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Reluctance to Change: Key Factors of Foreign Labours' Safety Non-Compliance Behaviours

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Abstract: Cultural and behavioural differences are the main aspects of reluctance to practise proper safety in the workplace in Malaysia. This is because foreign labourers have monopolised the Malaysian construction sector at the operational level since the early 1980s. Accordingly, the current study examined the key factors of reluctance in practising proper safety from a construction foreign labourers' behavioural perspective. A total of nine semi-structured interviews were conducted with selected construction professionals working closely with foreign labourers at the operational level. Their responses were analysed using thematic analysis through familiarisation of the data coded to determine the main factors and sub-factors. The results revealed that age, cultural diversity, callowness, ignorance, overconfidence, carelessness, oversight and misjudgement were the eight key factors in reluctance to practise safety among foreign labourers in Malaysian construction sites. This study believes that a high level of safety compliance among foreign labourers can be achieved when these factors are assessed in greater depth.

Keywords: Reluctance, Foreign labours, Safety compliances, Safety behaviours, Safety non-compliance behaviours

INTRODUCTION

The foreign labour workforce is vital in advancing a country's development (Najib et al., 2018). However, due to the influx of foreign labourers in the construction sector, safety disciplinary and misconduct issues involving foreign labourers are often reported (Zulkeflee et al., 2020; 2022a). Globally, the problem of safety non-compliance in the construction industry has been extensively addressed by previous researchers (Hasmori, Akhir and Said, 2020). These suboptimal practices are particularly prevalent in many developing countries where safety is not perceived as a crucial necessity (Zulkeflee et al., 2023). In such contexts, the prioritisation of income often takes precedence over the importance of safety (Keng and Razak, 2014).

In Malaysia, a comparable trend is observed among construction labourers, with the operational level largely dominated by foreign labourers from developing countries (Najib et al., 2018). The reluctance of foreign labourers to practise

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proper safety is not a new subject, as numerous studies have proven that safety non-compliance behaviour is the main factor (Williams, Hamid and Misnan, 2018; Hasmori, Akhir and Said, 2020; Zulkeflee et al., 2022a). One of the causal factors in accidents on the construction site is the unethical habits and behaviour of the foreign labourers, such as violating safety procedures, disobeying safety instructions and ignoring safety precautions (Williams, Hamid and Misnan, 2018). Foreign labourers behave in such a way due to their personal decisions and behaviours (Hasmori, Akhir and Said, 2020). For example, foreign labourers are likely to take shortcuts while performing a task, which would lead to ignorance when practising proper safety (Aliabadi et al., 2018). Eventually, the rates of accidents, incidents and near misses increase drastically, if this matter is not curbed and controlled from the beginning (Agyekum, Simons and Botchway, 2018).

There is a lack of published data and analysis on the actual reasons for safety non-compliance with Occupational Safety and Health (OSH) legislation among construction foreign labourers (Hamid, Majid and Singh, 2008). Previous scholars emphasise the management's responsibility to invest in safety, but they rarely focus on the safety attitudes and behaviours of each individual exposed to hazards (Williams, Hamid and Misnan, 2018; Azmi and Misnan, 2013; Kemei, Kaluli and Kabubo, 2015; Aniekwu, 2007; Zulkeflee et al., 2020). Furthermore, most of the safety literature has focused on the enhancement of safety compliance from a management perspective (Zulkeflee et al., 2022a). Accidents are multi-casual events that need to be studied from a macro viewpoint, including institutional, technical and macroeconomic perspectives. Nonetheless, only a few researchers have examined occupational accidents from a cultural standpoint and even fewer have focused on incidents involving foreign labourers (Rodríguez-López et al., 2016). Also, the factors of reluctance to practise proper safety among construction foreign labourers at the operational level have not yet been thoroughly identified in order to curb the increasing rate of accidents and mishaps (Zulkeflee et al., 2022b). Hence, safety non-compliance issues need to be addressed at their primary source by examining the actual attitudes and behaviours of the foreign labourers rather than waiting for problems to emerge from other sources (Zulkeflee et al., 2022a; 2022b).

Drawing on the previous study by Zulkeflee et al. (2023), the factors, particularly behavioural-related factors, contributing to reluctance to practice safety were emphasised. However, there is a need for additional research to delve into the factors from a demographic perspective. Some researchers posit that a demographic perspective could play a pivotal role in shaping individuals' behaviours (Fang et al., 2018; Jaafar et al., 2018).

IMMEDIATE ATTENTION IS REQUIRED FOR FOREIGN LABOUR ISSUES

According to the OSH Statistics 2020 published by the Social Security Organisation (2020), there were a total of 11,232 reported construction accidents in 2019. This represented a 2.6% decrease from the 11,529 cases reported in 2018. Despite this slight reduction, the construction sector remains one of the most hazardous industries in Malaysia, contributing to 22.5% of all occupational accidents reported in 2019. Most construction accidents (72.3%) were attributed to falls, followed by machinery-related incidents (16.2%) and contact with moving objects (5.5%).

Consequently, the accident data released by the Department of Occupational Safety and Health (2022) reflects a comparable pattern.

