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APPENDICES

LIST OF APPENDICES

Appendix 1: Interview guidelines of the pilot study

Master of Philosophy

Introduction

Unsafe behaviour of a construction worker is governed by many factors, both individual and external. This research is conducted to investigate the influential factors of unsafe behaviour of the construction workers and the degree of influence of those factors. The questionnaire consists of three parts covering demographic data, unsafe acts committed by construction workers and influential factors of unsafe behaviour.

Statement of Confidentiality

The information generated from this questionnaire will be used only for the purpose of completing the research. All the responses of the interviewees will be kept confidential. Further, to maintain the confidentiality, the actual names of the organisations and the respondents will not be revealed under any circumstance.

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Part 1: Validation of Literature findings to Sri Lankan construction industry

Please indicate (with a tick) if the unsafe act listed below are relevant/common among the construction workers in Sri Lankan context.

Unsafe Act	**Expert Response**	
	Relevant	**Irrelevant**
Conduct		
Working without authority on the job		
Annoyance and horseplay in the workplace		
Smoking, creating naked flame or sparks in areas where flammable materials are stored		
Leaving nails or other sharp objects protruding from surfaces		
Throwing or dropping objects from high levels		
Working under the effects of alcohol/drugs		
Working with lack of concentration		
Working in poor physical conditions		
Ergonomics		
Working at improper speeds		
Improper posture for tasks		
Tools and Equipment		
Incorrect use of tools and equipment		
Using defective equipment and tools		
Not wearing PPE		
Removing safety guards from the workplace or equipment		
Servicing equipment which is in operation		

What are the other unsafe acts specific to Sri Lankan context?

……

……

……

Part 2: Influential Factors of Unsafe Behaviour of Construction Workers - Sri Lankan Industry perspective

I) Please indicate (with a tick) if the influential factors of unsafe behaviour of construction workers listed below are relevant to the construction workers in Sri Lankan context

Influential Factor	**Expert Response**	
Person (Individual Dynamics)	**Relevant**	**Irrelevant**
age		
Explain		
gender		
Explain		
experience		
Explain		
alcohol/drug abuse		
Explain		
education		
Explain		
attitude towards safety		
Explain		
psychological distress		
Explain		
income		
Explain		
Process (Work environment)	**Relevant**	**Irrelevant**
hazardous operations		
Explain		
unsafe conditions		
Explain		
hazardous equipment		
Explain		
Place (Organizational Safety Culture)	**Relevant**	**Irrelevant**
Safety Procedures and rules		
Explain		
management commitment		
Explain		
employee involvement		
Explain		
Safety communication		
Explain		
Other? …… ……		

Thank you

Appendix 2: Main survey questionnaire

Master of Philosophy (Research)

Introduction

Unsafe behaviour of a construction worker is governed by many factors, both individual and external. This research is conducted to investigate the influential factors of unsafe behaviour of the construction workers and the degree of influence of those factors. The questionnaire consists of three parts covering demographic data, unsafe acts committed by construction workers and influential factors of unsafe behaviour.

Statement of Confidentiality

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Part 1: Respondent Profile

I) Name (Optional): …….
II) Age: ……..
III) Company (Optional):…….
IV) Please state your labour category and experience

Category (Please indicate with a tick)		**Experience** (Years)
Carpenter		
Electrician		
Mason		
Plumber		
Welders		
Other (Specify)		

Part 2 : Unsafe Behaviour

Please rate your engagement in the following conducts/activities while working, using the provided Likert scale.

Unsafe Act	**1**-None of the time	**2**-A little of the time	**3**-some of the time	**4**-Most of the time	**5**-All of the time
Conduct					
I work with lack of concentration					
I work in poor fitness					
I throw or drop objects (materials and tools) from high levels					
I work even when I am drunk or high					
I smoke/create naked flame in areas where flammable materials are stored					
I horseplay around in the workplace					
I work without authority on the job					
I leave nails or other sharp objects protruding from surfaces					
Ergonomics					
I tend to work at improper speeds					
I use improper posture for tasks					
Tools and Equipment					
I use tools and equipment the way I please					
I don't mind using defective equipment and tools					
I don't wear PPE					
I remove safety guards& features from the workplace					
I service/maintain equipment& tools which is in operation					

Part 3 :Factors Influencing Unsafe Behaviour

3.1 Individual dynamics

I) Alcohol / Drug Abuse

Question	**Yes**	**No**
Do you use alcohol and/or any nonmedical drugs such as tobacco, ganja, heroin, cocaine etc.		
Have you ever felt that you ought to cut down on your drinking or drug use?		
Have people annoyed you by criticizing your drinking or drug use?		
Have you ever felt bad or guilty about your drinking or drug use?		
Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?		

II) What is your level of education?

1 –Up to GCE A/L /NVQ level 3 or above

2 –Up to technical Course (NVQ level 2)

3 –Below/Up to GCE O/L (Grade 6-11)

4 – Primary Education (below/Up to fifth grade)

5 - No formal education

III) Do you think that the Occupational Safety and Health at the workplace is of importance to a worker and to the company (attitude towards safety)

1 - Strongly agree

2 - Agree

3 - Neither agree nor disagree

4 - Disagree

5 - Strongly disagree

IV) Psychological distress

The following questions ask about how you have been feeling during the past 30 days. For each question, please circle the number that best describes how often you had this feeling.

During the past 30 days, about how often did you feel …	1- None of the time	2- A little of the time	3- some of the time	4- Most of the time	5- All of the time
a) … nervous					
b) … hopeless					
c) …restless or fidgety					
d) … so depressed that nothing could cheer you up?					
e) … that everything was an effort?					
f) …worthless?					

V) Income

Financial Stability

Question	**Response**				
	1- Strongly agree	**2-** Agree	**3-** Neither agree nor disagree	**4** - Disagree	**5** -Strongly disagree
This job comes with a sufficient salary					
I have other means of income in addition to this job					

How many dependents do you have in your family?

1 – none
2 – one to two
3 – three
4 – four
5 – five or more

3.2 Work Environment

Question	1-None of the time	2-A little of the time	3- some of the time	4-Most of the time	5-All of the time
How often do you engage in hazardous operations on site? (Excavating, trenching, working at heights, Welding and Cutting, Blasting and the Use of Explosives etc.)					
How often do you find yourself surrounded by unsafe conditions on site? (ex. Unguarded machinery, manholes, debris, reinforcement bars, unguarded workspaces, etc.)					
How often do you use hazardous equipment* in work? (*hand tools, such as hammers, chisels, screwdrivers, spanners, saws, scissors, etc. *machines, such as drilling machines, portable power tools, floor polishing machines, power presses, circular saws, excavating equipment, lifting equipment, such as fork-lift trucks, vehicle hoists, lifting slings etc. *other equipment, such as ladders, kick stools, water pressure cleaners etc.)					

