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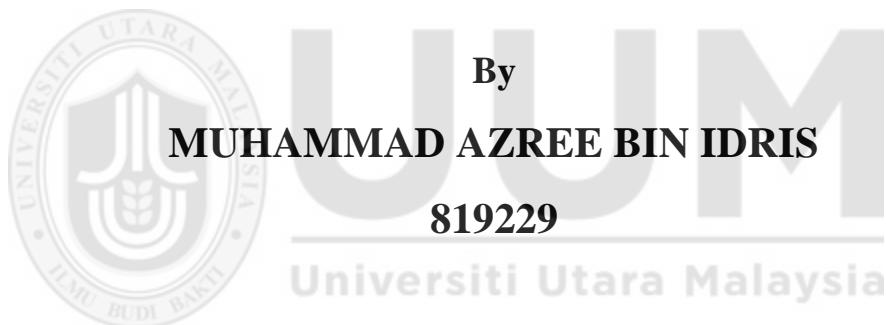


**HUBUNGAN ANTARA FAKTOR HAZAD  
KESELAMATAN, IKLIM KESELAMATAN DAN  
KESELAMATAN KERJA DENGAN TINGKAH LAKU  
SELAMAT DALAM SEKTOR PEMBUATAN**

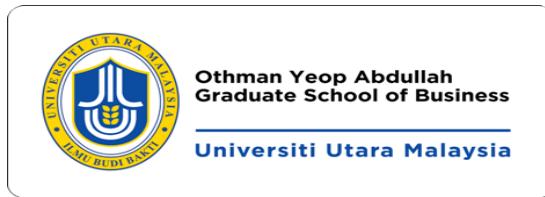


**IJAZAH SARJANA SAINS  
(PENGURUSAN KESELAMATAN DAN KESIHATAN PEKERJAAN)  
UNIVERSITI UTARA MALAYSIA  
2017**

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KESELAMATAN, IKLIM KESELAMATAN DAN  
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**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
Universiti Utara Malaysia,  
in Partial Fulfillment of the Requirement for Master of Sciences  
(Occupational Safety and Health Management)**



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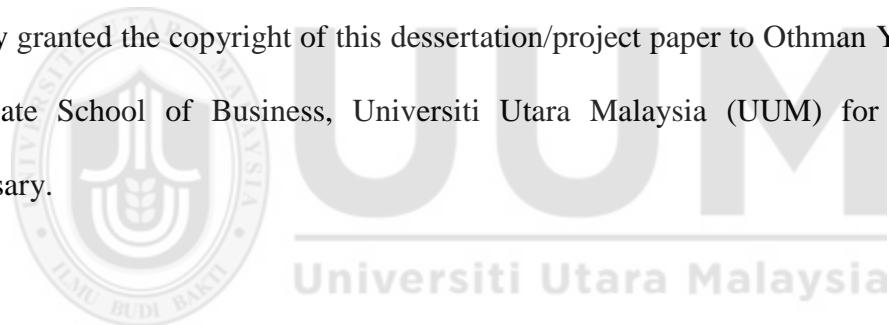
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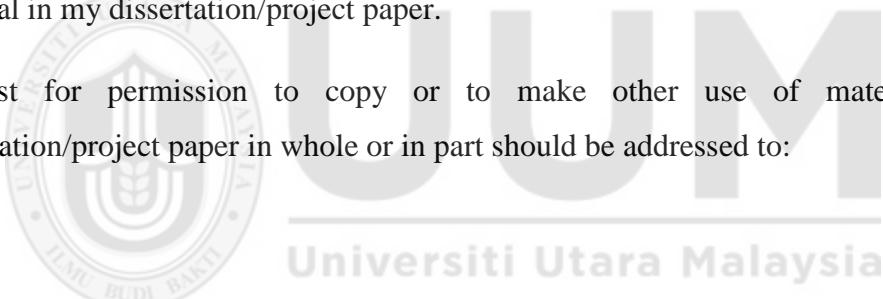
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## **ABSTRACT**

The study was conducted to identify the relationship between safety hazards, safety climate and job safety with safety behavior among workers in the manufacturing sector in Penang. This study was conducted at manufacturing plant where located in Nibong Tebal, Penang. The sampling collection technique by Krejcie and Morgan (1970) was used in this study to identify the amount of sample size required to be a sample of the study comprising workers in the manufacturing sector. A total of 300 questionnaires were distributed and 259 questionnaires were returned with complete answers. The data collected were analyzed using descriptive, correlation and multiple regression analysis. The Pearson coefficient used to test the hypothesis of the study. The results presented that there are two significant relationships to safe behavior are safety hazards and safety climates. The factor of job safety is presented a positive relationship to safe behavior, but not significant value. For the regression test presented that as much as 47.4% of independent variables affected safe behavior and 52.6% were influenced by other factors. For future studies it is recommended to use the other factors to determine the influencing to safety behavior.