In 2022, there were 6,719 reported accident cases, slightly fewer than the 6,686 cases recorded in 2021. Despite this modest decline, the construction sector maintained its position as the second-highest industry in terms of accident cases, trailing behind the manufacturing sector. The construction accidents that went unreported could be higher than the predictions of 36% of construction labourers, comprising illegal foreign labourers without work permits, 19% legal labourers and the remaining 45% being locals (Nungsari, Flanders and Chuah, 2020). The diversified nationalities of foreign labourers have intensified communication problems, which in turn constrain productivity and efforts aimed at ensuring safety at sites (Debrah and Ofori, 2001). This is because foreign labourers are more exposed to accidents at construction sites due to their unwillingness to conduct safety practices (Lingard and Rowlinson, 1994).

The level of safety compliance among foreign labourers is still doubtful, reflected in the consistent accident rate every year (CIDB Malaysia, 2018; Zulkeflee et al., 2020; 2022a; 2022b). Thus, dealing with foreign labourers from various cultural backgrounds calls for adequate safety intervention practices to enhance the labourers' safety behaviours (Mohammad and Bonaventura, 2017). However, the terminology of poor safety practices on construction sites needs to be defined in-depth in order to unravel the deprived actions often performed by foreign labourers (Collins, 2016).

Poor safety practices can be described as actions dealing with health and safety by outlining the danger and risk to people, equipment, environment and processes (Rajathi and Ramya, 2021). For instance, actions such as disobeying safety instructions, being facetious while working or not applying proper personal protective equipment (PPE) can be classified as poor safety practices (Williams, Hamid and Misnan, 2018). Many foreign labourers are reluctant to obey safety precautions, although it is being gazetted as a legal requirement to protect them from danger and risk on construction sites (Fang et al., 2018).

Furthermore, the construction labourers do not practise safety measures at the site due to carelessness, overconfidence, negligence and ignorance towards safety matters (Krishnamurthy, 2006). Besides that, the common excuses for these behaviours are caused by discomfort while applying the safety precautions and the restrictions they place on movement (Fang et al., 2018). The ignorant behaviours of the construction labourers increase behavioural safety non-compliance issues in the workplace (Zulkeflee et al., 2022a; 2022b). Hence, it is agreed that the main factors of safety non-compliance and unsafe behaviours are due to individual factors such as ignorance, overestimation of their abilities, negligence and oversight (Ahmed, Sobuz and Haque, 2018; Johanson, 2021). Although many initiatives have been taken by the management to curb the accident rates, foreign labourers still carry out unsafe work stemming of their poor temperament, bad safety behaviours and their choice not to practise safety (Adinyira et al., 2020).

RESISTANCE TO CHANGE BEHAVIOUR

Kubler-Ross (1969) established the Change Curve Model (as shown in Figure 1). The model emphasises the four stages most individuals go through while adapting to change.

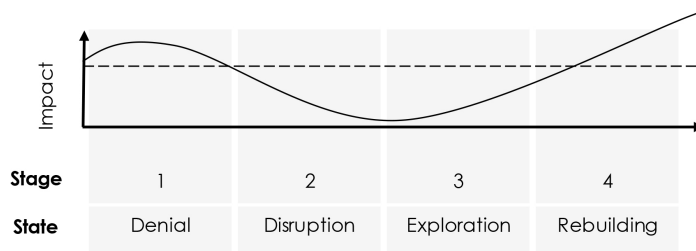


Figure 1. The change curve by Kubler-Ross (1969)

The first stage is where an individual's reaction: shock and denial, after they receive news that is contrary to their habits and practices (Ford, Ford and D'Amelio, 2008). For instance, people oppose changes when they believe they are losing something valuable to themselves. When the reality of the change begins to sink in, individuals tend to react adversely and go to the second stage (Ford, Ford and D'Amelio, 2008). They may be afraid of the consequences, furious and actively protesting the changes. Therefore, an organisation would be subjected to disturbance and swiftly devolve into anarchy. After that, individuals will begin to let go and accept the changes in the third stage. They will start to explore the meaning of the changes and discover the reality that they have to face. In the fourth stage, they begin to embrace the changes and rebuild their habits and behaviours.

In general, people are reluctant to change in an organisation that is not receptive to change and development (Stonehouse, 2013). Therefore, he has established the key reasons for resisting change based on the beginning phase of the denial stage, which emphasises the significance of the change. If it fails to sink in, the person will continue to act normal as if nothing has changed (Stonehouse, 2010). Therefore, two significant elements may contribute to an individual's resistance to change: their level of understanding and their level of emotional involvement (Stonehouse, 2012). These two elements shape an individual's perspective on how they perceive the difficulties that they face. As a change will have an immediate impact on a person and their surroundings, it is vital to engage them in the process since minor changes will have a major impact on them. Stonehouse (2010) illustrates the key reason for resisting change in Figure 2.