3.3 Organizational Safety Culture

Question	Response				
Safety Procedures & rules	**1-** Strongly agree	**2-** Agree	**3-** Neither agree nor disagree	**4-** Disagree	**5-** Strongly disagree
Procedures and rules are there					
They are helpful					
People are trained in them					
Procedures are updated over time for efficiency					
Management commitment	**1**	**2**	**3**	**4**	**5**
Safety is perceived to be in management's priorities					
They are often seen in the workplace					
They talk about safety when in the workplace and is this visible to the workforce					
They deal quickly and effectively with safety issues raised					
Management is trusted over safety					
Employee involvement in safety	**1**	**2**	**3**	**4**	**5**
People of all levels are involved in safety					
Individual employees are often asked for their input safety issues					
Employees often report unsafe conditions or near misses					
safety is regarded to be employees' responsibility					
Safety Communication	**1**	**2**	**3**	**4**	**5**
There is effective two-way communication about safety					
Safety information is easily available					
Safety programme of the company communicated to all levels					
People are open about safety					

Thank you for taking part in the survey.

Appendix 3: The Kessler K6

Date completed: __ __ / __ __ / __ __ __ __

K6+

Provider: _____

Provider ID:

|__|__|__|__|__|__|__|__|__|__|

Please use gummed label if available

Patient or Client Identifier:

|__|__|__|__|__|__|__|__|__|__|__|__|__|__|

Surname:

Other names:

Date of Birth: __ __ / __ __ / __ __ __ __

Sex: Male ☐1 Female ☐2

Address:

The following questions ask about how you have been feeling during the past 30 days. For each question, please circle the number that best describes how often you had this feeling.

Q1. During the past 30 days, about how often did you feel …	All of the time	Most of the time	Some of the time	A little of the time	None of the time
a. …nervous?	1	2	3	4	5
b. …hopeless?	1	2	3	4	5
c. …restless or fidgety?	1	2	3	4	5
d. …so depressed that nothing could cheer you up?	1	2	3	4	5
e. …that everything was an effort?	1	2	3	4	5
f. …worthless?	1	2	3	4	5

Appendix 4: Health & safety climate survey tool by HSE

Question set	
1	**Management commitment** •Where is safety perceived to be in management's priorities (Senior/middle/1st line)? • How do they show this? • How often are they seen in the workplace? • Do they talk about safety when in the workplace and is this visible to the workforce? • Do they 'walk the talk'? • Do they deal quickly and effectively with safety issues raised? • What balance do their actions show between safety and production? • Are management trusted over safety?
2	**Communication** • Is there effective two-way communication about safety? • How often are safety issues discussed; • With line manager/subordinate? • With colleagues? • What is communicated about the safety programme of the company? • How open are people about safety?
3	**Employee involvement** • How are people (all levels, especially operators) involved in safety? • How often are individual employees asked for their input safety issues? • How often do operators report unsafe conditions or near misses etc? • Is there active, structured operator involvement e.g. workshops, projects, safety circles? • Is there a continuous improvement / total quality approach? • Whose responsibility is safety regarded to be? • Is there genuine cooperation over safety – a joint effort between all in the company?
4	**Training/information** •Do employees feel confident that they have all the training that they need • How accurate are employees' perceptions of hazards and risks? • How effective is safety training in meeting needs (including managers!)? • How are needs identified? • How easily available is safety information?
5	**Compliance with procedures** • What are written procedures used for? • What decides whether a particular task will be captured in a written procedure? • Are they read? • Are they helpful? • What other rules are there? • Are there too many procedures and rules? • How well are people trained in them? • Are they audited effectively? • Are they written by users? • Are they linked to risks?

6	**Motivation** • Do managers give feedback on safety performance (& how)? • Are they likely to notice unsafe acts? • Do managers (all levels - S/M/1st) always confront unsafe acts? • How do they deal with them? • Do employees feel they can report unsafe acts? • How is discipline applied to safety? • What do people believe are the expectations of managers? • Do people feel that this is a good place to work (why/why not)? • Are they proud of their company?
7	**Learning Organisation** • Does the company really learn from accident history, incident reporting etc? • Do employees feel confident in reporting incidents or unsafe conditions? • Do they report them? • Do reports get acted upon? • Do they get feedback?

Appendix 5: Training dataset

No.	Category	Age (IF-1)	Experience (IF-2)	Alcohol/Drug abuse (IF-3)	Education (IF-4)	Attitudes to safety (IF-5)	Psychological distress (IF-6)	Income (IF-7)	Hazardous operations (IF-8)	Unsafe conditions (IF-9)	Hazardous equipment (IF-10)	Safety Procedures and rules (IF-11)	Management commitment (IF-12)	Employee involvement in safety IF-13)	Safety Communication (IF-14)	Expected USBS
1	Aluminium worker	0.4	0.4	0.6	0.6	0.2	0.4	0.4	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.27
2	Carpenter	0.8	1	0.2	0.2	0.2	0.4	0.4	0.8	0.8	0.8	0.4	0.8	1	0.8	0.52
3	Concrete worker	1	1	0.8	1	0.4	0.6	0.4	0.8	0.8	0.4	0.8	0.8	0.6	0.8	0.36
4	Aluminium worker	0.6	0.8	0.6	0.6	0.2	0.4	0.6	0.4	0.8	0.2	0.2	0.2	0.2	0.2	0.28
5	Rigger	0.8	0.8	0.2	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.39
6	Bar-bender	0.8	0.8	0.2	0.6	0.6	0.6	0.8	1	1	0.8	0.2	0.2	0.4	0.4	0.39
7	Mason	0.2	0.2	0.2	0.2	0.6	0.2	0.6	0.6	0.8	0.6	0.4	0.4	0.2	0.4	0.20
8	Mason	0.6	0.4	0.2	1	0.4	0.2	0.6	0.8	1	0.8	0.4	0.2	0.4	0.2	0.23
9	Aluminium worker	1	1	0.2	0.2	0.4	0.2	0.6	0.2	0.6	0.2	0.4	0.2	0.4	0.2	0.23
10	Aluminium worker	1	1	0.6	0.2	0.2	0.4	0.6	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.53
11	Carpenter	0.6	0.8	0.2	0.2	0.2	0.2	1	0.6	0.4	0.8	0.2	0.2	0.2	0.2	0.21
12	Electrician	0.6	0.8	0.2	0.2	0.2	0.2	0.6	0.8	0.2	0.2	0.2	0.2	0.2	0.2	0.31

