CHAPTER V

CONCLUSIONS AND SUGGESTION

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5.1. Conclusions

1. According to the answer gives by the respondents, almost respondents has assumption that they are usual deal with problems which commonly caused accidents in construction industry, based on their experience working in Indonesian construction industry. From the data collection we can conclude that the most commonly problems that caused accidents on construction sites are lack of enforcement of safety regulations, engaging incompetent personnel, and poor regard for safety by people involved in construction projects.
2. Based on the data collection, the present and potential safety hazards in the construction industry is in level of "for seldom" to be dealt with. The sources of accidents are from machinery & equipment, electricity, and scaffolding.
3. From the answer gives by the respondents we can conclude that the solutions are applicable to improved safety measures in construction industry. The most applicable solutions are sensitize the professionals, and sensitize, educate and train the public; undertake insurance covers and considers health and safety at all stages of project implementation; and engage competent personnel and ensure close site supervision.

4. From the data collection in Indonesia an in Uganda we know that there is a quite strong correlation and just a little differences between sources of accidents in Indonesia and sources of accidents in Uganda. The difference just in the matter of the frequency of occurrence of sources of accidents in Indonesian and Ugandan construction industry. But the sources of accidents are similar.

5.2. Suggestion

This kind of research may be continued in the future with more development in size and variation of questions and respondents to get clearer description about causes of accidents on construction site, the potential safety hazards in construction industry; and safety measures used on construction site in relation to existing safety regulations, design standards and code(s) of practice, and their impact on the safety of workers.

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APPENDICES

QUESTIONNAIRE OF CAUSES

OF ACCIDENTS IN CONSTRUCTION INDUSTRY

I. Personal Data / Data Pribadi

Age
Umur : .....

Current job title (Position)
Jabatan Terakhir : a. Project Manager
b. Site Manager
c. Consultant
d. Architect
e. Other, specify (lainnya).....

Year of working experience
Pengalaman Kerja : a. Less than 5 years (<5 tahun)
b. 5-10 years (5-10 tahun)
c. 10-20 years (10-20 tahun)
d. More than 20 years (>20 tahun)

Number of projects you have involved with
Jumlah Proyek Yang Pernah Ditangani : a. Less than 2 projects (<2 proyek)
b. 2-5 projects (2-5 proyek)
c. 5-10 projects (5-10 proyek)
d. More than 10 projects (>10 proyek)

Formal education
Pendidikan : a. High school (SMU)
b. Bachelor (S1)
c. Master (S2)
d. Doctoral (S3)
e. Other, specify (lainnya).....

Citizenship
Kewarganegaraan : a. Indonesian
b. Other, specify (lainnya).....

II. Causes of Accidents In Construction Industry (Sebab-sebab kecelakaan pada industri konstruksi)

The following list of problems commonly caused accidents in construction industry. Based on your experience working on construction site, what problems do you frequently deal with? Please rate them by circling with the following rating:

(Masalah-masalah berikut biasanya menyebabkan kecelakaan-kecelakaan pada industri konstruksi. Berdasarkan pengalaman anda bekerja pada lokasi konstruksi,masalah-masalah apa saja yang sering anda hadapi? Berilah nilai dengan melingkarinya berdasarkan tingkatan berikut)

5 for always (selalu)

4 for often (sering)

3 for usual (lazim)

2 for seldom (jarang)

1 for never (tidak pernah)

No	Causes (Sebab-sebab)	Frequency (Frekwensi)				
1	Lack of awareness of safety regulations (Kurangnya kesadaran akan peraturan tentang keamanan)	1	2	3	4	5
2	Lack of enforcement of safety regulations (Kurangnya pelaksanaan akan peraturan tentang keamanan)	1	2	3	4	5
3	Poor regard for safety by people involved in construction projects (Perhatian yang rendah akan keamanan oleh orang-orang yang terlibat pada proyek proyek konstruksi)	1	2	3	4	5
4	Engaging incompetent personnel (Berhadapan dengan personel yang tidak kompeten)	1	2	3	4	5
5	Non-vibrant professionalism (Profesionalisme yang lesu)	1	2	3	4	5
6	Mechanical failure of construction machinery/equipment (Kesalahan pada penggunaan alat/mesin-mesin konstruksi)	1	2	3	4	5
7	Physical and emotional stress (Tekanan fisik dan batin)	1	2	3	4	5
8	Chemical impairment (Kerusakan kimiawi)	1	2	3	4	5