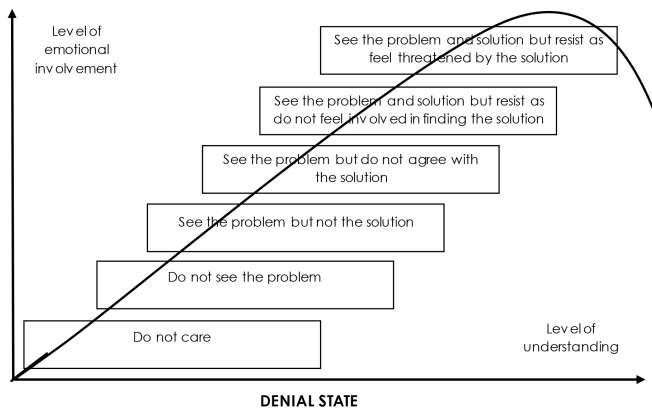


Figure 2. Key reason for resisting change by Stonehouse (2010)

METHODOLOGY

Data collection through a qualitative approach allows for the exploration of the informants' responses, a deeper understanding and more information to be collected from the informants (Vasileiou et al., 2018). To achieve the research objective of the current study, in-depth and extensive feedback from primary sources was examined in the data collection process using a qualitative method via semi-structured interviews with nine expert informants. The informants had vast experience in dealing closely with foreign labourers in the construction industry. A brief screening approach was implemented by conducting screening questions on the randomly selected construction site professionals to eliminate unqualified informants (Slaton et al., 2017). As a result, the current study involved main contractors from Grades 7 and 6, as their companies had the capacity and capability to hire large numbers of foreign labourers at the operational level. The questions were open-ended, with appropriate follow-up questions, intending to elicit as much information as possible.

Accidents and safety practices could be sensitive issues for a certain organisation due to their obligations to protect their reputation and status. Thus, the informants might be hesitant to share some technical information about their safety practices. Therefore, the questions were constructed without the use of any technical terms to prevent misunderstanding, allowing them to share information more sincerely. The contents of the semi-structured interviews consisted of questions related to the foreign labourers' site safety practices, individual perceptions of safety, reasons for misbehaviour and reasons for their reluctance to practise site safety.

Table 1. Personnel profiles of the study's informants

Informants	Current Roles	Contractor Grade	Years of Experiences
A	Site supervisor	G7	15 years
B	Deputy project manager	G7	17 years
C	Site supervisor	G7	13 years
D	Site supervisor	G7	16 years
E	Safety site personnel	G6	13 years
F	Safety site personnel	G7	10 years
G	Site supervisor	G7	9 years
H	Safety site personnel	G7	9 years
I	Site supervisor	G6	9 years

A thematic saturation approach was used in conjunction with the interviews. In other words, data collection would be stopped whenever theoretical saturation had been reached. For instance, no new data or themes are being collected, or the questioning procedure does not provide any new information (Vasileiou et al., 2018). The interviews were recorded and transcribed into an in-depth discussion. The transcripts were sent to the informants for any additional comments and approval to avoid any misinterpretation of the data. After the validation from the informants was confirmed, all transcripts were read through for the coding process. The process involved grouping each piece of data, which was separated and coded accordingly. Further comments and ideas were written on the sides for the identification of possible patterns to generate appropriate categories. This was a method of breaking down all raw data into components and grouping them into related categories. They were then interpreted to make sense of the data that had been acquired. From the categories, the sub-factors were established. Lastly, the representation process was initiated by involving comprehensive writing of the analytical data by describing the results obtained from the interview findings. Then, the sub-factors found earlier were linked together to establish the main factors of reluctance to practise safety among foreign construction labourers at the operational level.

FINDINGS

Responses from informants found factors of reluctance to practise safety among foreign labourers. Exclusion criteria were established during the analysis process, where any responses related to managerial or environmental-based factors were excluded from the analysis to achieve the main objective of this research.

Demographic-based Factors

The collection and analysis of broad characteristics of the foreign labourers' backgrounds, which included age, cultural diversity, working experiences and level of education, were grouped into demographic-based factors.

Labourers' age

There were observable differences in the level of competence through their seniority. The study found that younger labourers complied more easily with safety instructions compared to older labourers. Informants B, E, F and H suggested that the older labourers had low levels of work productivity as they were unable to focus on safety due to their slower movement compared to the younger labourers. The informants also agreed that older foreign labourers were unable to keep up with and adapt to the safety updates as their reactions were not as sharp as before. Besides that, Informants A, C, D, E, F and I stated that most of the older labourers were easily tired of practising safety as a result of overworking. A continuous work condition would cause physical fatigue and mental discomfort for them to apply safety while working.

Cultural diversity

Most of the Malaysian construction sites have labourers from developing countries around Southeast Asia. According to Informants A, C, D, E, F, H and I, most labourers had difficulties communicating with each other due to language constraints. They were more likely to communicate with people of their ethnicity and thus, safety information was unable to be disseminated widely throughout the site. Furthermore, Informants B, E, F and H emphasised that different ethnicities had different working approaches. Some of them came from a culture that did not practise safety in the workplace. Informants A, B, C, D, G and I stated that some of the foreign labourers were already accustomed to their old companies that did not practise safety in the first place.