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
13	Welder	0.6	0.6	0.2	0.4	0.2	0.2	1	0.8	0.2	0.8	0.2	0.2	0.2	0.2	0.25
14	Mason	0.2	0.4	0.2	0.6	0.4	0.4	0.6	0.4	0.4	0.6	0.2	0.4	0.4	0.4	0.23
15	Mason	0.4	0.2	0.8	0.6	0.6	0.4	0.6	0.8	0.4	0.8	0.2	0.4	0.4	0.4	0.33
16	Carpenter	0.6	1	0.2	0.6	0.2	0.2	1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31
17	Electrician	1	1	0.8	0.8	0.4	0.4	0.6	0.8	0.8	0.2	0.4	0.4	0.4	0.4	0.28
18	Bar-bender	0.8	0.8	0.8	0.6	0.4	0.6	0.8	1	1	1	0.4	0.4	0.4	0.4	0.31
19	Concrete worker	1	1	1	0.6	0.2	0.2	1	0.6	0.4	0.6	0.2	0.4	0.4	0.4	0.52
20	Concrete worker	0.6	1	1	0.6	0.2	0.4	1	0.6	0.4	0.6	0.2	0.4	0.4	0.4	0.53
21	Electrician	1	1	0.2	0.2	0.2	0.4	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.37
22	Mason	0.6	0.8	0.2	0.2	0.2	0.2	0.8	0.4	0.8	0.6	0.6	0.6	0.4	0.4	0.28
23	Mason	1	1	0.2	0.6	0.2	0.4	0.4	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.21
24	Mason	0.8	0.8	0.4	0.6	0.4	0.6	1	0.2	0.8	0.2	0.2	0.2	0.2	0.2	0.60
25	Electrician	1	1	0.2	0.4	0.2	0.4	0.6	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.37
26	Mason	0.8	1	0.2	0.4	0.4	0.4	0.6	0.6	0.8	0.4	0.2	0.2	0.2	0.2	0.40
27	Mason	0.8	1	0.2	0.6	0.2	0.4	1	0.4	0.4	0.4	0.4	0.6	0.4	0.2	0.45
28	Plumber	0.8	0.8	0.2	0.6	0.2	0.4	0.6	0.2	0.8	0.8	0.4	0.4	0.4	0.4	0.32
29	Welder	0.8	0.8	0.4	0.2	0.2	0.2	0.4	0.2	0.8	0.8	0.2	0.2	0.2	0.2	0.32
30	Mason	0.4	0.4	0.4	0.6	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
31	Plumber	0.2	0.2	0.2	0.6	0.2	0.4	0.8	0.6	1	0.2	0.2	0.2	0.2	0.2	0.32
32	Welder	0.8	1	0.6	0.4	0.6	0.2	1	0.8	0.8	0.6	0.6	0.6	0.4	0.4	0.53
33	Electrician	0.6	0.6	0.2	0.2	0.2	0.2	0.8	0.8	0.4	0.2	0.2	0.2	0.2	0.2	0.20

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
34	Electrician	0.4	0.4	0.2	0.4	0.2	0.2	0.8	0.8	0.4	0.2	0.2	0.2	0.2	0.2	0.20
35	Rigger	0.4	0.2	0.4	0.6	0.2	0.2	0.4	0.8	1	1	0.2	0.2	0.2	0.2	0.20
36	Electrician	0.6	0.6	0.2	0.2	0.2	0.2	0.8	0.8	0.4	0.2	0.2	0.2	0.2	0.2	0.20
37	Rigger	0.6	0.6	0.2	0.6	0.2	0.4	0.6	1	0.8	1	0.4	0.4	0.2	0.4	0.35
38	Mason	0.2	0.2	0.4	0.6	0.2	0.2	0.6	0.2	0.6	0.8	0.2	0.2	0.2	0.2	0.20
39	Rigger	0.8	1	0.6	0.6	0.4	0.6	0.6	0.8	0.6	0.4	0.4	0.4	0.4	0.6	0.39
40	Mason	0.6	0.8	0.8	0.6	0.4	0.6	1	0.4	0.6	0.2	0.2	0.4	0.4	0.4	0.44
41	Mason	0.6	0.8	0.2	0.6	0.6	0.4	1	0.2	0.6	0.8	0.4	0.4	0.2	0.4	0.47
42	Concrete worker	0.4	0.8	0.2	0.6	0.4	0.4	0.6	0.4	0.4	0.2	0.4	0.2	0.4	0.4	0.41
43	Concrete worker	1	1	1	0.6	0.4	0.4	0.8	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.43
44	Bar-bender	0.6	0.6	0.2	0.6	0.2	0.4	0.6	1	1	1	0.2	0.4	0.6	0.4	0.36
45	Carpenter	0.6	0.8	0.2	0.2	0.2	0.4	0.6	0.4	0.4	0.2	0.4	0.2	0.4	0.4	0.31
46	Concrete worker	1	1	0.2	0.6	0.2	0.2	0.4	0.8	0.8	0.8	0.4	0.2	0.2	0.2	0.49
47	Mason	0.2	0.2	0.2	0.8	0.2	0.2	1	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.20
48	Mason	0.6	0.6	0.4	0.6	0.4	0.2	1	0.2	0.8	0.6	0.2	0.2	0.2	0.2	0.27
49	Rigger	0.6	0.8	0.2	0.6	0.2	0.2	0.2	0.8	1	1	0.2	0.2	0.2	0.2	0.37
50	Rigger	0.6	0.6	0.2	0.6	0.4	0.2	0.6	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.21
51	Mason	0.8	0.8	0.4	0.6	0.6	0.4	1	0.4	0.2	0.4	0.2	0.6	0.6	0.8	0.44
52	Carpenter	1	1	0.8	0.2	0.6	0.6	1	0.6	0.8	0.8	0.8	0.8	0.6	1	0.45
53	Plumber	0.4	0.6	0.2	0.6	0.2	0.2	0.6	0.8	0.8	0.4	0.4	1	0.6	0.8	0.35
54	Rigger	0.2	0.2	0.2	1	0.4	0.6	0.6	0.8	0.8	0.8	0.6	0.6	1	1	0.27