III. The Present and Potential Safety Hazards In The Construction Industry (Bahaya keamanan yang ada dan mungkin terjadi pada industri konstruksi)

The following lists of sources of accidents commonly are the present and potential safety hazards in the construction industry. Based on your experience working on construction site, what sources of accidents do you frequently deal with? Please rate them by circling with the following rating:

(Sumber-sumber kecelakaan berikut biasanya merupakan bahaya keamanan yang ada dan mungkin terjadi pada industri konstruksi. Berdasarkan pengalaman anda bekerja pada lokasi konstruksi, sumber-sumber kecelakaan apa saja yang sering anda hadapi? Berilah nilai dengan melingkarinya berdasarkan tingkatan berikut)

5 for always (selalu)

4 for often (sering)

3 for usual (lazim)

2 for seldom (jarang)

1 for never (tidak pernah)

No	Sources of Accidents (Sumber-sumber kecelakaan)	Frequency (Frekwensi)				
1	Site Access (Akses ke lokasi)	1	2	3	4	5
2	Excavations (Penggalian)	1	2	3	4	5
3	False/Form Work (Bekisting)	1	2	3	4	5
4	Scaffolding (Perancah)	1	2	3	4	5
5	Machinery & Equipment (Mesin & Peralatan)	1	2	3	4	5
6	Electricity (Listrik)	1	2	3	4	5
7	Fire (Kebakaran)	1	2	3	4	5
8	Cranes/Lifting Equipment (Derek/Alat Pengangkat)	1	2	3	4	5
9	Worker To Worker Interaction (Hubungan pekerja ke pekerja)	1	2	3	4	5
	Other, specify (lainnya, sebutkan).....					

IV. Solution

What is your suggestion to improved safety measures in construction industry? Based on your experience working on construction site, what solutions are applicable? Please rate them by circling with the following rating:
(Apa saran anda untuk meningkatkan kadar keamanan pada industri konstruksi? Berdasarkan pengalaman anda bekerja pada lokasi konstruksi, solusi-solusi apa saja yang dapat dipakai? Berilah nilai dengan melingkarinya berdasarkan tingkatan berikut:

5 for most applicable (paling dapat dipakai)

4 for more applicable (lebih dapat dipakai)

3 for applicable (dapat dipakai)

2 for little applicable (kurang dapat dipakai)

1 for not applicable (tidak dapat dipakai)

No	Solution (Solusi)	Frequency (Frekwensi)				
1	Review existing safety regulations (Meninjau kembali peraturan-peraturan tentang keamanan yang telah ada)	1	2	3	4	5
2	Enforce building and safety regulations (Melaksanakan peraturan-peraturan tentang bangunan dan keamanan)	1	2	3	4	5
3	Sensitize the professionals, and sensitize, educate and train the public (Meningkatkan kepekaan para tenaga ahli, dan meningkatkan kepekaan, mendidik, dan melatih masyarakat umum)	1	2	3	4	5
4	Engage competent personnel and ensure close site supervision (Menggunakan personel yang kompeten dan menjamin pengawasan lokasi dari dekat)	1	2	3	4	5
5	Promote professionalism and ensure compliance with the professional code of ethics (Mempromosikan profesionalisme dan menjamin pemenuhan dengan kode etik keprofesionalan)	1	2	3	4	5
6	Undertake insurance covers and considers health and safety at all stages of project implementation (Mengusahakan perlindungan insuransi dan mempertimbangkan kesehatan dan keselamatan pada semua tingkatan dari pelaksanaan proyek)	1	2	3	4	5

No	Solution (Solusi)	Frequency (Frekwensi)				
7	Maintain and regularly service tools, plant and equipment (Menjaga dan memperbaiki peralatan, bangunan dan perlengkapan secara teratur)	1	2	3	4	5
8	Ensure good site organization and good housekeeping, and provide sanitation, health and first aid facilities (Menjamin pengaturan lokasi dan urusan keorganisasian yang baik, meyediakan kebersihan, kesehatan dan fasilitas pertolongan pertama)	1	2	3	4	5
	Other, specify (lainnya, sebutkan).....					