Callowness

Uneducated and unskilled labourers are characterised as callow labourers who require further safety induction and experience working on building projects. However, A, C, D, E, F and H emphasised that most newcomers did not have vast experience working on construction sites and were not exposed to the construction environment. Therefore, they were not very familiar with proper safety practices in the construction industry. Moreover, Informants A, C and D agreed that some foreign labourers did not have the opportunity to educate themselves. Labourers with a lack of education also disobeyed safety instructions as they could not comprehend the safety context at the workplace.

Behaviour-based Factors

The behaviour-based approach focuses on the foreign labourers' attitudes by addressing problems at their source rather than waiting for problems to emerge. These factors were perceived from the operational perspective to find out the actual reason for the reluctance to comply with safety-related matters.

Ignorance

According to Informants B, G and I, some foreign labourers believed that safety rules were inappropriate to be practised; thus, they took them for granted. Foreign labourers were used to not practising safety, so they perceived safety very lightly. Informants A, C and D said that since the foreign labourers had not practised proper safety for a long time, they viewed safety as troublesome, unreasonable, trivial and outdated. Therefore, applying safety equipment could cause them distress and discomfort while working. Moreover, all informants agreed that most foreign labourers were too stubborn and lazy to comply with proper safety practices as they claimed that applying safety equipment such as a climbing safety harness was time-consuming. Sometimes, the labourers blamed others when they were caught disobeying safety instructions at the workplace, as no one had taught them to apply proper PPE or they expected others to do it for them. For instance, labourers did not install safety barriers because they relied on others to do it. According to Informants A, C and D, foreign labourers often disobey safety instructions and practices on purpose in the sense that they would not comply with safety practices if the others also did not comply. Meanwhile, Informants E and F encountered several cases involving alcohol and drug abuse. During working time, their mental health was not stable because of intoxication or hallucinations.

Carelessness

The failure of foreign labourers to practise proper safety on construction sites was due to their negligent behaviour. All informants agreed that foreign labourers often gave excuses while not applying safety measures on the sites as they failed to keep and preserve their safety gear. The common excuses given by them were that their PPE was stolen, lost or misplaced, or that they simply forgot and left it at home. The informants added that there were times when the labourers were careless while working and did not properly execute tasks, thus contributing to accidents and near misses. Informants D, E and F stated that labourers who came in groups often liked to joke with their mates while working and sometimes their jokes were extreme, outrageous and dangerous. Horseplay behaviour was considered common within society, but it could be expected to cause serious harm to other people.

Oversight

According to the informants, most of the safety practices were common sense. However, foreign labourers forgot and overlooked proper safety practices due to their poor instincts and habits. Initiatives had been implemented by the management to enhance the foreign labourers' safety awareness by providing further safety training and displaying safety instructions on site. Unfortunately, Informants

B, E and F emphasised that foreign labourers tended to overlook safety instructions due to their inability to read and understand the instructions displayed. Some of them did not even notice or were unaware of the safety rules and regulations on the sites.

Overconfidence

Certain foreign labourers were arrogant. Informants A, C, D, E, F, H and I emphasised that many foreign labourers stressed that they were not involved in any accident while working, even without safety practices on the construction site. Moreover, experienced foreign labourers who did not practise proper safety believed that accidents and incidents would not happen to them if they were careful enough when working at the sites. Informants B, E and F agreed that foreign labourers are overconfident; thus, they did not apply safety precautions, especially while working at height, as they felt safe enough to work even though their workplace only provided them with ledges or extra working spaces. They were convinced that harm would not occur to them once they were comfortable and familiar with the work.

Misinterpretation

The informants agreed that accidents were caused by negligence. However, foreign labourers did not understand this concept and misinterpreted the meaning behind it. Informants B, E, F and H said that labourers often perceived safety as non-returning profit, which would not give them any benefit. They measured their lives by the value of money so they were unwilling to spend their resources or invest their money on safety equipment. All informants agreed that the majority of the foreign labourers perceived work progress as much more important than safety. They chased after project progress and finished the work before the deadline, especially the work on a "finish and go" basis. Even though the task needs to be completed within the time frame, most of the informants agreed that foreign labourers rushed around in the workplace, increasing the likelihood of incidents, accidents or near misses.

Table 2. Factors of reluctances in practising safety among foreign labourers at the operational level

Informants	Codes	Sub-Factors	Factors
B, E, F and H	Their movement starts to slow down and their reactions are not as sharp as before	Oldness	Age
A, C, D, E, F and I	Tired to apply safety due to being overworked	Fatigue	
A, C, D, E, F, H and I	The labourer has difficulties communicating with different ethnic	Language difference	Cultural diversity

(Continued on next page)

