

## **CHAPTER V**

### **CONCLUSIONS AND SUGGESTIONS**

#### **5.1. Conclusions**

According to the data analysis of respondent's answers on the questionnaires, the results of this research study enlightened that:

1. Many accidents in construction projects can caused by different type of factors. Based on respondent data, the unavailability of protective equipment has the highest mean value. It means, this type of factor become the most common cause of the accident in some construction projects in Yogyakarta.
2. A lot of type of injuries occurred because of construction accidents. The author can say that, the type of injuries that often occur the most in construction projects in Yogyakarta is sprain. It can be seen since sprain injury has the highest mean value of accidents intensity than the other injuries, based on respondent's answer.
3. Many kind of injuries that caused by the construction accidents can affected to the loss of work time in construction projects. It could be happened due to the duration of the first aid after the accidents occurred. Based on respondent data, bone fracture has the highest mean value. It means, this type of injury needs the longest time of first aid duration than the other injuries.

4. The author can say that the accidents could be impact to the project implementation. It can be seen by the respondent's answer since the statement that said, the main cause of project delays come from many accidents that occur, has been agreed the most by the respondents. Based on the data analysis, it has the highest mean value than the other three choices in this part of questionnaire.
5. Construction delays that happened in construction projects in Yogyakarta also happen by the other type of factors. The highest value from the respondent's answer showed that the factor of worker become the common factor that became a cause of project delays. It has 35,29% value from the all 4 factors that has been provided in this part of questionnaire.

## **5.2. Suggestions**

Based on the research of this final project, there are several things that can be used as suggestions in construction projects:

1. It is essential for the contractors and consultants to understood deeply about a preventive action in minimizing and avoiding the number of accidents in construction work so that the whole time that already scheduled can be used effectively in focusing on construction building processes.

2. For the construction worker (labor), it is proper to not only knew about the effect of construction accidents that already happened, but also needed to obey safety rules in many types of construction projects, so that the accident incidents can be rapidly reduce.



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## A. PENGANTAR

Penulis selaku mahasiswa Universitas Atma Jaya Yogyakarta dengan identitas sebagai berikut:

Nama : Adiyuda Dwi Kuncoro

NPM : 15 13 16215

Program Studi : Teknik Sipil Kelas Internasional

Kuesioner ini dibuat untuk keperluan penyusunan tugas akhir dengan judul “THE IMPACT OF ACCIDENTS ON CONSTRUCTION DELAYS FOR CONSTRUCTION PROJECTS IN YOGYAKARTA”. Kuesioner ini didistribusikan kepada beberapa perusahaan konstruksi yang telah maupun yang sedang menangani pelaksanaan proyek konstruksi di Yogyakarta.

Kami mohon kesediaan Bapak/Ibu untuk mengisi angket kuesioner berikut ini sesuai dengan pengalaman dalam pelaksanaan proyek-proyek konstruksi. Penulis mengucapkan terima kasih atas waktu yang telah diberikan oleh Bapak/Ibu untuk mengisi kuesioner dibawah ini. Nantinya hasil kuesioner ini dapat digunakan sebaik-baiknya sebagai data yang akan diolah untuk menunjang penyelesaian Tugas Akhir.

## **B. INFORMASI MENGENAI RESPONDEN**

## **DATA UMUM**

1. Nama Responden : \_\_\_\_\_
  2. Umur : \_\_\_\_\_
  3. Nama Proyek : \_\_\_\_\_
  4. Alamat Proyek : \_\_\_\_\_
  5. Jabatan dalam perusahaan konstruksi :
    - a. Kontraktor b. Konsultan c. Tulis
    - b. Latar belakang Pendidikan  
[ ] SD [ ] SMA/SMK/D1/D2/D3  
[ ] SMP [ ] S1/S2
    - c. Pengalaman kerja dalam perusahaan konstruksi dalam kurun waktu  
[ ] < 5 tahun [ ] 10-15 tahun  
[ ] 5-10 tahun [ ] > 15 tahun

### C. KUESIONER

Untuk mengisi kuesioner dibawah ini, menggunakan tanda (✓) pada pilihan jawaban berdasarkan persepsi yang sesuai dengan kondisi yang terjadi dalam pelaksanaan sebuah proyek konstruksi. Jawaban kuesioner ini dibedakan menjadi 5 fokus bagian yang terdiri dari:

## 1. Faktor-faktor Penyebab Terjadinya Kecelakaan Kerja

### KETERANGAN

Sangat Setuju	(SS)
Setuju	(S)
Netral	(N)
Kurang Setuju	(KS)
Tidak Setuju	(TS)

No	Faktor Penyebab	Faktor Penyebab Terjadinya Kecelakaan Kerja				
		SS	S	N	KS	TS
1	Kecerobohan Pekerja					
2	Kerusakan Mesin					
3	Kurangnya Keterampilan Kerja					
4	Bencana Alam					
5	Suhu Lingkungan					
6	Tidak Adanya Alat Pelindung Diri (APD)					

## 2. Intensitas Cedera yang Dialami Akibat Kecelakaan Kerja

### KETERANGAN (dalam setahun)

Sangat Sering	(SS) : $\geq 5$ kali
Sering	(S) : $> 3$ kali
Netral	(N) : $\leq 3$ kali
Tidak Sering	(TS) : 1 kali
Tidak Pernah	(TP) : 0 kali

No	Jenis Cedera	Intensitas Terjadinya Cedera yang Dialami				
		SS	S	N	TS	TP
1	Patah Tulang					
2	Keseleo					
3	Regang Otot					
4	Memar dan Luka Dalam					
5	Luka di Permukaan Kulit					
6	Luka Bakar					

### 3. Tinjauan dari Lamanya Pertolongan Pada Kecelakaan di Lapangan

#### KETERANGAN

Sangat Lama	(SL)	: $\geq 5$ jam
Lama	(L)	: $> 3$ jam
Netral	(N)	: $\leq 3$ jam
Cepat	(C)	: 1 jam
Sangat Cepat	(SC)	: $< 1$ jam

No	Jenis Cedera	Lamanya Pertolongan Pada Kecelakaan di Lapangan				
		SL	L	N	C	SC
1	Patah Tulang					
2	Keseleo					
3	Regang Otot					
4	Memar dan Luka Dalam					
5	Luka di Permukaan Kulit					
6	Luka Bakar					

#### **4. Tinjauan dalam Pengaruh Kecelakaan Kerja Terhadap Pelaksanaan Proyek**

## KETERANGAN

Sangat Setuju (SS)

Setuju (S)

Netral (N)

## Kurang Setuju (KS)

Tidak Setuju (TS)

No	Deskripsi	Pengaruh Kecelakaan Kerja Terhadap Pelaksanaan Proyek				
		SS	S	N	KS	TS
1	Apabila kecelakaan kerja terjadi, pekerjaan dapat digantikan oleh pekerja lainnya					
2	Kecelakaan kerja mengakibatkan penurunan kualitas penggeraan proyek					
3	Penyebab utama tertundanya penyelesaian proyek berasal dari banyaknya kecelakaan kerja					
4	Tidak adanya pengaruh kecelakaan kerja terhadap pelaksanaan proyek yang sudah dijadwalkan					

## 5. Faktor Lain yang Menjadi Penyebab Utama Terjadinya Keterlambatan

**Penyelesaian Proyek Konstruksi** {beri tanda (X) pada pilihan yang tepat}

- a. Faktor Biaya                  c. Faktor Pemilik Proyek      e. Lainnya:.....

b. Faktor Tenaga Kerja      d. Faktor Lingkungan

## A. INTRODUCTION

The author as Universitas Atma Jaya Yogyakarta student with following identities:

Name : Adiyuda Dwi Kuncoro

Student Number : 15 13 16215

Study Program : International Civil Engineering Program

The aim of this questionnaire was made for completing the data of the final project with title “THE IMPACT OF ACCIDENTS ON CONSTRUCTION DELAYS FOR CONSTRUCTION PROJECTS IN YOGYAKARTA”. The questionnaire is distributed to several construction companies which are handling some construction projects in Yogyakarta.

I ask for your willingness to fulfill all the questions in this questionnaire accordance to the experience in implementing construction projects. The author would like to say thank you for your availability to fill out the questionnaire below. At the end, the results of this questionnaire can be used as well as the data to be processed to support the completion of the final project.

