PROGRAM OF QUANTITY SURVEYING DEPARTMENT OF
BUILT ENVIRONMENT STUDIES AND TECHNOLOGY
FACULTY OF ARCHITECTURE. PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA PERAK BRANCH

CRANE ACCIDENTS IN CONSTRUCTION SITE FROM CONTRACTORS' PERSPECTIVE

Dissertation submitted in partial fulfillment
of the requirement for the award of
Bachelor of Quantity Surveying (Honours)

PREPARED BY: BADRUL AMIN BN KHIF NOOR (2019461286)
SEMESTER: SEPTEMBER 2019 – FEBRUARY 2022

ABSTRACT

Moving large heavy loads is crucial to today's construction industries. Heavy material, machineries and construction components are among the heavy loads that required crane to lift. Unfortunately, there are cases of crane accidents in the construction site that can cause injuries or even fatal accidents towards the workers. Public safety and properties are among the victim of the crane accidents due to the huge impact of the crane accidents. The aim of this research is to look for the causes of the crane accidents based on the previous cases. The objectives are to give recommendations on how to eliminate the crane accidents based on the causes stated. In pursuit to achieve the objective, the sampling method that is implement for this research is purposive sampling and there were 519 G7 contractors in Pulau Pinang that were registered under Construction Industry Development Board, 140 questionnaires are distributed to G7 contractors in Pulau Pinang. All the data has been analysed by using the Statistical Package for Social Science (SPSS) software. The outcome of this research shows that, the contractors strongly agree with the impact of the crane accidents and identify the causes of the crane accident with their own experienced. The result of this study may be used as an alternative to lower the possibility of the crane accident since the recommendation is clearly stated.

ACKNOWLEDGEMENT

In the name of ALLAH, the Almighty, the Most Beneficent and the Most Merciful. I want to express my sincere gratitude to Him that I have managed to accomplish this work and the task would not be done if not of His support and guidance as it is today. I want to express my gratitude to the people and all parties who responded and gave invaluable contributions in executing this dissertation.

I would love to take this opportunity to express my gratitude and appreciation to my supervisor for the support, encouragement, and ongoing advice during the completion of this dissertation. She had greatly encouraged me to work on this final project. Her insightful supervision, encouragement, thoughtful criticism throughout the research and her creative suggestions are also a special thank you. Without the support from her, completion of this project would not have been possible.

I would also like to express my gratitude to those who have helped me in achieving this research aim and objective by agreeing to be surveyed and sharing their expertise and insight on the realities of the construction sector. I am also indebted to all my friends for their moral support and encouragement of all the ways in which I prepared this dissertation.

Lastly, I would love to give my appreciation to my beloved parents and family who keep on giving me their encouragement and moral support whenever I need it to complete this final project. Thank you for all the understanding that I received throughout the process.

Thank you.

TABLE OF CONTENTS

1.1 INTRODUCTION

The National Institute of Occupational Safety and Health (NIOSH) expressed concern about the increasing numbers of construction-related and crane-related accidents. According to the Social Security Organizational, 7,388 accidents were registered in the construction industry in 2016, increasing from 4330 cases in 2011, an increase of 69.47 percent. This accident was caused by a number of factors, including a failure to wear personal safety equipment, a lack of supervision, and a failure to comply the safe use of tools, vehicles, and machinery. Construction site accidents are caused by mistakes made by either the construction companies or the workers.

According to Department of Occupational Safety and Health and Social Security Organizational from 2013-2016 secondary data, this study conducts a descriptive exploration survey to identified common fatal occupational injuries associated with the Malaysian sector as well as their causes and accidental agents. Result indicated the construction, followed by manufacturing, agriculture, forestry, logging, and fishery are the riskiest job in Malaysia. Those accidents can cause cost overrun and delay in completion of projects. The findings of this study can help to raise construction employees' awareness and knowledge in order to reduce the number of accidents on the construction site. Construction accidents caused by natural disasters are unpredictable, the contractor can only make critical decision to minimize damages towards the construction site.