

## **CHAPTER FOUR**

### **RESULTS**

This chapter presentation the survey results of the six parts. Firstly personal information, the second Part Response among the officials, part three accidents during the work. The fourth, fifth and sixth part to investigate training safety procedures, regulations, policies, and accident prevention methods related to the construction projects in Khartoum.

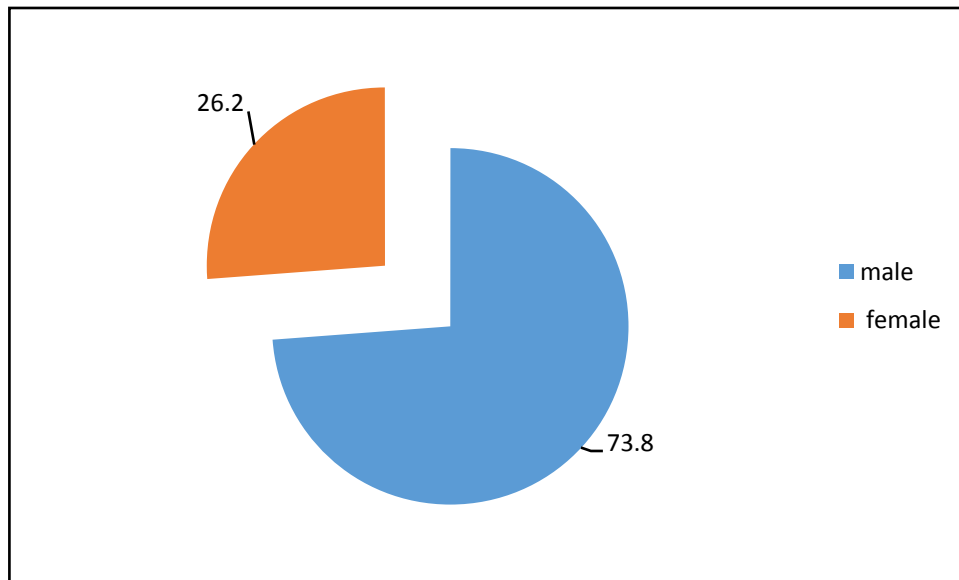
#### **4.1 Data analysis and hypothesis testing.**

This section includes initial and basic study data analysis and testing of hypotheses in the following manner:

##### **I. preliminary study data analysis**

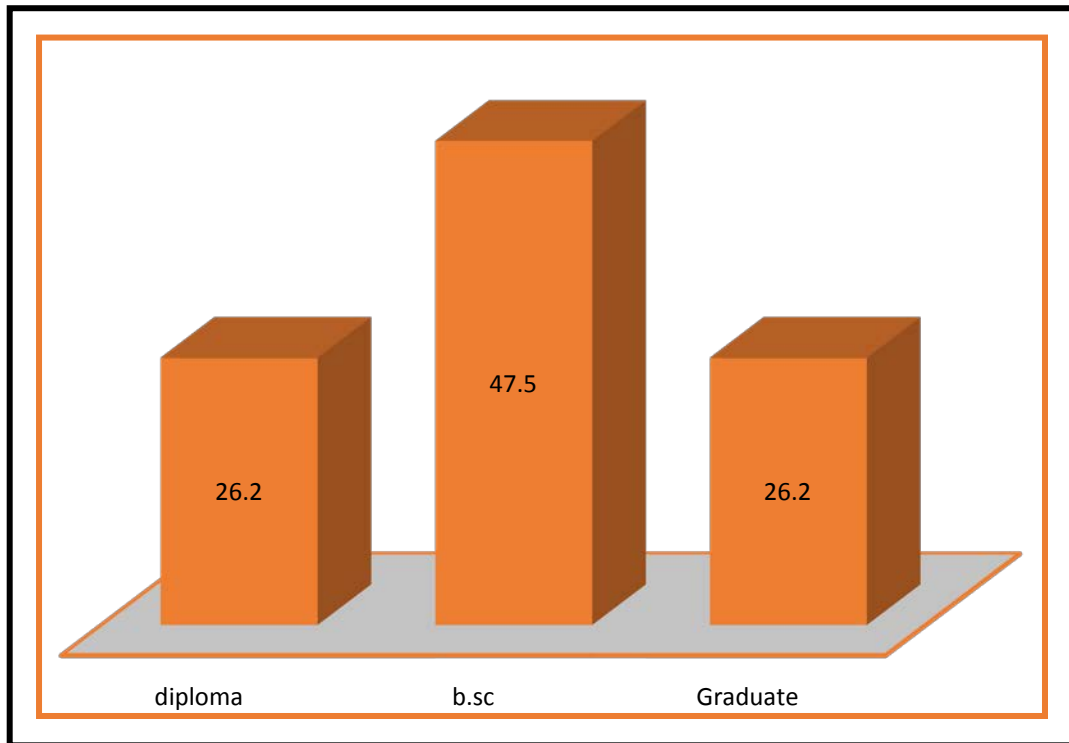
Preliminary data of the study include the following characteristics:

## 4.2 personal Information.



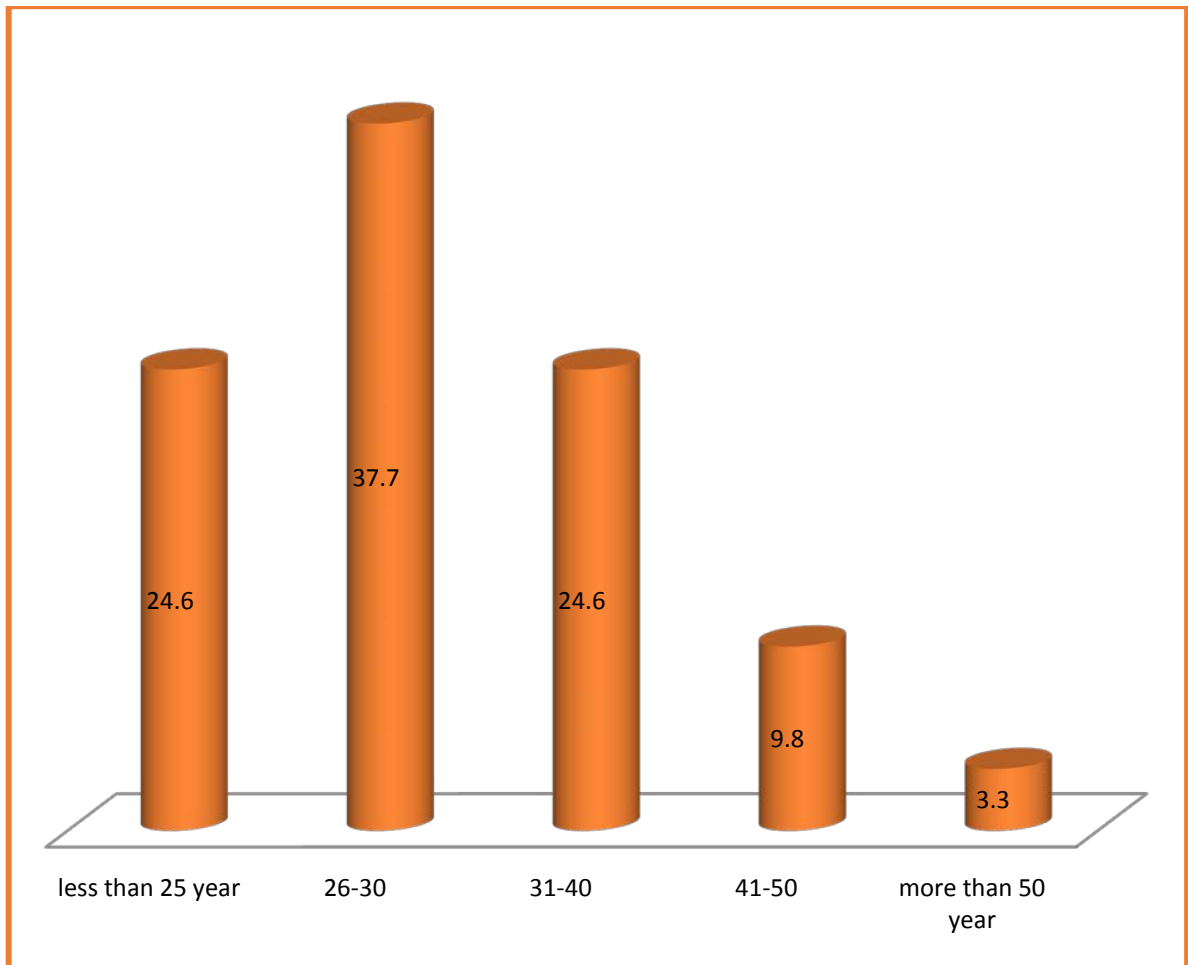
**Figure 4.1:** The distribution the sample according to gender

Participated in the questionnaire are meals and Females of the respondents in Kkartoum . 61 questionnaires have been distributed and the response rate is 73%. 8 % of the sample, and the 26.2% Female.



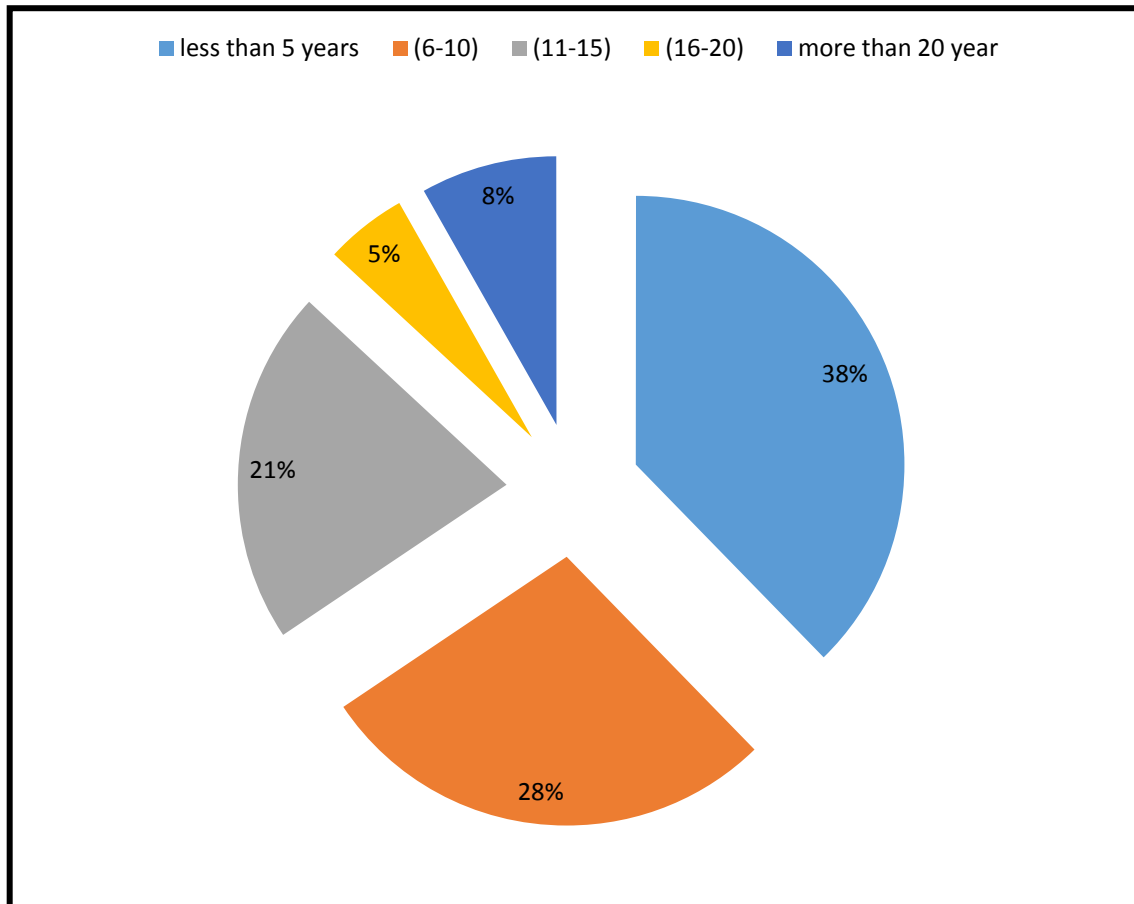
**Figure 4.2:** Academic qualification

Figure (4.2) show respondents who record academic qualification as 47.5% for Bachelor and 26.2% for postgraduate and diploma .