**B. RESPONDENT INFORMATION****GENERAL DATA**

1. Respondent Name :

2. Age :

3. Project Name :

4. Project Address :

5. Position in Construction Company :

a. Contractor

b. Consultant

c. Labor

b. Latest Education Status

 Elementary School High School Junior High School Bachelor/Master

c. Period of Time on Working in Construction Company

 < 5 years 10-15 years 5-10 years > 15 years**C. QUESTIONNAIRE**

To fill out the questionnaire below, give a check (✓) to the preferred choice in the available slot regarding with the condition that occur in the implementation of Construction Projects. The result of this questionnaire is divided into 5 focus sections, consisting of:

## 1. Factors That Cause Accidents in Construction Projects

### INFORMATION

Extremely Agree (SS)  
 Agree (S)  
 Neutral (N)  
 Agree Less (KS)  
 Disagree (TS)

No	Causative Factor	Factor That Cause Accidents in Construction Projects				
		SS	S	N	KS	TS
1	Carelessness Worker					
2	Engine Damage					
3	Lack of Working Skill					
4	Natural Disaster					
5	Ambient Temperature					
6	Unavailability of Protective Equipment					

## 2. Intensity of Injury Due to Working Accidents

### INFORMATION (in a year)

Very Often (SS) :  $\geq 5$  times  
 Often (S) :  $> 3$  times  
 Neutral (N) :  $\leq 3$  times  
 Not Often (TS) : 1 time  
 Never (TP) : 0 time

No	Type of Injury	Intensity of Injury Due to Working Accidents				
		SS	S	N	TS	TP
1	Bone Fracture					
2	Sprain					
3	Muscle Strain					
4	Bruise and Deep Wound					
5	Surface Injury					
6	Burn Injury					

### 3. First Aid Duration After Accidents

#### INFORMATION

Very Slow	(SL)	: $\geq 5$ jam
Slow	(L)	: $> 3$ jam
Neutral	(N)	: $\leq 3$ jam
Fast	(C)	: 1 jam
Very Fast	(SC)	: $< 1$ jam

No	Type of Injury	First Aid Duration After Accidents				
		SL	L	N	C	SC
1	Bone Fracture					
2	Sprain					
3	Muscle Strain					
4	Bruise and Deep Wound					
5	Surface Injury					
6	Burn Injury					

#### **4. Analysis of The Impact of Accidents on Project Implementation**

## INFORMATION

Extremely Agree (SS)

Agree (S)

## Neutral (N)

### Agree Less (KS)

Disagree (TS)

No	Description	The Impact of Accidents on Project Implementation				
		SS	S	N	KS	TS
1	If accident happens, the work can be replaced by other workers					
2	Accidents cause the decreasing of the work quality of the project					
3	The main cause of project delays come from many accidents that occur					
4	There is no effect between accidents with the scheduled project implementation					

## 5. Other Factors That Became a Main Cause of Project Delays {give a cross}

(X) to the right choice}

- a. Factor of Cost      c. Factor of Owner/Company      e. Other:.....

b. Factor of Worker      d. Factor of Environmental

### **RESPONDENT PROFILE**

Respondent Number	Project Name	Address	Position
1	Malioboro Suite Hotel	Jl. Pasar Kembang No. 28 Sosromenduran, Yogyakarta	Contractor
2	Malioboro Suite Hotel	Jl. Pasar Kembang No. 28 Sosromenduran, Yogyakarta	Contractor
3	Malioboro Suite Hotel	Jl. Pasar Kembang No. 28 Sosromenduran, Yogyakarta	Consultant
4	Malioboro Suite Hotel	Jl. Pasar Kembang No. 28 Sosromenduran, Yogyakarta	Labor
5	Malioboro Suite Hotel	Jl. Pasar Kembang No. 28 Sosromenduran, Yogyakarta	Labor
6	Malioboro Suite Hotel	Jl. Pasar Kembang No. 28 Sosromenduran, Yogyakarta	Labor
7	INSTIPER Central Library	Jl. Nangka II, Maguwoharjo, Yogyakarta	Contractor
8	INSTIPER Central Library	Jl. Nangka II, Maguwoharjo, Yogyakarta	Contractor
9	INSTIPER Central Library	Jl. Nangka II, Maguwoharjo, Yogyakarta	Contractor
10	INSTIPER Central Library	Jl. Nangka II, Maguwoharjo, Yogyakarta	Labor
11	INSTIPER Central Library	Jl. Nangka II, Maguwoharjo, Yogyakarta	Labor
12	Manohara Hotel Yogyakarta	Jl. Affandi Gejayan, Caturtunggal, Depok	Contractor
13	Manohara Hotel Yogyakarta	Jl. Affandi Gejayan, Caturtunggal, Depok	Contractor