Table 2. Continued

Informants	Codes	Sub-Factors	Factors
B, E, F and H	Different ethnicities practise different working styles	Different norms	
A, B, C, D, G and I	Already accustomed to old companies that do not follow safety		
B, E, F and H	Being with a culture where the workers do not practice safety		
A, C, D, E, F and H	They were not working and were exposed to the construction environment	Inexperience	Callowness
A, C and D	They do not have the opportunity to educate themselves	Low level of education	
B, G and I	Believe that the rules are inappropriate to be practised in the workplace	Witlessness	Ignorance
All	Perceive safety very lightly		
All	They used to not practice safety		
A, C, D, E, F and H	Not comfortable wearing PPE		
A, C and D	Believe that the rules are troublesome and outdated		
A, C, D, E, F, G, H and I	Did not follow safety on purpose	Laziness and stubborn	
A, C, D, E, F and I	Applying a safety harness is time-consuming		
All	The labourers themselves are stubborn		
A, C and D	The labourers expect others to do it for them	Relying on others	
A, C, D, E, F, H and I	Nobody teaches how to use PPE		
A, C and D	They will not obey if others do not		
E and F	Sometimes they get drunk while working	Drunkenness	
All	Left PPE at home	Fails and forgot to apply safety	Carelessness
All	Misplace their PPE somewhere		
All	PPE being stolen		
All	Careless while working		
D, E and F	They like to joke with friends at work	Horseplay	

(Continued on next page)

Table 2. *Continued*

Informants	Codes	Sub-Factors	Factors
B, E and F	Labourers overlook the safety rules	Overlooked the safety instructions	Oversight
A, C, D, E, F, H and I	Labourers did not notice the safety rules		
A, C, D, E, F, H and I	So far, I have never had an accident	Arrogant	Overconfident
A, C, D, E, F, H and I	Believe accidents will not occur to them		
B, E and F	Feel safe because the structure has a ledge		
B, E, F and H	Perceived safety as non-returning profit or benefit	Measure life by the value of money	Misjudgement
All	Labourers do not have money to spend on safety		
All	Labourers tend to chase for progress	Safety prioritisation	

DISCUSSION

Demographic-based Factors

The age of labourers was the human factor affecting construction safety and productivity in the workplace (Alaghbari, Al-Sakkaf and Sultan, 2019). As labourers grow older, their movements start to slow down and their reactions are not as sharp as before. People tend to adjust to their continually changing abilities as ageing is a slow process (Momade et al., 2020). This means that while people undertake similar tasks as they did when they were younger, they will most likely perform them differently as they age. The informants also stated that most of the foreign labourers do not like to practise safety as they are used to the culture without safety practices back in their country. Furthermore, construction foreign labourers are prone to tiredness due to high workloads, uncomfortable work postures and extended working hours, which is believed to have a detrimental influence on the labourers' safety performance in the workplace (Fang et al., 2018). Tiredness involving physical and mental fatigue can lead to poor quality of work, a reduction in productivity and higher chances of accidents on the construction site (Aryal, Ghahramani and Becerik-Gerber, 2017).

One of the critical factors contributing to the unwillingness of foreign labourers to practise safety was the labourer's background. Cultural diversity transpires when there are differences in ethnicity, race, language, religion, nationality and sexual orientation within a community (Martin, 2014). Surprisingly, labourers' cultural background might have a significant impact on their safety perception (Ricci et al., 2021). Hence, their habits of safety non-compliance have become the norm and difficult to change, yet it is not always impossible. For instance, foreign labourers were driven by the bad habits that were practised in their origin country, as they

assumed that the same practices could be adopted in the current workplace (Jaafar et al., 2018). Furthermore, effective and healthy communication between labourers requires disputes, discussions and debates (Vecchio-Sadus, 2007). However, language barriers and construction labourers' demographics have been demonstrated to influence safety communication in the construction organisation, which is one of the biggest factors in safety non-compliance and workplace injuries (Moyce and Schenker, 2018).

Uneducated and untrained labourers could be stipulated as callow labourers who needed a little more safety training and basic experience working on the construction sites. Besides that, the experience of the labourers is highly dependent on the total number of man hours and training that they have undertaken (Hamid, Majid and Singh, 2008). Hence, the insufficient experience of the labourers will also lead to their unwillingness to practise safety at construction sites. Furthermore, labourers with less experience in managing safety would contribute to low productivity while performing the work (Alaghbari, Al-Sakkaf and Sultan, 2019). Moreover, the number of occupational accidents on the site is higher among construction labourers with low levels of safety education and inadequate language abilities (Moyce and Schenker, 2018). Therefore, they refuse to comply with safety procedures as they fail to understand the importance and impact of safety education and safety compliance in the workplace (Hargreaves et al., 2019).

Behaviour-based Factors

The ignorant behaviours among foreign labourers were due to their lack of experience working in a safe environment or with people who practised proper safety. Inexperienced labourers who are reluctant to practise safety will contribute to increased accident and injury rates (Dennerlein et al., 2020). Most foreign labourers were used to non-safety culture practices back in their country, as they consider the proper safety practices to be troublesome, unreasonable, impractical and outdated. Responses from the informants emphasised that the foreign labourers often disobeyed safety practices on purpose due to their stubborn attitudes, as they would not comply with safety instructions when others did not comply. Foreign labourers behave in such a way due to less exposure to proper safety practices and their poor behaviour (Hasmori, Akhir and Said, 2020). The main factors contributing to safety non-compliance and unsafe behaviour are individual factors, including ignorance of safety practices, inability to comply with safety measures and failure to apply proper PPE (Zerguine, Jalaludin and Tamrin, 2016). Construction labourers are reluctant to comply with safety matters and refuse to apply PPE because of their poor habits and alcohol intake during working hours (Laryea, 2010). Thus, these will prevent the labourers from developing any safety coping skills and may cause further threats and violence in the workplace (Heiskanen, 2007).