**Figure 4.3.** Age in year

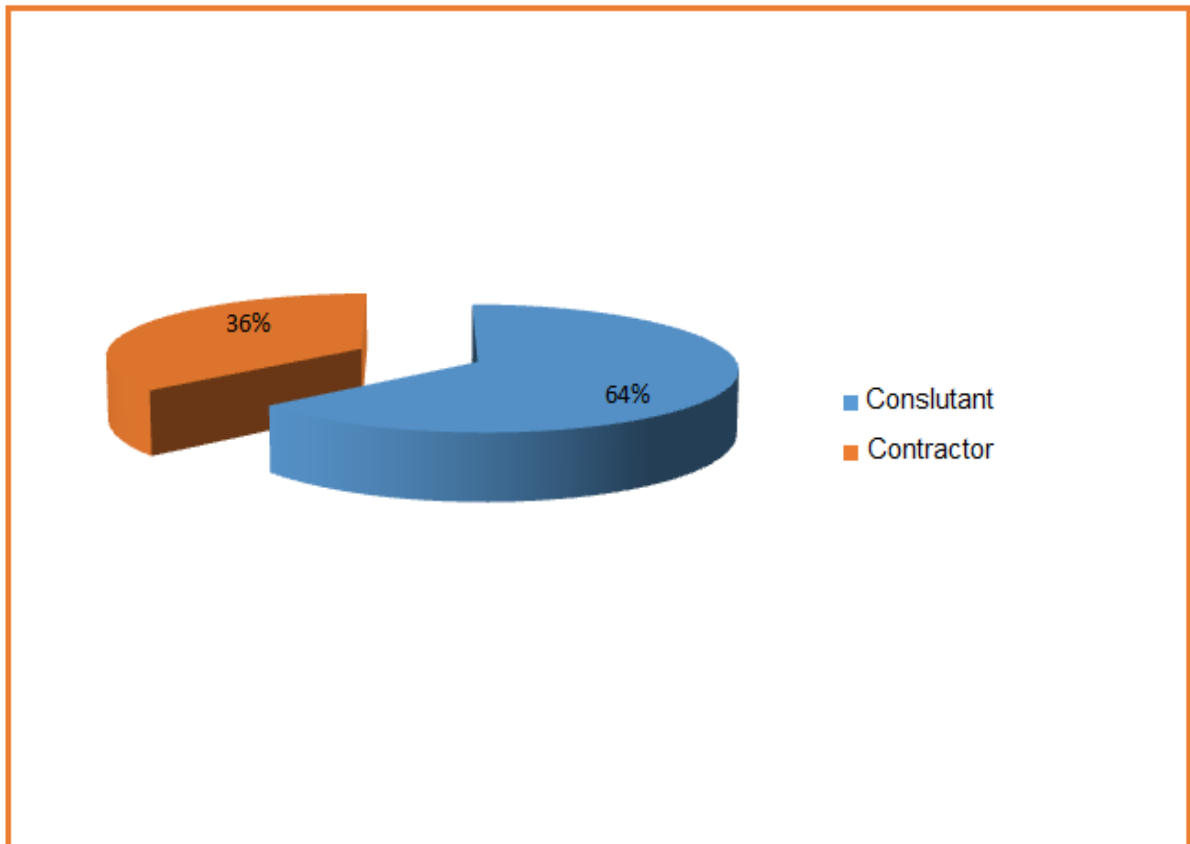
Figure (4.2) show respondents according to their Age as 24.6% for who are less than 25, 37.7% for who are between (26-30), and 24.6 for those in rang (31-40), 9.8% for Age between (41-50) and 3.3 for respondents more than 50.



**Figure 4.4.** experience in year

Figure (4.4) show respondents according to their experience in year 38% for who are less than 5 year , 28% for who are between (6-10), 21% for those in rang(11-15), 8% for Age between (15-20) and 5% for respondents more than 20 year.

### 4.3 Response among the Official



**Figure 4.5:** Response among the Official

Participated in the questionnaire are two types of the respondents' contractors and consultants. 61 questionnaires have been distributed and the response rate is 64% of the consultants and 36% for Contractor. Show (figure 4.5) response rate among respondents.