14	Manohara Hotel Yogyakarta	Jl. Affandi Gejayan, Caturtunggal, Depok	Consultant
15	Manohara Hotel Yogyakarta	Jl. Affandi Gejayan, Caturtunggal, Depok	Labor
16	Manohara Hotel Yogyakarta	Jl. Affandi Gejayan, Caturtunggal, Depok	Labor
17	Ngampilan Bridge Construction	Jl. Letjen Suprapto No.33, Ngampilan, Yogyakarta	Contractor
18	Ngampilan Bridge Construction	Jl. Letjen Suprapto No.33, Ngampilan, Yogyakarta	Contractor
19	Ngampilan Bridge Construction	Jl. Letjen Suprapto No.33, Ngampilan, Yogyakarta	Labor
20	Ngampilan Bridge Construction	Jl. Letjen Suprapto No.33, Ngampilan, Yogyakarta	Labor
21	Pedestrian Sidewalk Lippo Plaza	Jl. Laksda Adisucipto No.32, Demangan, Yogyakarta	Contractor
22	Pedestrian Sidewalk Lippo Plaza	Jl. Laksda Adisucipto No.32, Demangan, Yogyakarta	Consultant
23	Pedestrian Sidewalk Lippo Plaza	Jl. Laksda Adisucipto No.32, Demangan, Yogyakarta	Labor
24	Pedestrian Sidewalk Lippo Plaza	Jl. Laksda Adisucipto No.32, Demangan, Yogyakarta	Labor
25	Pedestrian Sidewalk Lippo Plaza	Jl. Laksda Adisucipto No.32, Demangan, Yogyakarta	Labor
26	Research and Innovation Center UMY	Jl. Brawijaya, Geblagan, Tamantirto	Contractor
27	Research and Innovation Center UMY	Jl. Brawijaya, Geblagan, Tamantirto	Consultant

28	Research and Innovation Center UMY	Jl. Brawijaya, Geblagan, Tamantirto	Labor
29	Research and Innovation Center UMY	Jl. Brawijaya, Geblagan, Tamantirto	Labor
30	Faculty of Islamic Studies UII	Jl. Kaliurang KM 14.5, Krawitan, Umbulmartani	Contractor
31	Faculty of Islamic Studies UII	Jl. Kaliurang KM 14.5, Krawitan, Umbulmartani	Contractor
32	Faculty of Islamic Studies UII	Jl. Kaliurang KM 14.5, Krawitan, Umbulmartani	Consultant
33	Faculty of Islamic Studies UII	Jl. Kaliurang KM 14.5, Krawitan, Umbulmartani	Labor
34	Faculty of Islamic Studies UII	Jl. Kaliurang KM 14.5, Krawitan, Umbulmartani	Labor

### DATA OF RESPONDENT

<b>Respondent Number</b>	<b>Profession</b>	<b>Age</b>	<b>Education</b>	<b>Experience</b>
1	1	3	4	3
2	1	2	3	2
3	2	2	4	2
4	3	2	1	2
5	3	3	2	4
6	3	1	2	1
7	1	3	4	3
8	1	1	4	1
9	1	1	3	1
10	3	2	3	2
11	3	2	3	2
12	1	2	4	2
13	1	1	4	1
14	2	2	4	2
15	3	1	2	2
16	3	1	3	1
17	1	1	3	1
18	1	2	3	2
19	3	1	2	1
20	3	2	2	2
21	1	1	3	1
22	2	1	3	2
23	3	1	2	1
24	3	1	2	1
25	3	2	2	2
26	1	3	4	3
27	2	2	4	2
28	3	2	1	4
29	3	1	2	2
30	1	3	4	2
31	1	1	4	1
32	2	1	4	1
33	3	2	1	3
34	3	1	2	1
<b>Frequency</b>		34	34	34