Data shows that most of the foreign labourers failed to apply safety precautions on the site due to their carelessness and negligence. Common excuses given by the labourers for not wearing their safety equipment onsite were due to them being lost, misplaced or stolen. In addition, there were times when they were careless while working by not properly executing the task. Other factors contributing to construction accidents were the labourers' poor safety judgement or carelessness in applying safety precautions (Ahmed, Sobuz and Haque, 2018). Foreign labourers often create an unsafe working environment in which they impatiently and carelessly perform their tasks and ignore safety standards (Ahmed,

Sobuz and Haque, 2018). A major factor that contributes to safety non-compliance among labourers on construction sites is the labourers' behaviours, such as not using PPE, horseplay, negligence and failure to identify the cause of the accident (Williams, Hamid and Misnan, 2018). Horseplay behaviour is rough play or pranks that include physical contact, playing around, foolish actions and social pressure to participate in unsafe acts that usually start with harmless intentions (Iacuone, 2005).

Foreign labourers tend to overlook safety instructions due to their inability to read and comprehend the instructions displayed. Some of them do not even notice or are unaware of the safety signs in the workplace. Being sensitive and alert to health and safety practices would change the labourers' fate on the construction site, as actions of overlooking and misjudging safety precautions should not be an excuse. Interaction and intervention activities should be the norm at the construction site so that the labourers will not overlook health and safety matters while conveying effective safety information deliberately (Ajslev et al., 2020). Foreign labourers who have been working for a long time believe that accidents and injuries will not occur to them. The labourers are often unaware of their shortcomings, overconfident in their skills in working at height and overestimate their abilities while executing the job (Johanson, 2021). This phenomenon is called the Dunning-Kruger Effect, whereby labourers often believe that they are more capable than they are (Johanson, 2021). Foreign labourers who are overconfident in their capabilities are often willing to take risks but are unaware of the shortcomings that may befall them (Pinos et al., 2021).

This study reveals that foreign labourers often misinterpret the importance of health and safety matters, as they frequently perceive safety as a non-returning profit or benefit to them. Foreign labourers do not perceive safety as an important issue, as they often chase project progress and disregard the value of their own lives (Keng and Razak, 2014). Moreover, they are unable to assess the importance of safety as they are unwilling to invest their money in safety needs. Safety should be a priority, even though foreign labourers are facing challenging times and pressures in completing the project within the time frame (Zulkeflee et al., 2022a). Foreign labourers tend to ignore safety matters as they impatiently carry out their work if they are paid based on the "finish and go" system (Ahmed, Sobuz and Haque, 2018).

Relationship with the Existing Model

The factors identified from the study's findings were similar to the model by Stonehouse (2010) (as shown in Figure 3). Some patterns have precise meanings with the model components and they have been linked to extending the model according to the suitability of this study. The demographic-based factors are stipulated as constant components since they are unaffected by the level of emotional and political involvement. For instance, the level of emotional and political involvement will not affect one's ageing and will not change one's culture or ethnicity. Moreover, changes in emotional level will not affect the reality that they are an inexperienced and uneducated person. However, multilevel cultures within the organisation with various demographic backgrounds have a significant

effect on their beliefs, values and attitudes as they determine the character or behaviour of a group of individuals (Reason, 2016; Cooper, 2002; Zulkeflee et al., 2023).

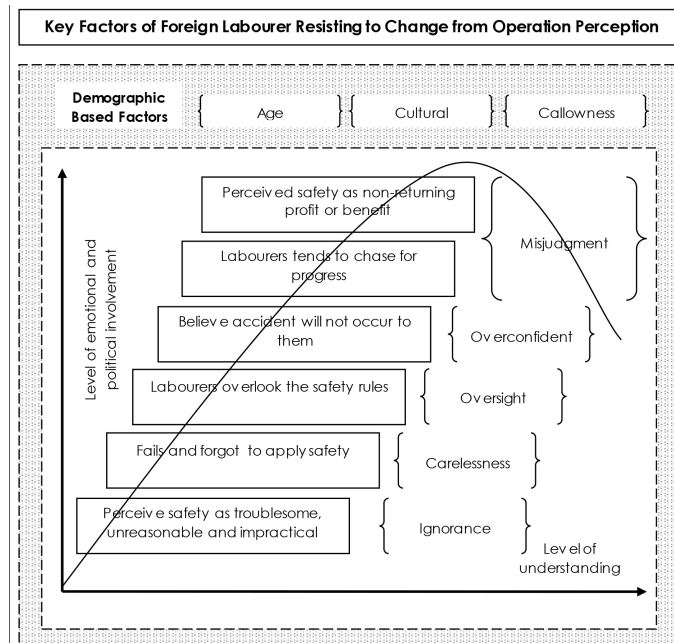


Figure 3. Key factors of foreign labour resisting change from operation perception extended model based on Stonehouse's (2010) Resisting of Change Model