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
55	Electrician	0.8	1	0.2	0.6	0.2	0.6	1	0.8	0.8	0.8	0.4	0.6	0.4	0.6	0.52
56	Carpenter	0.6	0.8	0.4	0.2	0.2	0.4	0.6	1	1	0.4	0.6	0.8	0.6	1	0.27
57	Plumber	0.2	0.2	0.2	0.6	0.2	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.4	0.25
58	Carpenter	0.4	0.4	0.6	0.6	0.4	0.2	0.6	1	1	0.4	0.4	0.8	0.2	0.2	0.23
59	Carpenter	0.6	0.8	0.4	0.6	0.2	0.4	0.6	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.36
60	Bar-bender	0.6	0.8	0.8	0.6	0.2	0.4	0.2	0.4	0.2	0.2	0.4	0.2	0.2	0.2	0.43
61	Concrete worker	0.8	0.8	0.2	0.6	0.2	0.4	0.8	0.4	0.2	0.2	0.4	0.4	0.4	0.4	0.29
62	Rigger	0.6	0.8	0.6	0.6	0.2	0.4	0.8	0.8	1	0.2	0.4	0.2	0.2	0.2	0.37
63	Mason	0.4	0.2	0.4	0.4	0.2	0.2	0.4	0.6	0.8	0.6	0.4	0.2	0.2	0.2	0.36
64	Electrician	0.8	0.8	0.2	0.2	0.2	0.2	0.6	0.8	0.8	0.8	0.2	0.2	0.2	0.4	0.37
65	Concrete worker	1	1	0.4	0.8	0.6	0.6	0.8	0.4	0.8	0.6	0.4	0.6	0.6	0.8	0.60
66	Welder	0.8	1	0.4	0.4	0.4	0.6	1	1	1	1	0.4	0.6	0.8	0.8	0.39
67	Mason	0.8	0.8	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.6	0.2	0.2	0.2	0.4	0.33
68	Welder	1	1	0.6	0.6	0.6	0.6	1	1	1	1	0.4	0.4	0.8	0.6	0.53
69	Plumber	0.6	0.6	0.2	0.2	0.4	0.2	0.2	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.39
70	Mason	0.4	0.2	0.2	0.4	0.2	0.2	0.4	0.6	0.8	0.4	0.2	0.4	0.2	0.2	0.33
71	Mason	0.6	0.4	0.2	0.2	0.2	0.4	0.4	0.8	0.6	0.6	0.2	0.2	0.2	0.2	0.35
72	Electrician	0.8	0.8	0.4	0.2	0.2	0.2	1	0.8	0.6	0.6	0.2	0.2	0.2	0.2	0.37
73	Carpenter	0.4	0.4	0.2	0.4	0.2	0.2	0.6	0.6	0.6	0.6	0.4	0.6	0.4	0.4	0.31
74	Rigger	0.4	0.2	0.4	0.6	0.4	0.2	0.4	1	0.8	1	0.2	0.2	0.2	0.2	0.35
75	Carpenter	0.2	0.2	0.2	0.6	0.2	0.2	0.4	0.4	0.8	0.8	0.2	0.4	0.4	0.2	0.35

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
76	Carpenter	0.6	0.6	0.2	0.2	0.2	0.2	1	0.2	0.4	0.2	0.2	0.4	0.2	0.2	0.20
77	Rigger	0.4	0.2	0.2	0.2	0.2	0.2	1	0.8	0.4	0.2	0.4	0.6	0.6	0.6	0.37
78	Rigger	0.8	1	0.6	0.2	0.2	0.6	0.8	0.8	1	0.4	0.6	0.6	1	0.4	0.37
79	Mason	0.6	0.4	0.2	0.6	0.2	0.2	1	0.8	0.6	0.8	0.2	0.2	0.2	0.2	0.20
80	Welder	0.6	0.6	1	0.4	0.4	0.2	1	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.43
81	Plumber	0.6	0.6	0.4	0.6	0.6	0.2	0.6	0.6	0.8	0.6	0.2	0.4	0.4	0.2	0.36
82	Welder	0.6	0.4	0.2	0.2	0.2	0.2	0.4	0.8	0.8	0.2	0.2	0.2	0.6	0.2	0.20
83	Electrician	0.4	0.4	0.2	0.2	0.2	0.2	0.8	1	0.2	0.2	0.2	0.2	0.2	0.2	0.20
84	Rigger	0.4	0.4	1	0.6	0.2	0.6	0.4	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.53
85	Bar-bender	0.6	0.6	1	0.6	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
86	Mason	0.4	0.6	1	0.8	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
87	Rigger	0.4	0.2	1	0.6	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.32
88	Concrete worker	0.6	0.8	1	1	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.52
89	Bar-bender	0.8	1	1	0.6	0.2	0.4	0.8	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.48
90	Plumber	0.8	1	1	0.6	0.4	0.4	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
91	Carpenter	1	1	1	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.59
92	Concrete worker	0.8	0.8	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.6	0.4	0.6	0.4	0.8	0.51
93	Mason	0.6	0.6	0.6	0.6	0.4	0.4	0.6	0.6	0.6	0.6	0.4	0.6	0	0.6	0.39
94	Welder	0.4	0.4	0.4	1	0.4	0.6	0.8	0.6	0.6	0.6	0.4	0.6	0.4	0.6	0.36
95	Mason	0.8	0.8	1	1	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.60
96	Mason	0.6	1	0.2	0.8	0.2	0.4	1	0.8	0.6	0.2	0.2	0.4	0.2	0.4	0.51