### FACTOR THAT CAUSE ACCIDENT

<b>Respondent Number</b>	<b>A1</b>	<b>A2</b>	<b>A3</b>	<b>A4</b>	<b>A5</b>	<b>A6</b>	<b>Total</b>
1	4	3	4	5	1	4	3.50
2	4	3	3	2	1	4	2.83
3	5	2	4	5	2	5	3.83
4	3	3	3	2	1	2	2.33
5	5	4	4	2	2	3	3.33
6	4	5	4	3	1	4	3.50
7	2	3	3	1	4	4	2.83
8	2	4	2	2	3	3	2.67
9	2	1	2	2	2	5	2.33
10	5	2	4	3	1	2	2.83
11	4	4	4	4	4	4	4.00
12	4	2	2	2	2	5	2.83
13	4	2	4	2	1	2	2.50
14	4	3	2	3	2	5	3.17
15	3	3	3	3	3	3	3.00
16	3	1	2	2	2	4	2.33
17	5	4	4	3	1	5	3.67
18	4	3	2	1	1	2	2.17
19	4	5	5	4	5	2	4.17
20	2	1	4	1	2	2	2.00
21	5	5	5	5	5	5	5.00
22	3	2	3	2	1	4	2.50
23	3	3	3	2	3	4	3.00
24	3	3	4	2	1	2	2.50
25	2	2	1	1	2	5	2.17
26	4	5	3	2	1	2	2.83
27	4	3	4	1	1	4	2.83
28	2	3	2	2	2	5	2.67
29	3	3	3	3	3	3	3.00
30	4	3	2	2	2	4	2.83
31	4	4	4	2	3	5	3.67
32	5	3	4	2	1	4	3.17
33	5	2	5	1	1	5	3.17
34	5	3	5	1	2	4	3.33
<b>Mean</b>	3.68	3.00	3.32	2.35	2.03	3.71	
<b>SD</b>	1.04	1.10	1.07	1.15	1.17	1.14	
<b>Maximum</b>	5	5	5	5	5	5	
<b>Minimum</b>	2	1	1	1	1	2	
<b>Ranking</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>6</b>	<b>1</b>	

### ACCIDENT INTENSITY

<b>Respondent Number</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>B5</b>	<b>B6</b>	<b>Total</b>
1	1	2	1	1	1	1	1.17
2	1	2	3	3	2	1	2.00
3	1	1	1	1	1	1	1.00
4	1	3	3	3	1	1	2.00
5	1	1	1	1	1	1	1.00
6	1	2	1	2	2	1	1.50
7	2	5	5	4	5	1	3.67
8	1	2	1	2	1	1	1.33
9	1	2	2	2	1	1	1.50
10	2	5	5	4	5	1	3.67
11	1	5	5	3	4	1	3.17
12	1	4	4	3	1	2	2.50
13	2	4	4	3	2	1	2.67
14	3	5	5	5	3	1	3.67
15	1	2	4	4	5	1	2.83
16	2	5	5	4	5	1	3.67
17	2	2	2	2	4	1	2.17
18	1	3	3	4	2	2	2.50
19	1	3	3	3	2	2	2.33
20	3	3	2	3	2	1	2.33
21	1	1	2	2	2	1	1.50
22	1	1	2	1	1	1	1.17
23	1	1	1	1	1	1	1.00
24	1	2	2	2	2	1	1.67
25	1	1	1	2	3	1	1.50
26	1	3	3	2	1	1	1.83
27	1	1	1	2	4	1	1.67
28	1	2	1	1	1	1	1.17
29	1	3	2	2	3	2	2.17
30	1	3	3	2	2	1	2.00
31	1	2	2	1	2	1	1.50
32	1	3	3	2	3	1	2.17
33	1	4	4	2	4	1	2.67
34	1	3	3	1	2	1	1.83
<b>Mean</b>	1.26	2.68	2.65	2.35	2.38	1.12	
<b>SD</b>	0.57	1.32	1.39	1.10	1.37	0.33	
<b>Maximum</b>	3	5	5	5	5	2	
<b>Minimum</b>	1	1	1	1	1	1	
<b>Ranking</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>6</b>	