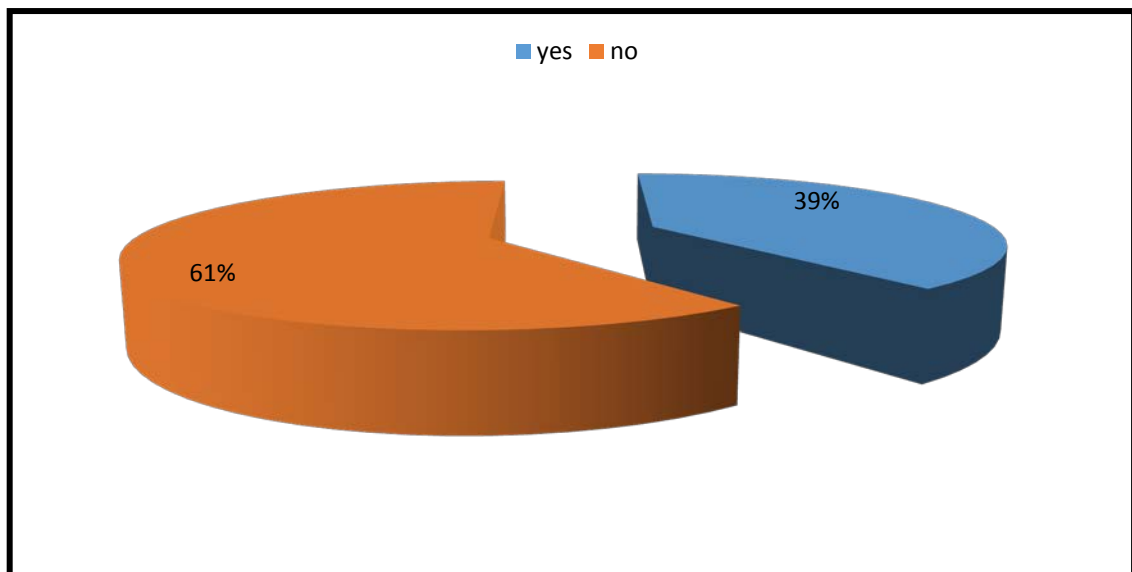
#### 4.4 Deaths in last five year.

**Table 4.1:** Number of Deaths in last five year

No. of Deaths		Frequency	Percent	Valid Percent	Cumulative Percent
1	There is no	51	83.6	83.6	83.6
2	1-3	8	13.1	13.1	96.7
3	8-12	1	1.6	1.6	98.4
5	more than 12	1	1.6	1.6	100.0
	Total	61	100.0	100.0	

Table 4.1 shows respondents who record academic qualification as 47.5% for Bachelor and 26.2% for postgraduate and diploma.

#### 4.5 documentation of Accidents.

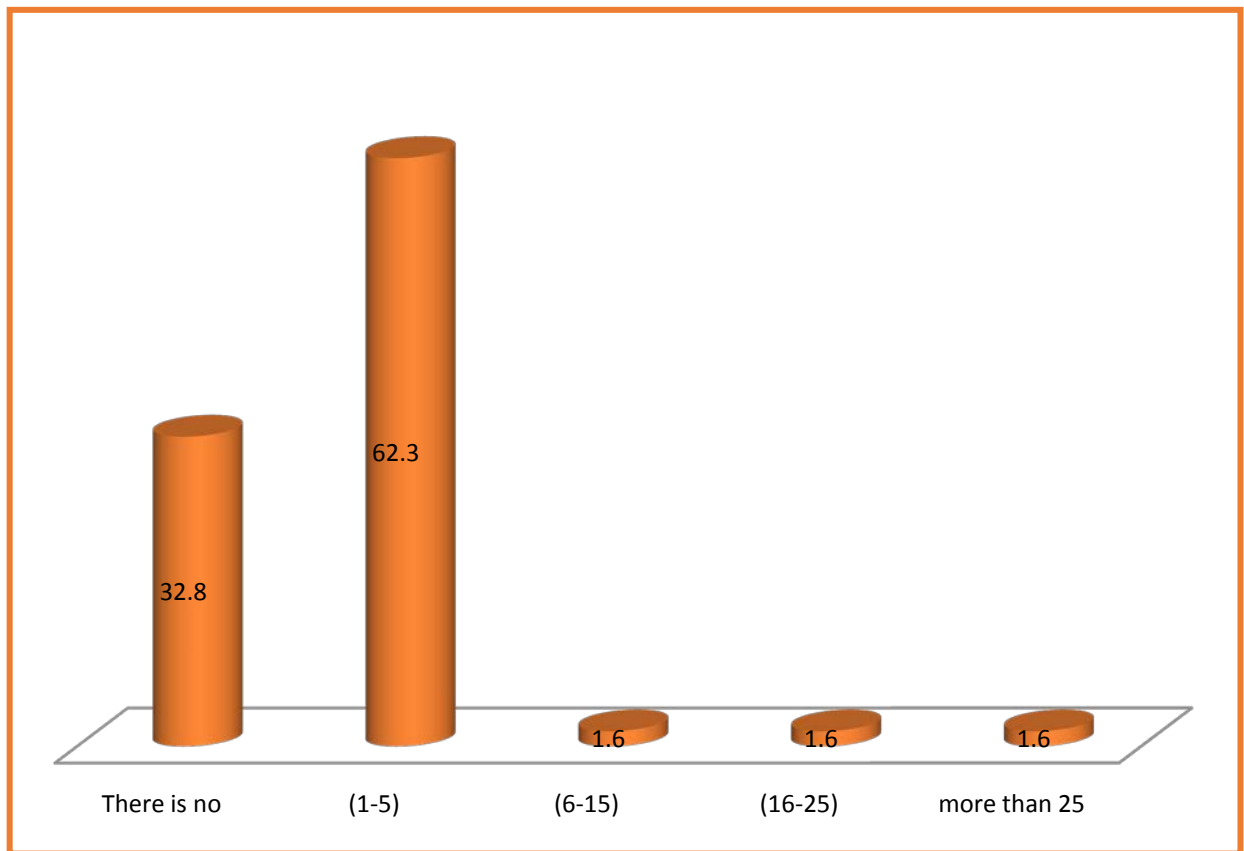


**Figure 4.6.** documentation of Accidents

A high percentage of the respondents Said that there is no accidents Documentation construction companies. and almost of the respondents(Contractors, consultants,) in the Khatoum did not keep records of The Size, nature, Cause, and results of the injury just the real injuries.