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
97	Carpenter	0.4	0.4	0.2	0.6	0.6	0.6	0.8	0.2	0.2	0.4	0.6	0.6	0.4	0.2	0.27
98	Carpenter	0.6	0.6	0.2	0.6	0.4	0.4	0.8	0.2	0.4	0.4	0.6	0.6	0.6	0.6	0.20
99	Electrician	0.6	0.6	0.2	0.2	0.2	0.2	0.6	1	0.8	0.2	0.6	0.6	0.6	0.8	0.47
100	Electrician	0.4	0.2	0.2	0.4	0.4	0.2	1	1	0.8	0.2	0.6	0.6	0.6	0.8	0.29
101	Mason	0.6	1	0.8	0.6	0.2	0.6	0.8	0.8	0.6	0.4	0.2	0.2	0.2	0.2	0.41
102	Mason	0.2	0.2	0.2	0.6	0.6	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.27
103	Mason	0.2	0.2	0.2	0.6	0.6	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.20
104	Mason	0.4	0.4	0.2	0.2	0.4	0.2	0.8	0.4	0.4	0.4	0.6	0.6	0.6	0.6	0.20
105	Mason	0.2	0.2	0.2	0.8	0.4	1	0.6	0.2	0.2	0.2	0.4	0.4	0.4	0.2	0.40
106	Mason	0.6	0.6	0.2	0.6	0.4	0.2	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.32
107	Mason	1	1	0.2	0.6	0.4	0.6	0.2	0.4	0.4	0.4	0.6	0.6	0.4	0.4	0.45
108	Mason	0.2	0.4	0.2	1	0.2	0.2	0.8	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.39
109	Mason	0.4	0.4	0.2	0.6	0.2	0.6	0.8	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.20
110	Carpenter	0.4	0.6	0.2	0.4	0.2	0.4	1	0.2	0.4	0.2	0.2	0.2	0.2	0.4	0.23
111	Carpenter	0.6	0.8	0.2	0.8	0.4	0.8	0.8	0.6	0.6	0.8	0.2	0.2	0.2	0.4	0.25
112	Rigger	0.4	0.2	0.2	0.8	0.6	0.2	1	0.8	0.2	0.2	0.4	0.4	0.4	0.4	0.20
113	Bar-bender	0.6	0.6	1	0.6	0.4	0.6	0.4	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.47
114	Electrician	0.6	0.8	0.6	0.4	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
115	Bar-bender	0.6	0.6	1	0.6	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
116	Rigger	0.4	0.4	0.2	0.6	0.2	0.4	0.6	1	1	1	0.2	0.2	0.4	0.2	0.35
117	Rigger	0.4	0.2	0.4	0.2	0.2	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
118	Plumber	0.8	1	0.2	0.4	0.2	0.4	0.4	0.8	1	0.6	0.4	0.6	0.6	0.6	0.49
119	Bar-bender	0.6	0.6	0.4	0.2	0.4	0.6	0.8	1	0.8	1	0.4	0.4	0.4	0.4	0.35
120	Mason	0.4	0.2	0.4	0.8	0.4	0.4	0.6	0.8	1	1	0.6	0.8	0.6	0.6	0.40
121	Rigger	0.4	0.8	0.6	0.8	0.2	0.4	0.4	0.8	0.8	0.8	0.8	0.4	0.6	0.8	0.45
122	Concrete worker	1	1	0.4	0.2	0.2	0.6	0.6	0.8	0.8	0.4	0.2	0.4	0.4	0.4	0.40
123	Concrete worker	1	1	0.6	0.6	0.6	0.4	0.8	0.8	1	0.8	0.6	0.4	0.4	0.6	0.43
124	Concrete worker	1	1	0.8	0.8	0.6	0.6	0.8	1	1	0.6	0.8	0.6	0.8	0.8	0.68
125	Rigger	0.4	0.4	0.4	0.4	0.2	0.6	0.8	0.8	0.8	0.2	0.8	0.4	0.8	0.6	0.47
126	Electrician	0.2	0.2	0.2	0.6	0.6	0.2	1	0.2	0.6	0.2	0.4	0.4	0.4	0.2	0.20
127	Rigger	0.2	0.2	0.2	0.6	0.2	0.2	0.2	1	0.2	0.8	0.2	0.2	0.2	0.2	0.20
128	Rigger	0.6	0.8	0.4	0.2	0.2	0.4	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.2	0.23
129	Mason	0.4	0.2	0.6	0.2	0.2	0.4	0.6	0.2	0.6	0.2	0.2	0.2	0.4	0.2	0.24
130	Plumber	0.4	0.6	0.8	0.8	0.4	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
131	Mason	0.6	0.8	0.4	0.6	0.4	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
132	Mason	0.6	0.6	1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.40
133	Carpenter	0.4	0.4	1	0.8	0.4	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.37
134	Concrete worker	0.2	0.4	0.4	1	0.4	0.6	1	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
135	Carpenter	0.2	0.2	1	0.6	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
136	Welder	0.8	1	1	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.49
137	Mason	0.2	0.2	1	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
138	Rigger	0.4	0.4	0.4	0.6	0.2	0.8	0.8	0.2	1	0.2	0.4	0.4	0.6	0.6	0.44