THANK YOU FOR YOUR COOPERATION

Case Summaries[a]

	Citizenship	Business Core	Education Background	Years in Construction Industry	Number of Experience of the Respondent
1	Australian	Contractor	Master	< 5 years	2 - 5 projects
2	Indonesian	Contractor	High school or similar	< 5 years	< 2 projects
3	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
4	Indonesian	Contractor	High school or similar	< 5 years	< 2 projects
5	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
6	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
7	Indonesian	Consultant	Bachelor	> 20 years	> 10 projects
8	Indonesian	Consultant	College	> 20 years	> 10 projects
9	Indonesian	Consultant	Master	> 20 years	> 10 projects
10	Singaporean	Owner/Developer	Master	< 5 years	2 - 5 projects
11	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
12	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
13	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
14	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
15	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
16	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
17	Indonesian	Contractor	High school or similar	< 5 years	> 10 projects
18	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
19	Indonesian	Contractor	High school or similar	> 20 years	5 - 10 projects
20	Indonesian	Contractor	Bachelor	10 - 20 years	< 2 projects
21	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
22	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
23	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
24	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
25	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
26	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
27	Indonesian	Contractor	Bachelor	5 - 10 years	> 10 projects
28	Indonesian	Consultant	Bachelor	10 - 20 years	> 10 projects
29	Indonesian	Consultant	Bachelor	10 - 20 years	> 10 projects
30	Indonesian	Consultant	Bachelor	> 20 years	> 10 projects
31	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
32	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
33	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
34	Indonesian	Contractor	College	5 - 10 years	5 - 10 projects
35	Indonesian	Contractor	Bachelor	5 - 10 years	> 10 projects
36	Indonesian	Contractor	Bachelor	5 - 10 years	> 10 projects
37	Indonesian	Contractor	Bachelor	5 - 10 years	> 10 projects
38	Indonesian	Contractor	Bachelor	10 - 20 years	< 2 projects
39	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
40	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
41	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
42	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
43	Indonesian	Contractor	Bachelor	10 - 20 years	> 10 projects
44	Indonesian	Contractor	High school or similar	< 5 years	2 - 5 projects
45	Indonesian	Contractor	High school or similar	5 - 10 years	5 - 10 projects
46	Indonesian	Contractor	College	5 - 10 years	5 - 10 projects
47	Indonesian	Contractor	College	5 - 10 years	5 - 10 projects
48	Indonesian	Consultant	Bachelor	> 20 years	> 10 projects
49	Indonesian	Contractor	Bachelor	5 - 10 years	5 - 10 projects
50	Indonesian	Consultant	Bachelor	10 - 20 years	> 10 projects
Total N	50	50	50	50	50

a. Limited to first 100 cases.

Case Summaries[a]

	CAUSES_1	CAUSES_2	CAUSES_3	CAUSES_4	CAUSES_5
1	1	4	4	3	2
2	3	2	2	1	1
3	1	2	2	3	3
4	3	4	3	2	2
5	4	3	3	2	4
6	4	3	2	2	3
7	4	4	4	4	4
8	4	4	3	4	4
9	4	3	3	3	4
10	3	3	2	2	2
11	4	4	4	4	4
12	3	2	2	2	2
13	4	2	4	2	3
14	1	2	3	3	3
15	1	5	1	2	2
16	4	4	3	2	2
17	3	2	3	2	1
18	4	3	3	5	5
19	4	4	2	2	3
20	3	3	2	3	2
21	4	3	2	4	4
22	3	3	4	3	4
23	5	4	3	4	2
24	2	2	2	2	2
25	3	2	2	3	2
26	3	2	2	2	3
27	4	4	3	5	2
28	1	4	2	4	2
29	1	1	2	2	1
30	2	2	3	2	3
31	3	2	4	3	4
32	3	4	4	3	3
33	3	3	3	3	2
34	4	3	3	3	2
35	4	4	3	5	3
36	4	2	2	4	4
37	4	4	4	3	3
38	2	5	5	4	4
39	1	5	3	3	1
40	4	3	5	4	4
41	4	3	4	3	3
42	1	1	2	3	2
43	4	3	3	4	3
44	4	3	3	4	4
45	2	4	4	3	4
46	3	3	2	3	2
47	3	2	2	3	1
48	4	4	4	3	3
49	4	4	4	5	2
50	3	4	2	2	3
Total N	50	50	50	50	50

