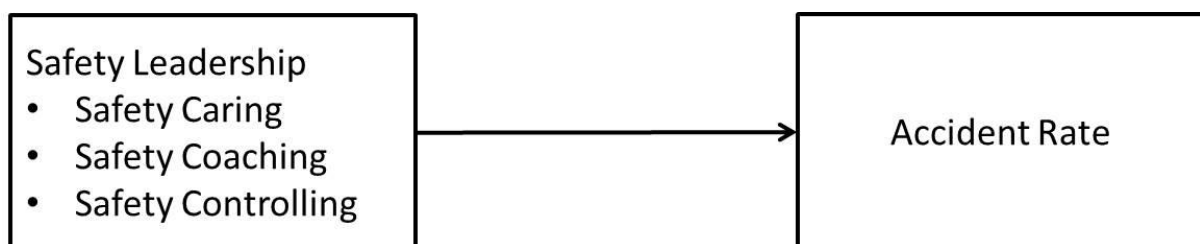
Safety leadership can be defined as the process which the leaders exert their influence on employees daily work routine through communication to achieve low accidents rate and positive safety performance (Lu and Yang, 2010; Wu *et al.*, 2007). Previous studies (Barling *et al.*, 2002; Zohar, 2002; Hofmann *et al.*, 2003) shown that leadership practices is a vital factor of influencing the accidents rates. It has becoming the centre of attention on studies in numerous industries especially in energy and manufacturing sectors (Flin and Yule, 2004; Rowley, 2009). Cooper (2010) offered that safety leadership is a necessity for top performing companies for shaping commitment towards safety issues as safety leadership plays a vital role in maintaining the behavioural safety process. According to Mullen *et al.* (2011), safety leadership is far more effective in shaping positive safety behaviour and attitudes through

inspiring and promoting. Thus, it is hypothesized that the higher the safety leadership in the organization, the lower the accident rate in the organization.

Previous studies have investigated the relationship of safety leadership and safety performance and have reported that there is significant influence of safety leadership on safety performance (Lingard *et al.*, 2012; Yang *et al.*, 2010; Zohar, 2002; Rowley, 2009). Wu (2005) proposed leaders with efforts to coach and concerning their employees regarding safety issues formed a great safety performance, thus, it was recommended that safety caring and safety controlling shall be included in safety leadership. Wiegand (2007) explained that safety coaching refers to the efforts of leaders in managing the safety performance and that these efforts involve interpersonal interaction and communication. Safety caring refers to the level of concern and attention amongst leaders towards safety issues and involves efforts to ensure the quality of safety in the workplace (Wu *et al.*, 2010; Cooper, 1998). Both Wu *et al.* (2008) and Cooper (1998) proposed that safety controlling is the use of power in outlining the safety rules and regulations to be complied with by the employees in order to achieve safe performance.

Throughout the years, it can be seen that safety leadership has always been based using transformational and transactional leadership in engaging the dimensions, since Cooper (1998). Cooper (1998), in initiating the dimensions of safety leadership, chosen to build the dimensions from the foundation of transformational and transactional leadership. Ultimately, primary dimensions of safety leadership, safety caring (transformational) and safety controlling (transactional) had been proposed. Extending from Cooper's (1998) dimensions, Wu (2005) to introduce an additional dimension under transformational leadership, safety coaching without abandons the originated dimensions initiated by Cooper (1998). Nonetheless, while Wu (2005) named her safety dimensions as safety caring, safety coaching, and safety controlling, there had been some situations when other scholars would have revised the names of such dimensions to other labels while retaining the meanings each dimensions carrying at the same time. These situations occurred when Lu and Yang (2010) and Du and Sun (2012) labelled Wu's (2005) safety caring into safety motivation and active management respectively while safety coaching had been named safety policy and safety monitoring respectively by Lu and Yang (2010) and Du and Sun (2012) respectively.

Successively to the review of dimensions, Wu's (2005) dimensions of safety caring, safety coaching, and safety controlling were chosen in this studies as it can be generalized to most of the industries (Shah Rollah Abdul Wahab, 2011). Thus, the conceptual framework of this study had been developed.



**Figure 2: Framework**

*H1: the higher level of safety leadership will affect the lower level of workplace accidents.*

## 5. Research Methodology

This research shall be a quantitative research. According to Creswell (2002), a quantitative research refers to research that measures causal relationships, hypotheses testing, and theories testing using survey as data collection instrument. Creswell (2002) further proposes that quantitative research should be used in research which contains a large amount of statistical data. Furthermore, the design of this research is descriptive and correlational study. Elifson (1998) proposes that descriptive study describes the characteristics of the desired trends or situations. Descriptive study helps the researcher understand the phenomena and inter-correlation between the variables (Sekaran and Bougie, 2009). Correlational study had been defined as a technique that is able to describe and measure the link and relationship between two variables statistically (Gravetter and Wallnau, 2002).

Respondents of this study will be employees from the iron and steel based manufacturing companies chosen from Federation of Malaysian Manufacturers (FMM) directory. A major reason for selecting these industries is that the number of accidents which occur in these industries is the highest among all other manufacturing industries, with an accident occurring every two working hours in Malaysia in 2011 (Social Security Organization, 2011).

In this research, it is apparent that the questionnaire is an adaptation of questionnaires from and Wu *et al.* (2008). In order to measure safety leadership, the Safety Leadership Scale developed by Wu *et al.* (2008) shall be adopted. Meanwhile, adoption of Wu *et al.*'s (2008) Safety Performance Scale shall adopted to explore the findings. The adoption of Wu *et al.*'s questionnaires in the measurements of independent variables, dependent variable, and also mediation is due to the proven high reliability of the questionnaires (Alpha Cronbach: 0.84 to 0.97) (Shah Rollah, 2011; Wu *et al.*, 2008).

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