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
139	Bar-bender	0.4	0.6	1	0.6	0.2	0.2	0.6	0.2	0.8	0.2	0.2	0.2	0.2	0.2	0.20
140	Concrete worker	1	1	0.6	0.6	0.8	0.4	1	0.8	0.8	0.4	0.2	0.2	0.2	0.2	0.60
141	Bar-bender	0.2	0.2	0.2	0.6	0.2	0.4	1	0.8	1	1	0.4	0.4	0.4	0.4	0.25
142	Electrician	0.6	0.8	0.2	0.4	0.2	0.4	1	1	1	1	1	1	0.6	0.8	0.48
143	Rigger	0.4	0.6	0.6	0.2	0.2	0.4	0.8	0.4	0.2	0.2	0.2	0.4	0.4	0.4	0.35
144	Welder	0.6	0.8	0.8	0.8	0.6	0.6	1	1	1	1	0.4	1	0.8	0.8	0.45
145	Concrete worker	0.4	1	0.2	0.6	0.2	0.4	0.6	0.8	0.8	0.2	1	0.8	0.8	0.4	0.47
146	Carpenter	0.6	0.4	0.2	0.6	0.2	0.4	0.4	1	0.8	0.8	1	0.8	0.6	0.8	0.39
147	Mason	0.6	0.4	0.2	1	1	0.2	0.8	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.29
148	Bar-bender	0.4	0.6	0.8	0.6	0.2	0.2	0.6	0.2	0.6	0.2	0.6	0.2	0.2	0.4	0.52
149	Welder	0.6	0.6	0.2	0.2	0.2	0.2	0.6	1	0.2	1	0.2	0.2	0.2	0.2	0.20
150	Carpenter	0.8	0.8	0.6	0.6	0.2	0.2	0.6	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.21
151	Rigger	0.6	0.6	0.8	0.2	0.2	0.6	0.8	0.2	0.8	0.2	0.2	0.2	0.2	0.2	0.43
152	Bar-bender	0.6	0.4	0.2	0.6	0.2	0.2	1	0.4	0.8	0.8	0.2	0.2	0.2	0.2	0.20
153	Mason	0.6	0.6	0.2	0.2	0.2	0.4	0.6	0.4	0.8	0.8	0.2	0.2	0.2	0.2	0.20
154	Mason	0.8	0.8	0.6	0.2	0.2	0.4	0.8	0.4	0.8	0.8	0.2	0.2	0.2	0.2	0.51
155	Carpenter	0.4	0.2	0.6	0.6	0.2	0.4	0.6	0.4	0.8	0.8	0.2	0.2	0.2	0.2	0.23
156	Mason	0.2	0.6	0.2	0.8	0.6	0.2	1	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.20
157	Mason	0.4	0.8	0.2	1	0.6	0.6	0.8	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.40
158	Mason	0.6	0.8	0.2	1	0.4	0.6	0.8	0.6	0.6	0.4	0.6	0.4	0.8	0.4	0.44
159	Mason	0.4	0.4	0.6	0.8	0.2	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
160	Welder	0.2	0.2	0.6	0.8	0.2	0.6	0.8	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
161	Mason	0.6	0.8	0.4	1	0.2	0.6	0.8	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.39
162	Aluminium worker	1	1	0.2	0.6	0.6	0.4	0.6	0.4	0.8	0.4	0.4	0.6	0.4	0.4	0.52
163	Welder	0.8	1	0.8	0.6	0.6	0.8	0.8	1	1	1	0.6	0.6	0.4	0.4	0.59
164	Mason	0.4	0.4	0.2	0.8	0.4	0.2	0.6	0.8	1	0.4	0.2	0.2	0.2	0.2	0.37
165	Mason	0.2	0.2	0.2	0.6	0.2	0.2	0.6	0.8	0.8	0.6	0.2	0.2	0.2	0.2	0.35
166	Mason	0.4	0.6	0.2	0.6	0.2	0.4	0.6	0.8	0.8	0.8	0.4	0.2	0.2	0.2	0.37
167	Mason	0.4	0.8	0.2	0.6	0.4	0.4	0.6	0.8	0.8	0.8	0.4	0.2	0.2	0.2	0.32
168	Carpenter	0.6	0.8	0.8	1	0.2	0.6	0.8	1	1	0.8	0.2	0.2	0.4	0.2	0.51
169	Electrician	0.8	1	0.4	0.4	0.4	0.4	0.6	0.8	1	0.8	0.4	0.4	0.4	0.2	0.52
170	Welder	1	1	0.2	0.6	0.6	0.4	0.6	0.8	0.8	1	0.4	0.4	0.4	0.2	0.63
171	Rigger	0.2	0.2	0.2	0.4	0.6	0.2	0.8	1	1	0.8	0.4	0.2	0.2	0.2	0.31
172	Bar-bender	0.6	0.8	0.8	0.2	0.2	0.4	0.6	1	1	1	0.2	0.2	0.4	0.2	0.43
173	Rigger	0.8	1	0.6	0.6	0.6	0.4	1	1	0.8	1	0.4	0.6	0.4	0.4	0.41
174	Mason	0.4	0.4	0.6	0.8	0.6	0.2	0.6	0.8	0.8	0.6	0.2	0.2	0.2	0.4	0.35
175	Mason	0.6	0.6	0.4	0.6	0.6	0.4	0.6	0.6	0.8	0.6	0.4	0.2	0.4	0.2	0.39
176	Rigger	1	1	0.2	0.6	0.6	0.4	1	1	1	1	0.4	0.4	0.4	0.4	0.48
177	Welder	1	1	0.4	0.6	0.6	0.4	1	1	1	1	0.4	0.6	0.4	0.4	0.48
178	Carpenter	0.4	0.4	0.2	0.6	0.2	0.2	0.6	0.8	1	0.8	0.2	0.2	0.2	0.2	0.32
179	Electrician	0.4	0.4	0.2	0.4	0.2	0.2	0.4	1	1	1	0.2	0.2	0.2	0.2	0.32
180	Rigger	0.8	0.8	0.4	0.6	0.6	0.4	1	1	1	1	0.4	0.4	0.4	0.4	0.51

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
181	Plumber	0.8	0.8	0.6	0.4	0.6	0.2	0.6	0.8	0.8	0.8	0.4	0.4	0.6	0.4	0.53
182	Welder	0.6	0.8	0.2	0.2	0.2	0.2	0.6	1	1	1	0.2	0.2	0.2	0.2	0.40
183	Electrician	0.6	0.8	0.2	0.4	0.2	0.2	0.6	0.8	1	1	0.2	0.2	0.2	0.2	0.41
184	Carpenter	0.2	0.2	0.6	0.8	0.4	0.2	1	0.6	1	0.8	0.2	0.2	0.4	0.4	0.37
185	Mason	0.2	0.2	0.2	0.6	0.2	0.2	0.4	0.8	1	0.6	0.2	0.2	0.2	0.2	0.32
186	Welder	0.8	1	0.2	0.6	0.6	0.2	0.8	1	1	1	0.4	0.4	0.4	0.4	0.47
187	Carpenter	0.6	0.4	0.6	0.6	0.6	0.2	0.6	0.8	1	0.8	0.2	0.4	0.2	0.4	0.37
188	Plumber	0.6	0.8	0.6	0.4	0.4	0.4	0.8	0.8	1	0.8	0.2	0.2	0.2	0.4	0.39
189	Plumber	0.6	0.8	0.4	0.4	0.2	0.2	0.4	0.6	0.8	0.6	0.2	0.4	0.4	0.2	0.44
190	Electrician	0.8	1	0.2	0.4	0.4	0.2	0.6	1	1	1	0.2	0.2	0.2	0.2	0.40
191	Electrician	0.8	1	0.4	0.4	0.4	0.2	0.8	1	1	1	0.4	0.2	0.2	0.4	0.47
192	Mason	0.4	0.2	0.2	0.6	0.2	0.2	0.6	0.8	1	0.6	0.2	0.2	0.2	0.2	0.33
193	Carpenter	0.2	0.2	0.6	0.8	0.2	0.4	1	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.29
194	Rigger	0.2	0.2	0.2	0.8	0.2	0.2	0.6	1	1	1	0.2	0.4	0.2	0.2	0.32
195	Mason	0.6	0.8	0.2	0.2	0.2	0.2	0.4	0.6	0.8	0.6	0.2	0.4	0.2	0.2	0.40
196	Rigger	0.4	0.2	0.4	0.8	0.4	0.2	0.6	0.8	0.8	0.8	0.2	0.2	0.4	0.2	0.28
197	Bar-bender	0.6	0.4	0.2	0.4	0.4	0.2	0.4	0.8	0.8	0.8	0.2	0.4	0.2	0.2	0.28
198	Concrete worker	1	1	0.6	0.6	0.6	0.4	0.8	0.6	1	0.6	0.4	0.6	0.8	0.6	0.59
199	Plumber	0.6	0.6	0.4	0.6	0.4	0.2	0.8	0.6	0.8	0.6	0.4	0.4	0.4	0.2	0.31
200	Concrete worker	1	1	0.4	0.8	0.6	0.2	0.8	0.6	0.8	0.6	0.4	0.6	0.6	0.6	0.49
201	Mason	0.2	0.2	0.2	0.4	0.2	0.2	0.4	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.27