Case Summaries[a]

	CAUSES_6	CAUSES_7	CAUSES_8
1	2	2	2
2	2	1	1
3	2	2	1
4	2	3	2
5	3	3	4
6	2	2	1
7	2	2	2
8	3	2	3
9	2	5	2
10	3	2	1
11	2	3	2
12	2	2	2
13	4	4	1
14	1	3	3
15	1	1	1
16	4	1	1
17	1	1	1
18	2	2	2
19	2	2	2
20	3	1	1
21	1	2	4
22	4	3	3
23	2	1	1
24	2	2	1
25	3	1	1
26	2	1	1
27	2	2	1
28	2	2	2
29	1	2	1
30	2	3	1
31	2	3	1
32	2	2	2
33	2	2	2
34	2	2	2
35	4	2	2
36	2	4	1
37	2	2	1
38	2	3	1
39	1	4	1
40	3	1	2
41	2	2	1
42	2	1	1
43	2	2	2
44	3	4	2
45	3	3	3
46	3	4	1
47	3	1	2
48	3	2	2
49	2	2	4
50	3	2	2
Total N	50	50	50

a. Limited to first 100 cases.

Case Summaries[a]

	SOURCE_1	SOURCE_2	SOURCE_3	SOURCE_4	SOURCE_5
1	3	3	2	3	3
2	1	2	2	1	2
3	4	4	3	2	3
4	2	2	1	1	2
5	3	4	2	2	3
6	2	2	1	2	2
7	2	2	2	1	1
8	2	3	2	1	1
9	1	2	1	2	3
10	1	2	1	2	2
11	1	2	2	2	3
12	2	2	2	2	2
13	2	1	1	1	2
14	1	1	2	3	2
15	2	2	1	1	3
16	2	1	1	2	2
17	2	2	1	2	2
18	2	1	2	2	3
19	2	2	3	3	2
20	1	3	2	2	3
21	2	2	1	1	3
22	2	4	2	4	2
23	2	2	2	2	2
24	4	2	3	3	2
25	1	2	2	2	3
26	1	3	2	2	3
27	2	2	2	2	2
28	1	2	2	2	3
29	1	2	2	3	1
30	2	1	1	2	1
31	1	2	3	2	3
32	2	2	4	4	2
33	2	2	2	2	2
34	1	2	2	2	2
35	2	3	4	3	5
36	2	3	2	2	2
37	2	2	2	2	3
38	1	2	2	2	1
39	2	2	5	3	2
40	4	2	2	3	3
41	1	2	3	3	2
42	2	2	3	3	3
43	1	2	3	3	2
44	2	2	2	3	2
45	2	3	2	2	2
46	3	3	3	3	3
47	3	2	2	2	2
48	2	3	1	2	2
49	3	2	3	3	3
50	1	2	2	3	4
Total N	50	50	50	50	50

Case Summaries[a]

	SOURCE_6	SOURCE_7	SOURCE_8	SOURCE_9
1	2	2	2	2
2	1	1	2	3
3	2	2	2	2
4	2	1	2	3
5	3	2	2	3
6	2	1	1	5
7	1	1	2	2
8	2	2	1	2
9	2	1	1	3
10	1	1	1	1
11	3	2	2	3
12	2	2	2	2
13	2	2	1	1
14	1	1	2	2
15	3	1	3	1
16	2	1	1	2
17	2	1	2	2
18	2	3	2	3
19	2	1	1	2
20	2	2	3	1
21	2	3	2	1
22	3	3	3	3
23	2	2	2	2
24	2	2	3	3
25	2	1	3	1
26	3	1	2	2
27	3	2	2	3
28	3	2	2	2
29	1	1	2	2
30	1	1	1	2
31	3	2	3	1
32	4	2	3	2
33	2	2	2	1
34	2	2	2	1
35	4	4	3	5
36	1	1	1	1
37	3	2	4	2
38	2	1	1	2
39	3	2	2	1
40	4	2	4	4
41	2	2	2	2
42	1	1	3	1
43	2	1	1	2
44	3	1	2	3
45	2	2	2	2
46	3	1	1	4
47	3	2	4	3
48	3	1	2	2
49	2	2	3	3
50	3	3	3	2
Total N	50	50	50	50

a. Limited to first 100 cases.