**Keywords:** Safe behavior, Safety hazard, Safety Climate, Job Safety



## **ABSTRAK**

Kajian ini dijalankan adalah untuk mengkaji perhubungan antara hazard keselamatan, iklim keselamatan dan keselamatan kerja dengan tingkah laku selamat dalam kalangan pekerja di sektor pembuatan di Pulau Pinang. Kajian ini telah dijalankan di sebuah kilang pembuatan yang terletak di Nibong Tebal, Pulau Pinang. Teknik saiz pengumpulan pensampelan oleh Krejcie dan Morgan (1970) telah digunakan dalam kajian ini bagi mengenal pasti jumlah saiz sampel yang diperlukan untuk dijadikan sampel kajian yang terdiri daripada pekerja-pekerja di sektor pembuatan berkenaan. Sebanyak 300 borang soal selidik telah diedarkan dan sebanyak 259 borang soal selidik telah dikembalikan beserta jawapan yang lengkap. Data yang diperolehi telah dianalisis dengan menggunakan ‘descriptive’, ‘correlation’ dan ‘multiple regression’. Bagi pekali Kolerasi Pearson yang digunakan adalah untuk menguji hipotesis kajian. Hasil kajian menunjukkan bahawa terdapat dua hubungan yang signifikan terhadap tingkah laku selamat, iaitu hazard keselamatan dan iklim keselamatan. Faktor keselamatan kerja menunjukkan hubungan positif terhadap tingkah laku selamat, namun tidak pada nilai signifikan. Bagi ujian regresi menunjukkan bahawa sebanyak 47.4 % pembelahan bebas mempengaruhi tingkah laku selamat dan sebanyak 52.6% dipengaruhi oleh faktor-faktor lain. Bagi kajian di masa hadapan disarankan untuk menggunakan faktor-faktor lain selain daripada faktor yang digunakan dalam kajian ini.

**Kata kunci :** Tingkah laku selamat, Hazard Keselamatan, Iklim Keselamatan, Keselamatan Kerja

## **PENGHARGAAN**

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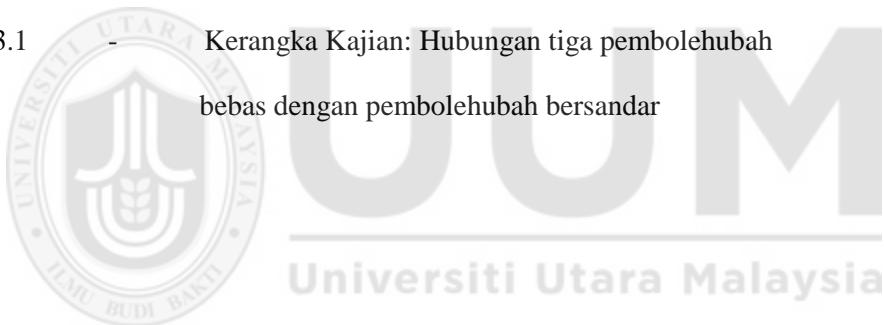
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## SENARAI SINGKATAN

AKJ	-	Akta Kilang dan Jentera
AKKP	-	Akta Keselamatan dan Kesihatan Pekerjaan
BBS	-	<i>Behavioral Based Safety</i>
JKKP	-	Jabatan Keselamatan dan Kesihatan Pekerjaan
KDNK	-	Keluaran Dalam Negara Kasar
NTPM	-	Nibong Tebal Paper Mill Sdn. Bhd.
OHSAS	-	Siri Penilaian Kesihatan dan Keselamatan Pekerjaan
PERKESO	-	Pertubuhan Keselamatan Sosial
SPM	-	Sijil Pelajaran Malaysia
SPSS	-	<i>Statistical Package for the Social Sciences</i>
STPM	-	Sijil Tinggi Pelajaran Malaysia