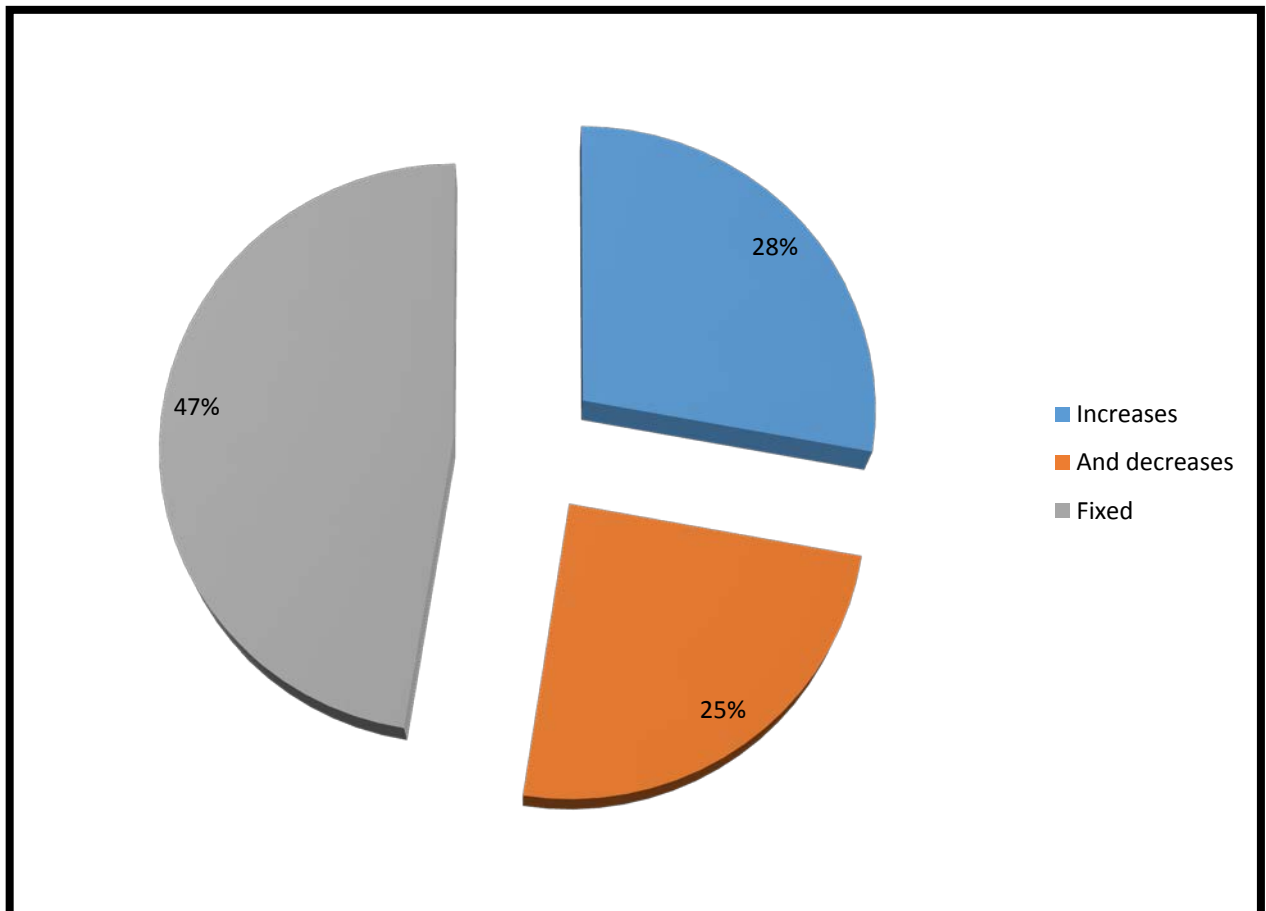
#### 4.6 Ingries in last five year:



**Figure 4.7:** Number of Ingries in last five year

A 52.8% percentage of the respondents believed that the number of accidents rates between (1-5) accidents on construction site.

#### 4.7 Rate Accedance in last five year:



**Figure 4.8:** Rate of Accedance in last five year

A high percentage of the respondents believed that the fixed number of accidents rates on construction site in last five year , and 28% of respondents believed the accidents increased and 25% they believed the accidents decrease.

**Table 4.2:** the Degree of Injuries.

	low		medium		high	
	Frequencies	percent	Frequencies	percent	Frequencies	percent
<b>1</b>	7	11.5%	4	6.6%	49	80.3%
<b>2</b>	8	13.1%	47	77.0%	6	9.8%
<b>3</b>	46	75.4%	10	16.4%	6	9.8%
<b>total</b>	61	100%	61	100%	61	100%

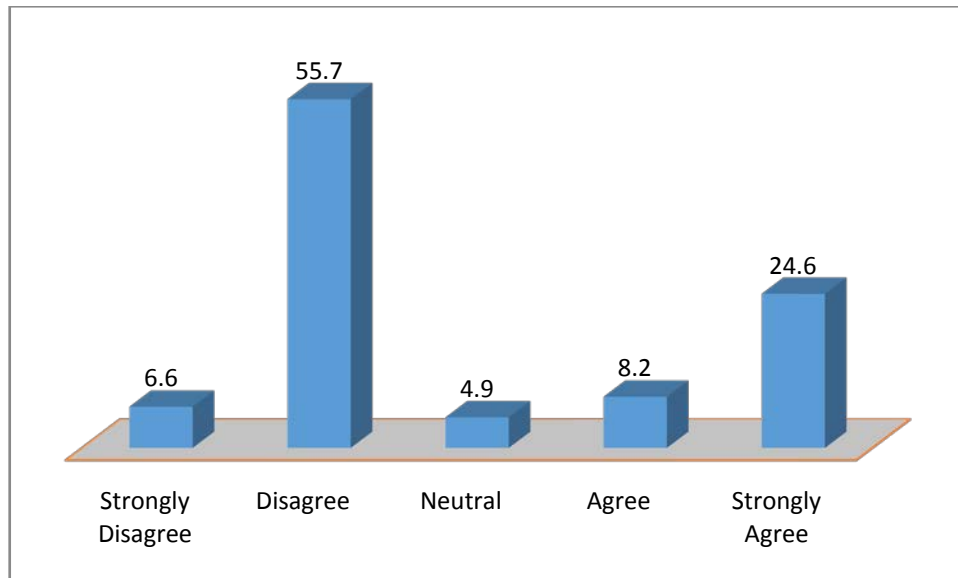
Types of injuries among the respondent during the last five years that hight reat 75.4% of the light injuries, 16.4% Partially injuries and 9.8% that caused permanent inability (permanent ).