CONCLUSION

Accidents, incidents and near misses often occur at construction sites due to the reluctance of foreign labourers at the operational level to practice proper safety. Therefore, factors of reluctance to practise safety among foreign labourers were identified in this research. Based on the Resisting of Change Model, the factors resemble the original components of the model. Foreign labourers who perceive safety as troublesome, unreasonable, impractical and outdated are considered stubborn, which would trigger ignorant behaviour. Foreign labourers are also unaware of their inadequacies and overconfidence in their working-at-height skills and often overestimate their abilities while executing the job. Hence, they fail to apply safety precautions and are unable to comply with safety matters, which leads to negligence and carelessness. Furthermore, foreign labourers tend to overlook safety precautions as they are often unaware of their surroundings and safety instructions on the construction sites. Moreover, foreign labourers believe that they are always under time pressure and have no time to comply with safety

precautions to chase project progress. Inevitably, their misinterpretation of safety will taunt them if they perceive safety as a non-returning profit and rather measure their lives by the value of money.

RECOMMENDATIONS AND IMPLICATIONS

To enhance the robustness of the research and its generalisability, it may be beneficial to consider a larger sample size or incorporate other research methods for a more comprehensive understanding of the topic. This study suggests that the data will be more accurate if the interviews can be conducted from the perspective of foreign construction labourers to unravel the actual reasons for reluctance to practise safety on construction sites. Moreover, the theory of Planned Behaviour seems appropriate to be used to explain and predict all behaviours over which workers can exert self-control. Moreover, this study has the potential to assist construction firms in fostering a safety-conscious culture and adherence to safety regulations, offering a set of guidelines and best practices to ensure labourers comply with safety measures and create a secure work environment for their employees.

REFERENCES

- Adinyira, E., Manu, P., Agyekum, K., Mahamadu, A.M. and Olomolaiye, P.O. (2020). Violent behaviour on construction sites: Structural equation modelling of its impact on unsafe behaviour using partial least squares. *Engineering, Construction and Architectural Management*, 27(10): 3363–3374. <https://doi.org/10.1108/ECAM-09-2019-0489>
- Agyekum, K., Simons, B. and Botchway, S.Y. (2018). Factors influencing the performance of safety programmes in the Ghanaian construction industry. *Acta Structilia*, 25(2): 39–61. <http://dx.doi.org/10.18820/24150487/as25i2.2>
- Ahmed, S., Sobuz, M.H.R. and Haque, M.I. (2018). Accidents on construction sites in Bangladesh: A review. Paper presented at the 4th International Conference on Civil Engineering for Sustainable Development 2018. Khulna, Bangladesh, 9–10 February.
- Ajslev, J.Z., Wåhlin-Jacobsen, C.D., Brandt, M., Møller, J.L. and Andersen, L.L. (2020). Losing face from engagement: An overlooked risk in the implementation of participatory organisational health and safety initiatives in the construction industry. *Construction Management and Economics*, 38(9): 824–839. <https://doi.org/10.1080/01446193.2020.1759811>
- Alaghabari, W., Al-Sakkaf, A.A. and Sultan, B. (2019). Factors affecting construction labour productivity in Yemen. *International Journal of Construction Management*, 19(1): 79–91. <https://doi.org/10.1080/15623599.2017.1382091>
- Aliabadi, M.M., Aghaei, H., Kalatpour, O., Soltanian, A.R. and Tabib, M.S. (2018). Effects of human and organizational deficiencies on workers' safety behavior at a mining site in Iran. *Epidemiology and Health*, 40. <https://doi.org/10.4178/EPIH.E2018019>
- Aniekwu, N. (2007). Accidents and safety violations in the Nigerian construction industry. *Journal of Science and Technology*, 27(1): 81–89. <https://doi.org/10.4314/just.v27i1.33027>