## **BAB 1**

### **PENGENALAN**

#### **1.0 Pengenalan**

Pengenalan terhadap Akta Keselamatan dan kesihatan Pekerjaan (AKKP) 1994 dan Akta Kilang dan Jentera (AKJ) 1967 di Malaysia merupakan keprihatinan dan kepekaan kerajaan terhadap kepentingan isu-isu keselamatan dan kesihatan pekerjaan di dalam sektor industri. Pelaksanaan akta-akta ini adalah bertujuan untuk meningkatkan dan mempromosikan budaya kerja selamat dan sihat di tempat kerja (AKKP, 1994). Secara umumnya, tempat kerja merupakan tempat berisiko dan berhazard di mana boleh mendatangkan kecederaan kepada pekerja jika tiada pengurusan terhadap kewujudan hazard-hazard tersebut (Pertubuhan Buruh Antarabangsa ,ILO). Pengenalan seksyen 15 dan 24 dalam AKKP, 1994 merupakan kewajipan masing-masing yang perlu dipatuhi sama ada dari pihak majikan maupun pekerja dalam menjaga kepentingan keselamatan dan kesihatan di tempat kerja.

Kemalangan di tempat kerja disebabkan dua faktor utama, iaitu faktor keadaan tidak selamat dan faktor kelakuan tidak selamat (Kelly, 2017). Faktor keadaan tidak selamat adalah menerangkan tentang aspek persekitaran tempat kerja yang berpotensi berlakunya kemalangan, misalnya sistem pencahayaan, sistem pengudaraan, faktor kebisingan, bahan kimia toksik, sistem pendawaian, reka bentuk mesin atau jentera, peralatan tangan dan sebagainya. Faktor kelakuan tidak selamat adalah menerangkan

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## Lampiran A

### SURVEY FORM / BORANG KAJI SELIDIK

**Pengenalan:** Kajian menggunakan borang soal selidik ini dijalankan untuk memenuhi syarat keperluan kursus BSMZ 6996, Projek Penyelidikan, Program Sarjana Pengurusan Keselamatan dan Kesihatan Pekerjaan, Universiti Utara Malaysia.

**Makluman:** Maklumat individu yang diperoleh daripada kajian ini adalah sulit dan akan dirahsiakan daripada pengetahuan umum dan hanya akan digunakan untuk tujuan akademik sahaja.

These questionnaires are available to get feedback on employee safety and health practice in manufacturing sector.  
**Borang kaji selidik ini disediakan untuk mendapatkan maklumbalas pekerja terhadap amalan keselamatan dan kesihatan pekerjaan di sektor pembuatan.**

#### Part A / Bahagian A

##### Respondent background / Latar belakang responden

Position (Jawatan) : \_\_\_\_\_

Department (Bahagian) : \_\_\_\_\_

Please tick ( ✓ ) / Sila tandakan ( ✓ )

1. Gender (Jantina) :

i. Male (Lelaki) (   )

ii. Female (Perempuan) (   )

2. Marriage Status (Status Perkahwinan) :

i. Single (Bujang) (   )

ii. Married (Berkahwin) (   )

iii. Widow (Janda/Duda) (   )

3. Age (Umur) :

4. Education Level (Tahap pendidikan):

i. Under 19 years old (Bawah 19 tahun) (   )

i. SPM (   )

ii. 20 – 29 years old (tahun) (   )

ii. STPM (   )

iii. 30 – 39 years old (tahun) (   )

iii. Competent Cert

(Sijil kompeten) (   )

iv. 40 – 49 years old (tahun) (   )

iv. Diploma (   )

v. 50 years old and above

v. Degree (Sarjana muda) (   )

(50 tahun dan ke atas)

vi. Master (Sarjana) (   )

vii. PhD (Doktor Falsafah) (   )

5. Do you attend the safety and health training? **Pernahkah kamu mengikuti mana-mana**

#### Kursus Keselamatan dan Kesihatan ?

(   ) Yes (Ya) (   ) No (Tidak)

6. Have you had an accident at work? **Pernahkah kamu mengalami kemalangan semasa**

#### bekerja?

(   ) Yes (Ya)

Please state (Sila nyatakan) : \_\_\_\_\_

(   ) No (Tidak)

## Part B (Bahagian B)

The elements of Safety and Health. **Elemen-elemen keselamatan dan kesihatan**

Please circle the number based on the instructions given score. **Sila bulatkan nombor berdasarkan skor petunjuk yang diberi.**