**Table.4.3** Reasoneses of accidants:

	Unsafe Behavior during the work		Unsafe work Environment		Personal Reasons	
	Frequencies	percent	Frequencies	percent	Frequencies	percent
<b>1</b>	8	13.1%	5	8.2%	46	75.4%
<b>2</b>	8	13.1%	45	73.8%	10	16.4%
<b>3</b>	45	73.8%	11	18.0%	5	8.2%
<b>total</b>	61	100%	61	100%	61	100%

Responses of accidents among the respondent during the last five years that high rate 73.8% for Unsafe Behavior during the work, 18.0% for unsafe work Environment and 8.2% for Personal Reasons.

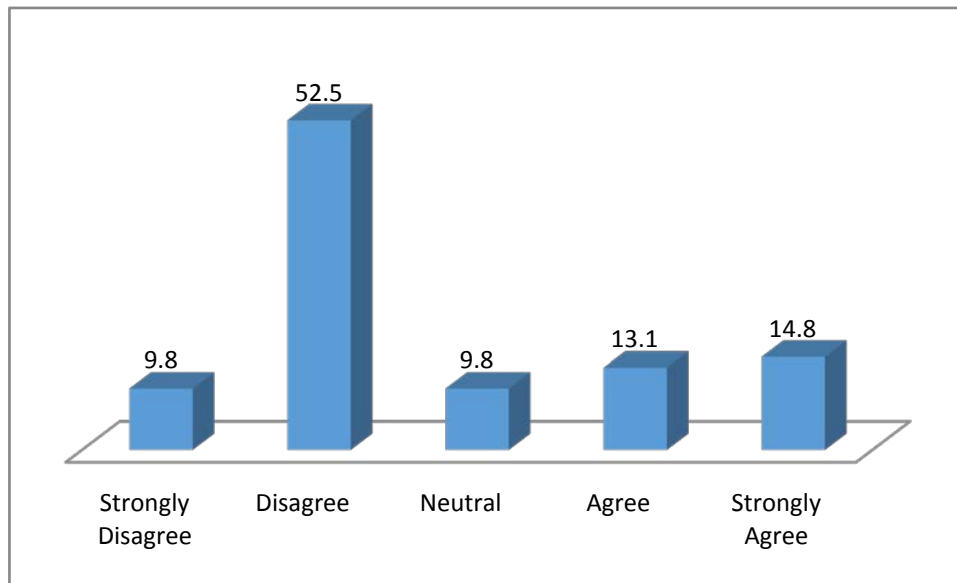
#### 4.8 Training and Qualification.



**Figure 4.9.** external monitor of safety

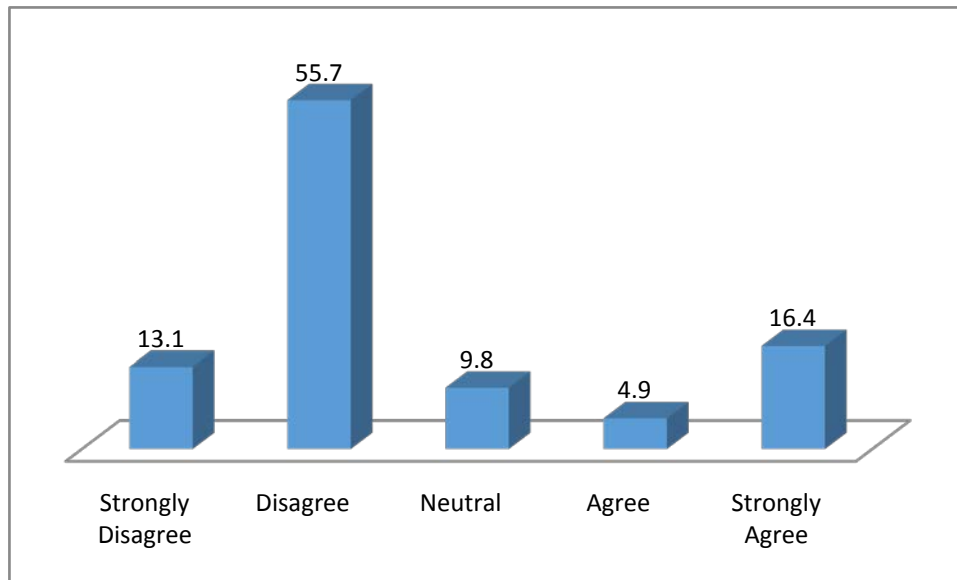
55.7 % of the respondents disagreed that there is external institution that monitor safety in construction, enlightenment of the construction employs, in applying safety legislation, or help in improving safety performance in construction sites in the Khartoum.