Case Summaries[a]

	SOLUTI_1	SOLUTI_2	SOLUTI_3	SOLUTI_4	SOLUTI_5	SOLUTI_6
1	2	4	3	4	3	2
2	3	3	3	3	3	2
3	3	3	4	3	2	4
4	3	3	4	5	4	4
5	3	3	4	3	3	3
6	3	4	3	4	4	4
7	4	3	3	4	5	5
8	3	4	4	3	3	5
9	3	4	4	3	3	5
10	3	4	5	4	4	5
11	3	2	2	4	4	4
12	5	4	5	5	4	4
13	5	5	5	5	5	5
14	3	4	4	4	3	4
15	4	5	5	5	4	5
16	3	5	5	5	3	5
17	3	3	4	3	3	3
18	3	3	4	4	3	3
19	3	5	4	4	3	3
20	1	3	3	4	3	3
21	3	4	4	4	4	4
22	5	5	5	5	3	3
23	3	3	3	3	2	3
24	4	4	3	5	3	5
25	3	4	4	4	4	5
26	2	2	5	2	4	4
27	5	4	5	5	4	4
28	4	4	4	4	3	3
29	3	4	5	3	4	4
30	3	2	4	2	3	3
31	3	3	2	4	2	3
32	2	2	2	4	2	4
33	3	4	4	4	3	5
34	2	3	4	4	4	4
35	3	3	4	3	4	5
36	3	3	4	4	4	3
37	1	2	3	3	3	3
38	2	3	3	2	3	4
39	2	4	2	4	3	4
40	3	4	5	4	4	5
41	2	4	3	3	2	4
42	2	4	4	5	3	4
43	2	4	4	2	3	2
44	3	5	3	4	4	2
45	3	5	3	3	5	2
46	2	3	3	3	3	3
47	4	4	3	3	2	3
48	3	3	4	4	3	3
49	3	5	5	4	3	4
50	3	5	5	3	4	4
Total N	50	50	50	50	50	50

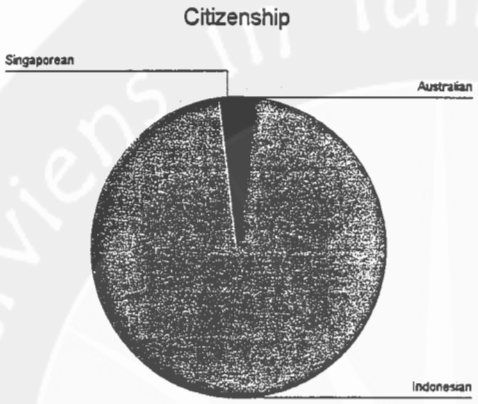
Case Summaries[a]

		SOLUTI_7	SOLUTI_8
1		5	4
2		3	3
3		3	4
4		3	2
5		3	3
6		3	3
7		5	3
8		5	3
9		4	4
10		5	5
11		5	5
12		3	2
13		3	4
14		4	3
15		5	5
16		5	5
17		3	3
18		3	3
19		3	4
20		3	4
21		5	5
22		5	5
23		3	3
24		5	5
25		3	4
26		3	3
27		4	5
28		5	4
29		3	3
30		2	3
31		4	4
32		4	3
33		5	5
34		2	3
35		3	4
36		4	3
37		3	3
38		2	3
39		3	3
40		4	4
41		3	3
42		4	3
43		3	3
44		4	3
45		4	3
46		2	4
47		4	3
48		4	4
49		3	3
50		4	4
Total	N	50	50

a. Limited to first 100 cases.

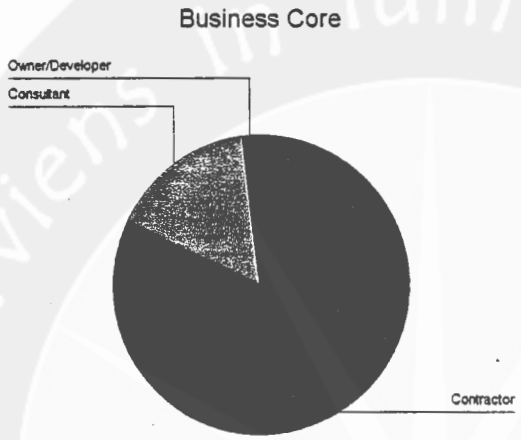
Citizenship

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Australian	1	2,0	2,0	2,0
	Indonesian	48	96,0	96,0	98,0
	Singaporean	1	2,0	2,0	100,0
	Total	50	100,0	100,0	