1	2	3	4	5
Strongly Disagree/ <b>Sangat Tidak Setuju</b>	Disagree/ <b>Tidak Setuju</b>	Neither Agree Nor Disagree/ <b>Berkecuali</b>	Agree/ <b>Setuju</b>	Strongly Agree/ <b>Sangat Setuju</b>

### 1.0 Safety Hazard (**Hazard Keselamatan**)

- a. I lift objects that are too heavy.  
*Saya mengangkat objek yang terlalu berat.* (1) (2) (3) (4) (5)
- b. I lift objects that are too bulky or large.  
*Saya mengangkat objek yang terlalu besar.* (1) (2) (3) (4) (5)
- c. I work on elevated surfaces or walkways.  
*Saya bekerja di tempat permukaan atau laluan yang tidak rata.* (1) (2) (3) (4) (5)
- d. I work near electrical current.  
*Saya bekerja berhampiran dengan punca elektrik* (1) (2) (3) (4) (5)
- e. I am exposed to toxic chemicals.  
*Saya terdedah kepada bahan kimia bertoksik.* (1) (2) (3) (4) (5)
- f. The floor is slippery.  
*Permukaan lantai licin.* (1) (2) (3) (4) (5)
- g. Room temperatures are too hot.  
*Suhu bilik terlalu panas.* (1) (2) (3) (4) (5)
- h. Room temperatures are too cold.  
*Suhu bilik terlalu sejuk.* (1) (2) (3) (4) (5)
- i. The light in my work area is too bright.  
*Pencahayaan terlalu terang di kawasan kerja.* (1) (2) (3) (4) (5)
- j. There is not enough light where I work.  
*Kurang pencahayaan di tempat kerja.* (1) (2) (3) (4) (5)
- k. There are rough spots on the surfaces of materials.  
*Terdapat permukaan kasar pada bahan/ Peralatan digunakan.* (1) (2) (3) (4) (5)
- l. There are sharp edges on work materials  
*Terdapat permukaan tajam pada bahan/ peralatan yang digunakan.* (1) (2) (3) (4) (5)

1	2	3	4	5
Strongly Disagree/ <b>Sangat Tidak Setuju</b>	Disagree/ <b>Tidak Setuju</b>	Neither Agree Nor Disagree/ <b>Berkecuali</b>	Agree/ <b>Setuju</b>	Strongly Agree/ <b>Sangat Setuju</b>

## 2.0 Safety Climate (*Iklim Keselamatan*)

### Supervisory safety climate (*Arahan keselamatan*)

- a. I feel comfortable reporting safety or health hazards to my immediate supervisor.

*Saya rasa selesa melaporkan bahaya keselamatan*

*dan kesihatan di tempat kerja kepada penyelia.* (1) (2) (3) (4) (5)

- b. I feel comfortable reporting work injuries or health effects to my immediate supervisor.

*Saya rasa selesa melaporkan kecederaan semasa*

*bekerja atau mengalami masalah kesihatan kepada penyelia.*

(1) (2) (3) (4) (5)

- c. My immediate supervisor believes workplace safety and health are very important.

*Penyelia saya percaya bahawa keselamatan*

*dan kesihatan di tempat kerja adalah penting.* (1) (2) (3) (4) (5)

- d. My immediate supervisor is a good resource for helping me to solve safety and health problems.

*Penyelia saya merupakan sumber rujukan dalam*

*membantu saya menyelesaikan masalah*

*keselamatan dan kesihatan di tempat kerja.*

(1) (2) (3) (4) (5)

- e. My immediate supervisor values my ideas about improving safety and health.

*Penyelia saya menghargai pendapat saya untuk*

*meningkatkan tahap keselamatan dan kesihatan*

*di tempat kerja.*

(1) (2) (3) (4) (5)

1	2	3	4	5
<b>Strongly Disagree/ Sangat Tidak Setuju</b>	<b>Disagree/ Tidak Setuju</b>	<b>Neither Agree Nor Disagree/ Berkecuali</b>	<b>Agree/ Setuju</b>	<b>Strongly Agree/ Sangat Setuju</b>

Managerial safety climate (*Pengurusan keselamatan*)