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**Figure 4.10:** regular monitor of Safety

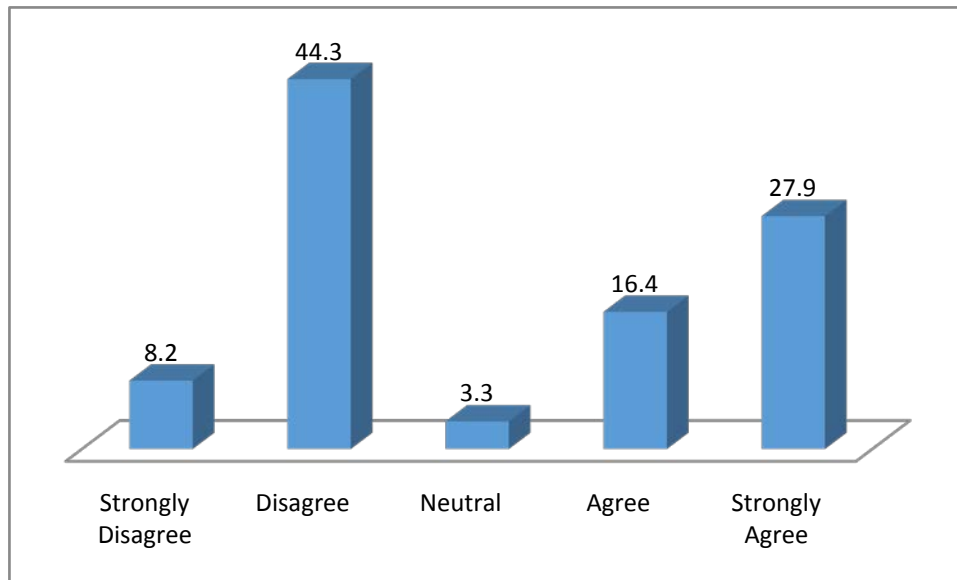
52.5 % of the respondents disagreed that there is regular monitor for safety in construction, enlightenment of the construction employs, in applying safety legislation, or help in improving safety performance in construction sites in the Khartoum.



**Figure 4.11:** Duration of safety monitor

A high percentage of the respondents disagreed that the enough duration in construction site were due to the first management carelessness and lack of legislation and careless of the consulting.

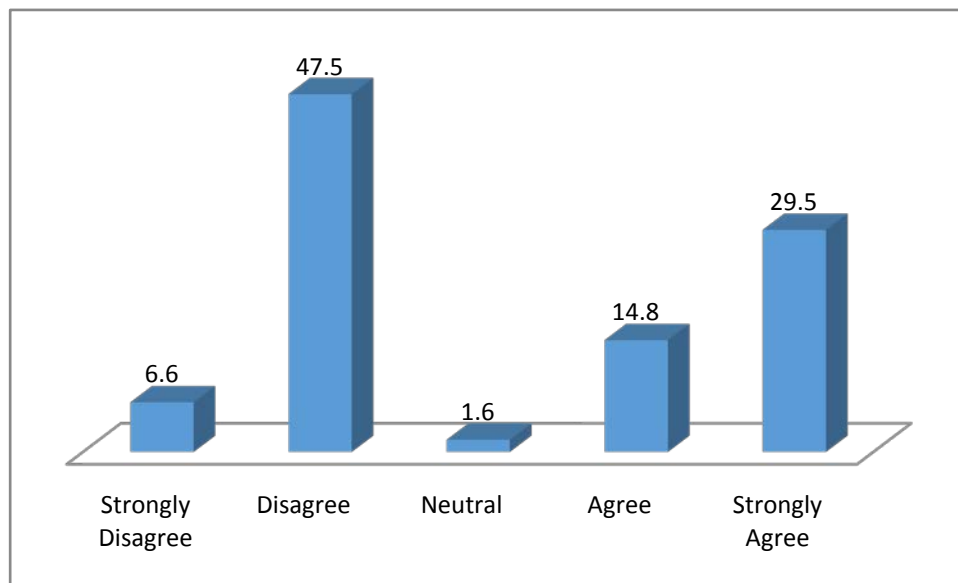
#### 4.9 Regulations Availability.



**Figure 4.12:** internal systems

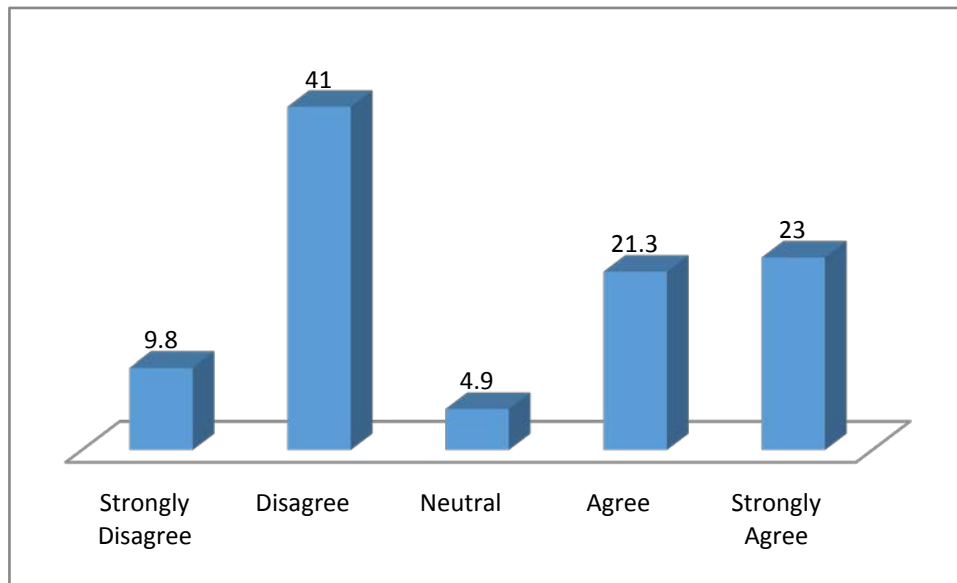
44.3 % of the respondents disagreed that there is internal system for safety in construction, enlightenment of the construction employs, in applying safety legislation, or help in improving safety performance in construction sites in the Khartoum.