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
202	Rigger	0.2	0.2	0.2	0.8	0.4	0.2	1	0.8	1	0.8	0.4	0.4	0.2	0.2	0.27
203	Mason	0.4	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.27
204	Carpenter	0.4	0.4	0.4	0.4	0.2	0.2	0.6	0.6	0.8	0.8	0.2	0.2	0.2	0.2	0.29
205	Mason	0.6	0.4	0.8	1	0.6	0.6	1	0.8	0.8	0.6	0.6	0.4	0.4	0.6	0.40
206	Plumber	0.6	0.6	0.2	0.2	0.2	0.2	0.4	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.31
207	Bar-bender	0.8	0.8	0.2	0.6	0.2	0.2	0.4	1	0.8	1	0.2	0.2	0.2	0.2	0.33
208	Welder	1	1	0.4	0.4	0.4	0.2	1	1	1	1	0.4	0.2	0.2	0.4	0.45
209	Concrete worker	1	1	0.6	0.6	0.6	0.4	0.8	0.6	1	0.6	0.6	0.6	0.4	0.4	0.60
210	Mason	0.2	0.4	0.2	0.4	0.2	0.2	0.4	0.6	0.6	0.6	0.2	0.2	0.2	0.4	0.29
211	Electrician	0.8	1	0.2	0.2	0.2	0.2	0.4	1	0.6	0.8	0.2	0.2	0.2	0.2	0.33
212	Carpenter	0.2	0.2	0.2	1	0.6	0.2	0.8	0.6	0.8	0.8	0.2	0.2	0.2	0.2	0.31
213	Mason	0.4	0.2	0.2	0.4	0.2	0.2	0.4	0.6	0.6	0.6	0.2	0.2	0.2	0.2	0.28
214	Bar-bender	0.6	0.8	0.8	0.6	0.6	0.2	1	0.8	0.8	1	0.6	0.6	0.6	0.6	0.40
215	Rigger	0.6	0.6	0.2	0.2	0.2	0.2	0.4	1	0.6	0.8	0.2	0.2	0.2	0.2	0.29
216	Mason	0.6	0.6	0.2	0.4	0.2	0.2	0.4	0.8	0.8	0.6	0.2	0.2	0.2	0.4	0.39
217	Concrete worker	1	1	0.6	0.8	0.6	0.6	1	0.6	1	0.6	0.6	0.4	0.4	0.6	0.56
218	Electrician	0.8	0.8	0.2	0.2	0.2	0.2	0.2	0.8	0.8	0.8	0.2	0.2	0.2	0.2	0.35
219	Welder	1	0.8	0.6	0.6	0.6	0.2	1	0.8	0.8	0.8	0.6	0.6	0.6	0.4	0.48
220	Electrician	0.4	0.4	0.2	0.2	0.2	0.2	0.4	0.8	1	0.8	0.2	0.4	0.4	0.2	0.32
221	Mason	0.6	0.4	0.2	0.6	0.4	0.2	0.6	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.35
222	Plumber	0.8	1	0.2	0.4	0.4	0.2	1	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.41

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
223	Rigger	0.4	0.4	0.2	0.6	0.2	0.2	0.6	0.8	1	0.8	0.2	0.2	0.2	0.2	0.28
224	Bar-bender	0.6	0.8	0.2	0.2	0.2	0.2	0.6	0.8	1	0.8	0.2	0.2	0.2	0.2	0.28
225	Mason	0.6	0.6	0.2	0.4	0.2	0.2	0.4	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.32
226	Welder	1	1	0.6	0.8	0.6	0.6	0.8	1	0.8	1	0.6	0.6	0.6	0.4	0.59
227	Concrete worker	1	1	0.4	0.6	0.6	0.4	1	0.6	0.8	0.4	0.6	0.4	0.6	0.6	0.56
228	Carpenter	0.2	0.2	0.4	0.6	0.4	0.2	0.6	0.8	0.4	0.4	0.2	0.2	0.2	0.2	0.33
229	Mason	0.4	0.4	0.2	0.6	0.4	0.2	0.4	0.8	1	0.6	0.2	0.4	0.2	0.4	0.31
230	Electrician	0.6	0.8	0.2	0.2	0.2	0.2	0.4	1	1	1	0.2	0.2	0.2	0.2	0.29
231	Bar-bender	1	1	0.6	0.6	0.6	0.4	1	0.8	1	0.8	0.4	0.4	0.6	0.4	0.52
232	Rigger	0.4	0.4	0.2	0.4	0.2	0.2	0.6	1	1	0.8	0.2	0.2	0.2	0.2	0.29
233	Concrete worker	1	1	0.8	0.6	0.6	0.6	0.8	0.8	1	0.6	0.6	0.6	0.4	0.4	0.59
234	Welder	0.8	0.8	0.4	0.6	0.6	0.2	1	1	1	1	0.6	0.6	0.4	0.6	0.36
235	Plumber	0.6	0.6	0.2	0.4	0.2	0.2	0.8	0.8	0.8	0.6	0.4	0.6	0.4	0.4	0.32
236	Rigger	0.4	0.2	0.2	0.6	0.2	0.2	0.4	1	1	1	0.4	0.2	0.2	0.2	0.29
237	Plumber	0.2	0.2	0.8	1	0.6	0.2	0.8	0.6	0.8	0.6	0.6	0.6	0.4	0.6	0.41
238	Mason	0.4	0.2	0.2	0.8	0.6	0.2	1	0.8	1	0.6	0.4	0.6	0.4	0.4	0.35
239	Electrician	0.4	0.2	0.2	0.6	0.4	0.2	0.6	0.8	1	0.8	0.4	0.4	0.4	0.4	0.35
240	Mason	0.6	0.6	0.2	0.4	0.2	0.2	0.6	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.40
241	Electrician	0.8	0.8	0.4	0.6	0.4	0.4	0.8	0.8	1	0.8	0.2	0.4	0.4	0.2	0.44
242	Welder	1	1	0.2	0.6	0.4	0.6	0.6	1	1	1	0.4	0.6	0.4	0.4	0.52
243	Bar-bender	0.6	0.8	0.2	0.6	0.2	0.2	0.6	1	1	1	0.4	0.4	0.2	0.2	0.36