- a. Top management believes work place safety and health are very important.  
*Pihak pengurusan atasan percaya bahaya keselamatan dan kesihatan di tempat kerja adalah penting.* (1) (2) (3) (4) (5)

b. The union / company safety committee is effective in improving workplace safety and health.  
*Jawatankuasa keselamatan / kesatuan pekerja syarikat bersungguh-sungguh dalam meningkatkan tahap keselamatan dan kesihatan di tempat kerja.* (1) (2) (3) (4) (5)

c. The company is concerned about my safety and health when I am away from work.  
*Pihak syarikat menitikberatkan tentang keselamatan dan kesihatan saya apabila berada di luar masa bekerja (tamat masa bekerja)* (1) (2) (3) (4) (5)

d. Overall, this is a safe place to work.  
*Secara keseluruhan, tempat kerja saya Adalah selamat untuk bekerja.* (1) (2) (3) (4) (5)

### 3.0 Job Safety (*Keselamatan Kerja*)

- a. I am skilled at avoiding the dangers of work place hazards.  
*Saya berkemahiran dalam mengelak sebarang bahaya di tempat kerja saya dari berlaku.* (1) (2) (3) (4) (5)

b. I am very active in removing workplace safety and health hazards.  
*Saya aktif dalam menyingkirkan bahaya keselamatan dan kesihatan di tempat kerja* (1) (2) (3) (4) (5)

1	2	3	4	5
Strongly Disagree/ <b>Sangat Tidak Setuju</b>	Disagree/ <b>Tidak Setuju</b>	Neither Agree Nor Disagree/ <b>Berkecuali</b>	Agree/ <b>Setuju</b>	Strongly Agree/ <b>Sangat Setuju</b>

- c. I am confident in my ability to remove work place safety and health hazards.  
*Saya yakin akan kebolehan saya dalam menyingkirkan bahaya keselamatan dan kesihatan di tempat kerja.* (1) (2) (3) (4) (5)
- d. Safety equipment is within easy reach.  
*Peralatan keselamatan senang untuk di capai.* (1) (2) (3) (4) (5)
- e. Safety equipment does work very well.  
*Peralatan keselamatan berfungsi dengan baik.* (1) (2) (3) (4) (5)
- f. Tools or equipment do work the way they should.  
*Peralatan yang digunakan berfungsi dengan betul.* (1) (2) (3) (4) (5)
- g. I do have the correct tool for the job.  
*Peralatan yang digunakan adalah bersesuaian dengan pekerjaan yang dilakukan oleh saya.* (1) (2) (3) (4) (5)

#### 4.0 Safety Behavior (*Tingkah laku Selamat*)

- a. I can do the job safely without following safety procedures.  
*Saya boleh menjalankan tugas dengan selamat tanpa mematuhi prosedur kerja selamat.* (1) (2) (3) (4) (5)
- b. I ignore some safety procedures if I am trying to save time.  
*Saya abaikan sebahagian prosedur keselamatan jika ingin jimat masa.* (1) (2) (3) (4) (5)
- c. The safety procedures do not seem necessary.  
*Prosedur keselamatan adalah tidak perlu.* (1) (2) (3) (4) (5)

	2	3	4	5
Strongly Disagree/ <b>Sangat Tidak Setuju</b>	Disagree/ <b>Tidak Setuju</b>	Neither Agree Nor Disagree/ <b>Berkecuali</b>	Agree/ <b>Setuju</b>	Strongly Agree/ <b>Sangat Setuju</b>

- d. I take safety shortcuts when I feel pressure to work fast.

*Saya ambil jalan pintas dalam melakukan sesuatu pekerjaan untuk kerja cepat.*

( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 )

- e. It is difficult to do a task while following all of the safety rules.

*Tugas menjadi sukar untuk dilakukan jika mematuhi segala peraturan keselamatan.*

( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 )

1	2	3	4	5
0%-10%	11%-20%	21%-30%	31%-40%	41%-50%
6	7	8	9	10
51%-60%	61%-70%	71%-80%	81%-90%	91%-100%

Universiti Utara Malaysia

- f. How the percentages of time do you follow all of the procedures for the jobs that you do ?

*Berapakah keperatusan masa untuk kamu mematuhi semua prosedur kerja selamat terhadap tugas yang kamu lakukan ?*

( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 )  
( 6 ) ( 7 ) ( 8 ) ( 9 ) ( 10 )

- g. How the percentages of time that their coworkers followed safety work practices ?

*Berapakah keperatusan masa untuk rakan-rakan sekerja kamu mematuhi amalan kerja selamat ?*

( 1 ) ( 2 ) ( 3 ) ( 4 ) ( 5 )  
( 6 ) ( 7 ) ( 8 ) ( 9 ) ( 10 )

“Thank you for your cooperation”

“Terima kasih di atas kerjasama yang diberikan”