**Figure 4.13:** internal regulations

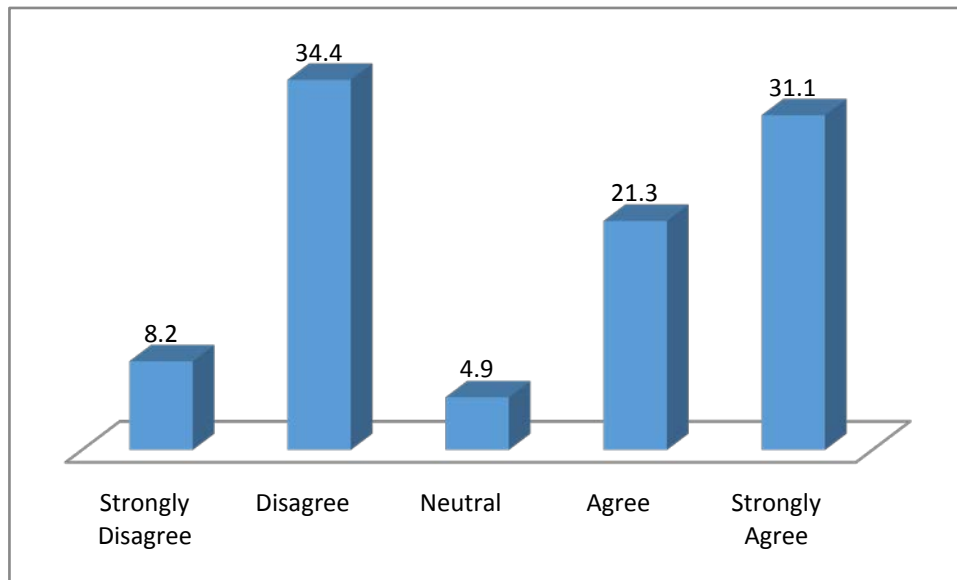
A high percentage of the respondents (47.5%) disagreed that the internal regulations in construction companies.



**Figure 4.14:** procedures availability

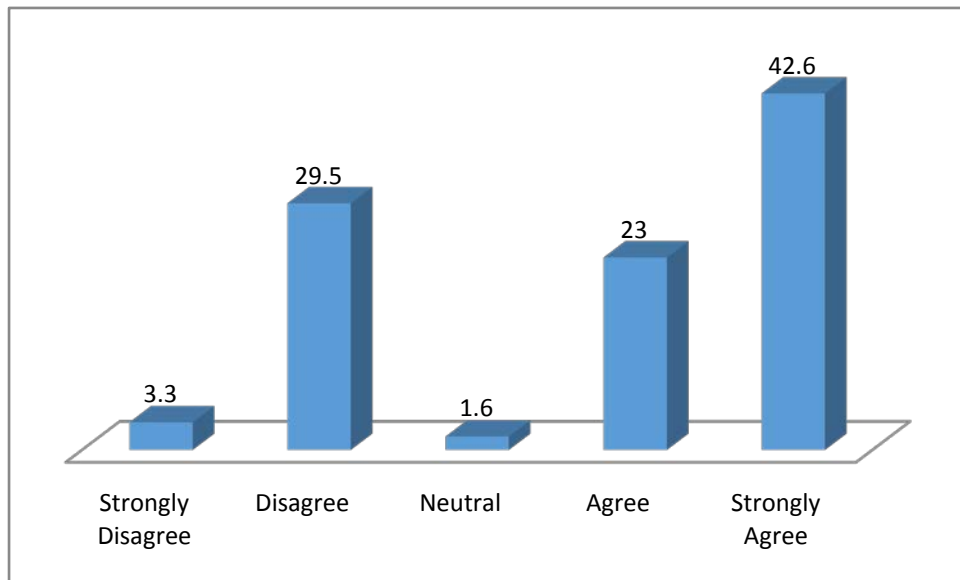
A high percentage of the respondents (47.5%) disagreed that the procedures availability in construction companies.

#### 4.10 Regulations updating :



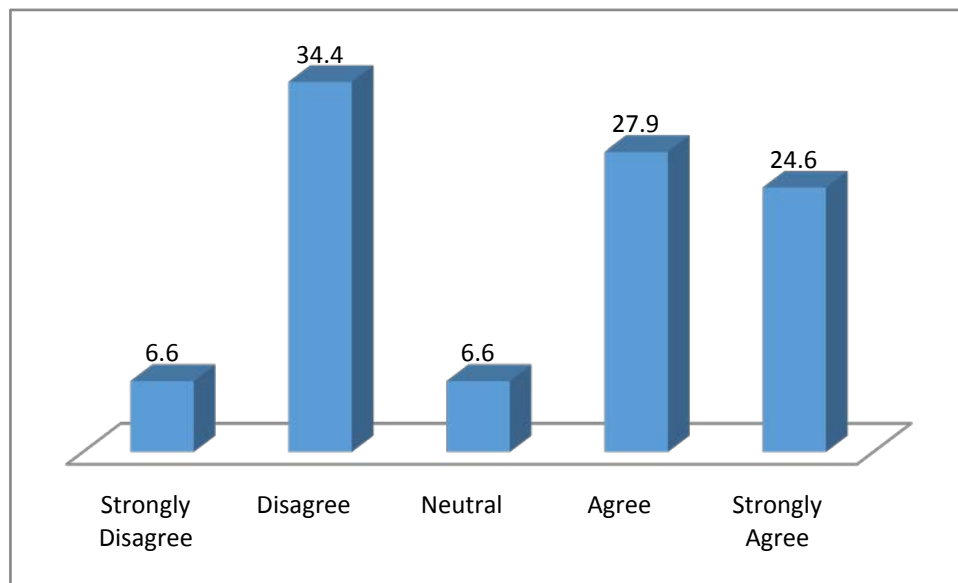
**Figure 4.15:** employments satisfaction

(34%) of the respondents believed that the disagreed there is the employment satisfaction, although 31% strongly agreed.



**Figure 4.16:** safety rule updating

(42.6%) of the respondents believed that the agreed the updating of regulation will reduce the accents.



**Figure 4.17:** suitability safety rule

(43.4%) of the respondents believed that the agreed the updating of regulation will reduce the accents.