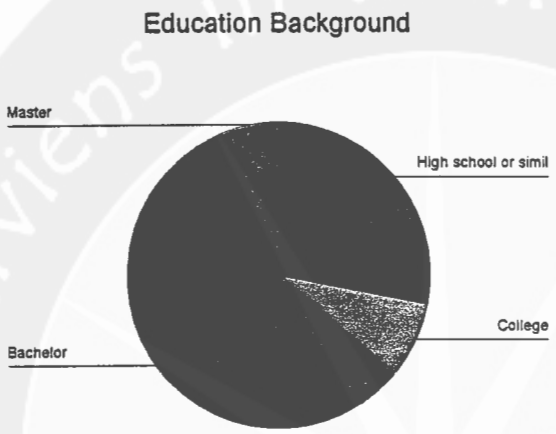
Business Core

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Contractor	41	82,0	82,0	82,0
	Consultant	8	16,0	16,0	98,0
	Owner/Developer	1	2,0	2,0	100,0
	Total	50	100,0	100,0	



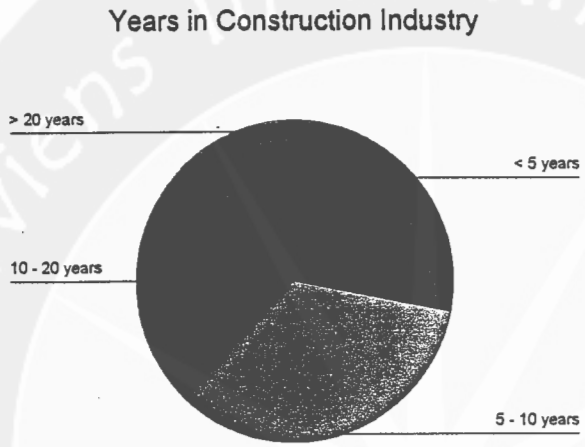
Education Background

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High school or similar	14	28,0	28,0	28,0
	College	4	8,0	8,0	36,0
	Bachelor	29	58,0	58,0	94,0
	Master	3	6,0	6,0	100,0
	Total	50	100,0	100,0	



Years in Construction Industry

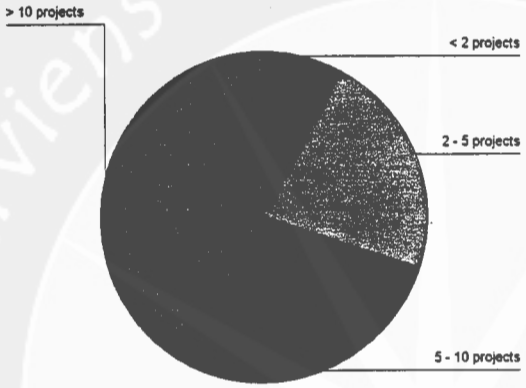
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 5 years	14	28,0	28,0	28,0
	5 - 10 years	17	34,0	34,0	62,0
	10 - 20 years	13	26,0	26,0	88,0
	> 20 years	6	12,0	12,0	100,0
	Total	50	100,0	100,0	



Number of Experience of the Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 2 projects	4	8,0	8,0	8,0
	2 - 5 projects	11	22,0	22,0	30,0
	5 - 10 projects	14	28,0	28,0	58,0
	> 10 projects	21	42,0	42,0	100,0
	Total	50	100,0	100,0	

Number of Experience of the Respondent



Descriptives (Cause)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Lack of awareness of safety regulatuions	50	1	5	3,08	1,12
Lack of enforcement of safety regulations	50	1	5	3,12	1,00
Poor regard for safety by people involved in constraction projects	50	1	5	2,92	,92
Engaging incompetent personnel	50	1	5	3,04	,97
Non-vibrant profesionalism	50	1	5	2,76	1,02
Mechanical failure of constraction machinery/equipment	50	1	4	2,28	,78
Phisical and emotional stress	50	1	5	2,22	,97
Chemical impairment	50	1	4	1,72	,86
Valid N (listwise)	50				