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
244	Plumber	0.2	0.2	0.4	0.4	0.2	0.2	0.4	0.6	0.8	0.6	0.4	0.2	0.2	0.2	0.36
245	Rigger	0.6	0.8	0.2	0.2	0.2	0.2	0.6	0.8	0.8	0.8	0.2	0.2	0.2	0.4	0.37
246	Concrete worker	1	1	0.4	0.8	0.6	0.6	0.8	0.4	0.8	0.6	0.4	0.6	0.6	0.8	0.60
247	Welder	0.8	0.8	0.4	0.4	0.4	0.6	1	1	1	1	0.4	0.6	0.8	0.8	0.39
248	Carpenter	0.8	0.8	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.6	0.2	0.2	0.2	0.4	0.33
249	Rigger	0.8	1	0.6	0.6	0.6	0.6	1	1	1	1	0.4	0.4	0.8	0.6	0.53
250	Mason	0.6	0.6	0.2	0.2	0.4	0.2	0.2	0.6	0.8	0.6	0.2	0.2	0.2	0.2	0.39
251	Mason	0.4	0.2	0.2	0.4	0.2	0.2	0.4	0.6	0.8	0.4	0.2	0.4	0.2	0.2	0.33
252	Mason	0.6	0.6	0.2	0.2	0.2	0.4	0.4	0.8	0.6	0.6	0.2	0.2	0.2	0.2	0.35
253	Electrician	0.8	0.8	0.4	0.2	0.2	0.2	1	0.8	0.6	0.6	0.2	0.2	0.2	0.2	0.37
254	Plumber	0.4	0.4	0.2	0.4	0.2	0.2	0.6	0.6	0.6	0.6	0.4	0.6	0.4	0.4	0.31
255	Rigger	0.2	0.2	0.4	0.6	0.4	0.2	0.4	1	0.8	1	0.2	0.2	0.2	0.2	0.35
256	Mason	0.2	0.2	0.2	0.6	0.2	0.2	0.4	0.4	0.8	0.8	0.2	0.4	0.4	0.2	0.35
257	Plumber	0.8	0.8	0.2	0.2	0.2	0.2	0.4	0.4	0.6	0.4	0.2	0.2	0.4	0.4	0.40
258	Mason	0.4	0.2	0.2	0.4	0.2	0.2	0.4	0.4	0.6	0.4	0.2	0.2	0.4	0.2	0.32
259	Electrician	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.8	0.6	0.6	0.2	0.4	0.4	0.4	0.33
260	Mason	0.2	0.2	0.2	0.6	0.2	0.2	0.6	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.31
261	Carpenter	1	1	0.8	0.6	0.4	0.4	0.8	0.8	1	0.8	0.4	0.4	0.6	0.6	0.59
262	Plumber	0.4	0.6	0.6	0.8	0.8	0.4	1	0.4	0.8	0.6	0.4	0.8	0.8	0.4	0.44
263	Electrician	0.8	1	0.2	0.4	0.4	0.2	0.6	0.8	0.8	0.8	0.2	0.6	0.4	0.4	0.44
264	Electrician	0.6	0.6	0.4	0.2	0.2	0.2	0.6	1	0.6	0.4	0.2	0.4	0.4	0.2	0.31

No.	Category	IF-1	IF-2	IF-3	IF-4	IF-5	IF-6	IF-7	IF-8	IF-9	IF-10	IF-11	IF-12	IF-13	IF-14	Expected USBS
265	Mason	0.4	0.2	0.2	0.4	0.2	0.2	0.6	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.35
266	Carpenter	0.6	0.6	0.6	0.6	0.6	0.4	1	0.6	0.8	0.8	0.6	0.6	0.6	0.6	0.41
267	Mason	0.4	0.2	0.4	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.2	0.2	0.6	0.4	0.33
268	Carpenter	0.8	1	0.6	0.6	0.4	0.4	0.6	0.6	0.6	0.8	0.4	0.6	0.4	0.6	0.53
269	Welder	0.6	0.8	0.2	0.2	0.2	0.4	0.6	1	1	1	0.4	0.6	0.4	0.4	0.33
270	Carpenter	0.4	0.6	1	0.8	0.8	0.4	1	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.56
271	Mason	0.2	0.2	0.2	0.4	0.2	0.2	0.6	0.4	0.4	0.4	0.2	0.4	0.4	0.2	0.28
272	Rigger	1	1	0.6	0.8	0.6	0.6	1	1	1	1	0.6	0.6	0.6	0.8	0.60
273	Carpenter	1	1	0.8	0.8	0.6	0.4	1	0.6	0.6	0.8	0.6	0.6	0.8	0.6	0.60
274	Electrician	1	1	0.2	0.2	0.2	0.4	1	0.8	0.8	0.8	0.6	0.6	0.4	0.6	0.39
275	Concrete worker	1	1	0.4	0.8	0.6	0.4	1	0.4	0.8	0.4	0.6	0.6	0.8	0.6	0.55
276	Welder	1	1	0.6	0.6	0.6	0.4	0.6	1	1	1	0.4	0.2	0.4	0.2	0.49
277	Mason	0.4	0.2	0.6	0.8	0.4	0.4	0.8	0.6	0.8	0.6	0.2	0.2	0.6	0.4	0.40

Appendix 6: List of publications

Research papers published and presented in international conferences:

- Manjula N.H.C., and De Silva, N., (2013).Strengthening the safety culture for organizational sustainability. In *proceedings of the CIOB 2nd World Construction Symposium, 2013,* 14th-15th June 2013, Colombo, Sri Lanka
- Manjula N.H.C., and De Silva, N., (2013). A study on the factors affecting safety behaviour of construction workers. *FARU International Research Symposium*, 13th-14th December 2013, Hambantota, Sri Lanka.
- Manjula N.H.C., and De Silva, N., (2014). Factors influencing safety behaviours of construction workers. In *proceedings of the CIOB 3rd World Construction Symposium, 2014,* 20th -22ndJune 2014, Colombo, Sri Lanka.