### FIRST AID DURATION

<b>Respondent Number</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>	<b>Total</b>
1	5	2	2	5	1	2	2.83
2	5	3	2	5	3	1	3.17
3	4	1	1	3	1	1	1.83
4	5	2	1	4	1	2	2.50
5	5	2	2	3	3	1	2.67
6	4	1	1	3	3	1	2.17
7	3	3	3	3	3	3	3.00
8	2	2	2	1	4	2	2.17
9	5	3	2	4	3	3	3.33
10	1	1	1	1	1	1	1.00
11	1	1	3	1	4	1	1.83
12	4	4	2	5	2	1	3.00
13	4	3	1	1	1	2	2.00
14	2	2	2	2	2	2	2.00
15	1	1	1	2	2	1	1.33
16	2	1	2	4	3	2	2.33
17	1	1	1	1	1	1	1.00
18	1	1	2	1	2	1	1.33
19	2	2	1	2	2	2	1.83
20	1	1	2	2	1	1	1.33
21	2	2	2	2	2	2	2.00
22	1	1	1	1	3	3	1.67
23	2	1	2	1	3	3	2.00
24	2	1	2	2	2	2	1.83
25	4	2	4	2	3	1	2.67
26	3	1	3	1	3	2	2.17
27	3	1	2	2	1	2	1.83
28	3	2	1	1	3	4	2.33
29	1	1	1	3	2	2	1.67
30	4	3	3	5	3	3	3.50
31	3	2	2	2	1	3	2.17
32	1	1	1	2	3	3	1.83
33	3	1	2	5	1	2	2.33
34	1	1	2	3	3	1	1.83
<b>Mean</b>	2.68	1.68	1.82	2.50	2.24	1.88	
<b>SD</b>	1.45	0.84	0.76	1.40	0.96	0.84	
<b>Maximum</b>	5	4	4	5	4	4	
<b>Minimum</b>	1	1	1	1	1	1	
<b>Ranking</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>4</b>	

### IMPACT OF ACCIDENTS

<b>Respondent Number</b>	<b>D1</b>	<b>D2</b>	<b>D3</b>	<b>D4</b>	<b>Total</b>
1	3	3	4	3	3.25
2	3	3	3	2	2.75
3	4	4	2	1	2.75
4	4	4	3	2	3.25
5	3	5	3	4	3.75
6	3	5	4	4	4.00
7	4	4	4	5	4.25
8	1	4	5	2	3.00
9	2	4	4	1	2.75
10	2	4	4	3	3.25
11	3	2	4	2	2.75
12	3	2	5	2	3.00
13	3	4	3	1	2.75
14	2	4	3	1	2.50
15	2	4	4	2	3.00
16	3	3	3	1	2.50
17	5	1	2	5	3.25
18	2	2	1	2	1.75
19	2	2	3	3	2.50
20	2	4	2	2	2.50
21	4	4	4	3	3.75
22	3	3	4	3	3.25
23	2	5	4	4	3.75
24	2	4	5	3	3.50
25	3	3	3	2	2.75
26	3	4	5	3	3.75
27	5	5	4	2	4.00
28	4	4	4	4	4.00
29	1	4	3	2	2.50
30	2	4	4	2	3.00
31	2	4	5	2	3.25
32	3	4	4	2	3.25
33	3	3	5	2	3.25
34	3	3	5	1	3.00
<b>Mean</b>	<b>2.82</b>	<b>3.59</b>	<b>3.68</b>	<b>2.44</b>	
<b>SD</b>	<b>0.97</b>	<b>0.96</b>	<b>1.01</b>	<b>1.11</b>	
<b>Maximum</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	
<b>Minimum</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	
<b>Ranking</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>4</b>	

### OTHER FACTOR THAT CAUSE PROJECT DELAYS

<b>Respondent Number</b>	<b>Factor</b>
1	2
2	2
3	2
4	1
5	4
6	3
7	2
8	1
9	4
10	3
11	4
12	2
13	2
14	2
15	3
16	3
17	4
18	3
19	1
20	1
21	2
22	2
23	2
24	1
25	1
26	4
27	2
28	3
29	4
30	2
31	4
32	4
33	4
34	1
Frequency	34

<b>Factor</b>	<b>E1</b>	<b>E2</b>	<b>E3</b>	<b>E4</b>	<b>Total</b>
Frequency	7	12	6	9	34
Percentage	20.59	35.29	17.65	26.47	100
<b>Ranking</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	