Frequency Table (Cause)

Lack of awareness of safety regulatuions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	8	16,0	16,0	16,0
	For seldom	4	8,0	8,0	24,0
	For usual	15	30,0	30,0	54,0
	For often	22	44,0	44,0	98,0
	For always	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Lack of enforcement of safety regulations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	2	4,0	4,0	4,0
	For seldom	13	26,0	26,0	30,0
	For usual	15	30,0	30,0	60,0
	For often	17	34,0	34,0	94,0
	For always	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

Poor regard for safety by people involved in constraction projects

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	1	2,0	2,0	2,0
	For seldom	18	36,0	36,0	38,0
	For usual	17	34,0	34,0	72,0
	For often	12	24,0	24,0	96,0
	For always	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

Engaging incompetent personnel

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	1	2,0	2,0	2,0
	For seldom	15	30,0	30,0	32,0
	For usual	19	38,0	38,0	70,0
	For often	11	22,0	22,0	92,0
	For always	4	8,0	8,0	100,0
	Total	50	100,0	100,0	

Non-vibrant profesionalism

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	5	10,0	10,0	10,0
	For seldom	17	34,0	34,0	44,0
	For usual	14	28,0	28,0	72,0
	For often	13	26,0	26,0	98,0
	For always	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Mechanical failure of constraction machinery/equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	6	12,0	12,0	12,0
	For seldom	28	56,0	56,0	68,0
	For usual	12	24,0	24,0	92,0
	For often	4	8,0	8,0	100,0
	Total	50	100,0	100,0	

Phisical and emotional stress

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	11	22,0	22,0	22,0
	For seldom	24	48,0	48,0	70,0
	For usual	9	18,0	18,0	88,0
	For often	5	10,0	10,0	98,0
	For always	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Chemical impairment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	24	48,0	48,0	48,0
	For seldom	19	38,0	38,0	86,0
	For usual	4	8,0	8,0	94,0
	For often	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

Descriptives (Sources of Accidents)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Site access	50	1	4	1,90	,81
Excavations	50	1	4	2,20	,70
False/Form Work	50	1	5	2,10	,86
Scaffolding	50	1	4	2,24	,74
Machinery and equipment	50	1	5	2,36	,78
Electricity	50	1	4	2,26	,80
Fire	50	1	4	1,68	,71
Cranes/Lifting equipment	50	1	4	2,10	,84
Worker to worker interaction	50	1	5	2,20	,99
Valid N (listwise)	50				

Frequency Table (Sources of Accidents)

Site access

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	16	32,0	32,0	32,0
	For seldom	26	52,0	52,0	84,0
	For usual	5	10,0	10,0	94,0
	For often	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

Excavations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	5	10,0	10,0	10,0
	For seldom	33	66,0	66,0	76,0
	For usual	9	18,0	18,0	94,0
	For often	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

False/Form Work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	11	22,0	22,0	22,0
	For seldom	27	54,0	54,0	76,0
	For usual	9	18,0	18,0	94,0
	For often	2	4,0	4,0	98,0
	For always	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Scaffolding

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	7	14,0	14,0	14,0
	For seldom	26	52,0	52,0	66,0
	For usual	15	30,0	30,0	96,0
	For often	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

Machinery and equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	5	10,0	10,0	10,0
	For seldom	25	50,0	50,0	60,0
	For usual	18	36,0	36,0	96,0
	For often	1	2,0	2,0	98,0
	For always	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Electricity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	8	16,0	16,0	16,0
	For seldom	24	48,0	48,0	64,0
	For usual	15	30,0	30,0	94,0
	For often	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

Fire

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	22	44,0	44,0	44,0
	For seldom	23	46,0	46,0	90,0
	For usual	4	8,0	8,0	98,0
	For often	1	2,0	2,0	100,0
	Total	50	100,0	100,0	

Cranes/Lifting equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	12	24,0	24,0	24,0
	For seldom	24	48,0	48,0	72,0
	For usual	11	22,0	22,0	94,0
	For often	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

Worker to worker interaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	12	24,0	24,0	24,0
	For seldom	22	44,0	44,0	68,0
	For usual	12	24,0	24,0	92,0
	For often	2	4,0	4,0	96,0
	For always	2	4,0	4,0	100,0
	Total	50	100,0	100,0	

Descriptives (Solution)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Review existing safety regulations	50	1	5	2,98	,89
Enforce building and safety regulations	50	2	5	3,66	,89
Sensitize the professionals, and sensitize, educate and train the public	50	2	5	3,80	,90
Engage competent personnel and ensure clos site supervision	50	2	5	3,72	,86
Promote professionalism and ensure compliance with the pofessional code of ethics	50	2	5	3,34	,77
Undertake insurance covers and considers health and safety at all stages of project implementation	50	2	5	3,74	,94
Maintain and regularly service tools, plant and equipment	50	2	5	3,66	,94
Ensure good site organization and good housekeeping, and provide sanitation, health and first aid facilities	50	2	5	3,60	,83
Valid N (listwise)	50				

Frequency Table (Solution)

Review existing safety regulations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For never	2	4,0	4,0	4,0
	For seldom	10	20,0	20,0	24,0
	For usual	29	58,0	58,0	82,0
	For often	5	10,0	10,0	92,0
	For always	4	8,0	8,0	100,0
	Total	50	100,0	100,0	

Enforce building and safety regulations

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	5	10,0	10,0	10,0
	For usual	16	32,0	32,0	42,0
	For often	20	40,0	40,0	82,0
	For always	9	18,0	18,0	100,0
	Total	50	100,0	100,0	

Sensitize the professionals, and sensitize, educate and train the public

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	4	8,0	8,0	8,0
	For usual	14	28,0	28,0	36,0
	For often	20	40,0	40,0	76,0
	For always	12	24,0	24,0	100,0
	Total	50	100,0	100,0	

Engage competent personnel and ensure clos site supervision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	4	8,0	8,0	8,0
	For usual	15	30,0	30,0	38,0
	For often	22	44,0	44,0	82,0
	For always	9	18,0	18,0	100,0
	Total	50	100,0	100,0	

Promote professionalism and ensure compliance with the pofessional code of ethics

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	6	12,0	12,0	12,0
	For usual	24	48,0	48,0	60,0
	For often	17	34,0	34,0	94,0
	For always	3	6,0	6,0	100,0
	Total	50	100,0	100,0	

Undertake insurance covers and considers health and safety at all stages of project implementation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	5	10,0	10,0	10,0
	For usual	15	30,0	30,0	40,0
	For often	18	36,0	36,0	76,0
	For always	12	24,0	24,0	100,0
	Total	50	100,0	100,0	

Maintain and regularly service tools, plant and equipment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	4	8,0	8,0	8,0
	For usual	21	42,0	42,0	50,0
	For often	13	26,0	26,0	76,0
	For always	12	24,0	24,0	100,0
	Total	50	100,0	100,0	

Ensure good site organization and good housekeeping, and provide sanitation, health and first aid facilities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	For seldom	2	4,0	4,0	4,0
	For usual	25	50,0	50,0	54,0
	For often	14	28,0	28,0	82,0
	For always	9	18,0	18,0	100,0
	Total	50	100,0	100,0	

Nonparametric Correlations

Correlations

			Cause of Uganda	Cause of Indonesia
Spearman's rho	Cause of Uganda	Correlation Coefficient	1,000	,833*
		Sig. (2-tailed)	.	,010
		N	8	8
	Cause of Indonesia	Correlation Coefficient	,833*	1,000
		Sig. (2-tailed)	,010	.
		N	8	8

*. Correlation is significant at the .05 level (2-tailed).

Nonparametric Correlations

Correlations

			Sources of Accidents of Uganda	Sources of Accidents of Indonesia
Spearman's rho	Sources of Accidents of Uganda	Correlation Coefficient	1,000	,650
		Sig. (2-tailed)	.	,058
		N	9	9
	Sources of Accidents of Indonesia	Correlation Coefficient	,650	1,000
		Sig. (2-tailed)	,058	.
		N	9	9

Nonparametric Correlations

Correlations

			Solution of Uganda	Solution of Indonesia
Spearman's rho	Solution of Uganda	Correlation Coefficient	1,000	-,143
		Sig. (2-tailed)	.	,736
		N	8	8
	Solution of Indonesia	Correlation Coefficient	-,143	1,000
		Sig. (2-tailed)	,736	.
		N	8	8