- Aryal, A., Ghahramani, A. and Becerik-Gerber, B. (2017). Monitoring fatigue in construction workers using physiological measurements. *Automation in Construction*, 82: 154–165. <https://doi.org/10.1016/j.autcon.2017.03.003>
- Azmi, W.F.W. and Misnan, M.S. (2013). A case for the introduction of designers' safety education (DSE) for architects and civil engineers. *Advanced Engineering Forum*, 10 (2013): 160-164. <https://doi.org/10.4028/www.scientific.net/aef.10.160>
- CIDB Malaysia (2018). *Annual Report 2018. Strengthening Construction Transformation*. Kuala Lumpur: CIDB Malaysia.
- Collins, L.H. (2016). The impact of health and safety practises on productivity on construction sites. A case study of selected construction firms in the Akuapem North Municipality. PhD Diss. University of Education.
- Cooper, D. (2002). Safety culture: A model for understanding and quantifying a difficult concept. *Professional Safety*, 47(6).
- Debrah, Y.A. and Ofori, G. (2001). The state, skill formation and productivity enhancement in the construction industry: The case of Singapore. *International Journal of Human Resource Management*, 12(2): 184–202. <https://doi.org/10.1080/09585190010014593>
- Dennerlein, J.T., Weinstein, D., Huynh, W., Tessler, J., Bigger, L., Murphy, L. and Manjourides, J. (2020). Associations between a safety prequalification survey and worker safety experiences on commercial construction sites. *American Journal of Industrial Medicine*, 63(9): 766–773. <https://doi.org/10.1002/ajim.23143>
- Department of Occupational Safety and Health (DOSH) (2022). *National Occupational Accident and Fatality Rate*. Malaysia: DOSH.
- Fang, W., Ding, L., Luo, H. and Love, P.E. (2018). Falls from heights: A computer vision-based approach for safety harness detection. *Automation in Construction*, 91: 53–61. <https://doi.org/10.1016/j.autcon.2018.02.018>
- Ford, J.D., Ford, L.W. and D'Amelio, A. (2008). Resistance to change: The rest of the story. *Academy of Management Review*, 33(2): 362–377. <https://doi.org/10.5465/AMR.2008.31193235>
- Hamid, A.R.A., Majid, M.Z.A. and Singh, B. (2008). An overview of construction accidents in Malaysia. *Issues in Construction Industry*, 110–123.
- Hargreaves, S., Rustage, K., Nellums, L.B., McAlpine, A., Pocock, N., Devakumar, D., Aldridge, R.W., Abubakar, I., Kristensen, K.L., Himmels, J.W., Friedland, J.S. and Zimmerman, C. (2019). Occupational health outcomes among international migrant workers: A systematic review and meta-analysis. *The Lancet Global Health*, 7(7): e872–e882. [https://doi.org/10.1016/s2214-109x\(19\)30204-9](https://doi.org/10.1016/s2214-109x(19)30204-9)
- Hasmori, M.F., Akhir, N.A.F. and Said, I. (2020). Causes for lack of usage of safety harness among construction workers in Malaysia: An investigation. *Civil Engineering and Built Environment*, 1(1): 104–114.
- Heiskanen, M. (2007). Violence at work in Finland: Trends, contents and prevention. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 8(1): 22–40. <https://doi.org/10.1080/14043850701278473>
- Iacuone, D. (2005). Real men are tough guys: Hegemonic masculinity and safety in the construction industry. *The Journal of Men's Studies*, 13(2): 247–266. <https://doi.org/10.3149/jms.1302.247>

- Jaafar, M.H., Arifin, K., Aiyub, K., Razman, M.R., Ishak, M.I.S. and Samsurijan, M.S. (2018). Occupational safety and health management in the construction industry: A review. *International Journal of Occupational Safety and Ergonomics*, 24(4): 493–506. <https://doi.org/10.1080/10803548.2017.1366129>.
- Johanson, A. (2021). Identifying scotomata in hazard identification caused by ignorance and overconfidence. Msc diss. Eastern Illinois University.
- Kemei, R.K., Kaluli, J.W. and Kabubo, C.K. (2015). Assessment of occupational safety and health in construction sites in Nairobi County, Kenya. Paper prepared at the 22nd Engineers International Conference. Nairobi, Kenya, 13–15 May.
- Keng, T.C. and Razak, N.A. (2014). Case studies on the safety management at construction site. *Journal of Sustainability and Management*, 9(2): 90–108.
- Krishnamurthy, N. (2006). Safety in high-rise design and construction. In "Build Tech – 2006" *International Seminar on High Rise*. Mysore, India: Builders' Association of India, 19–34.
- Kubler-Ross, E.D. (1969). *On Death and Dying*. New York: MacMillan Publishing Co.
- Laryea, S. (2010). Health and safety on construction sites in Ghana. Paper presented at the Construction, Building and Real Estate Research Conference of the Royal Institution of Chartered Surveyors. Paris, 2–3 September.
- Lingard, H. and Rowlinson, S. (1994). Construction site safety in Hong Kong. *Construction Management and Economics*, 12: 501–510. <https://doi.org/10.1080/01446199400000061>
- Martin, G.C. (2014). The effects of cultural diversity in the workplace. *Journal of Diversity Management*, 9(2): 89–92. <https://doi.org/10.19030/jdm.v9i2.8974>
- Mohammad, M.Z. and Bonaventura, H.W.H. (2017). A model of integrated multilevel safety intervention practices in Malaysian construction industry. *Procedia Engineering*, 171: 396–404. <https://doi.org/10.1016/j.proeng.2017.01.349>
- Momade, M.H., Shahid, S., Hainin, M.R., Nashwan, M.S. and Umar, A.T. (2020). Modelling labour productivity using SVM and RF: A comparative study on classifiers performance. *International Journal of Construction Management*, 22(10): 1924–1934. <https://doi.org/10.1080/15623599.2020.1744799>
- Moyce, S.C. and Schenker, M. (2018). Migrant workers and their occupational health and safety. *Annual Review of Public Health*, 39: 351–365. <https://doi.org/10.1146/annurev-publhealth-040617-013714>
- Najib, I.Z.M., Nordin, R.M., Ahnuar, E.M. and Sukor, K.M. (2018). Malaysian as the component of labour force for construction industry in Malaysia. Paper presented at International Conference on Built Environment and Engineering 2018. Johor, Malaysia, 29–30 October. <https://doi.org/10.1051/mateconf/201926601007>
- Nungsari, M., Flanders, S. and Chuah, H.Y. (2020). Poverty and precarious employment: The case of Rohingya refugee construction workers in Peninsular Malaysia. *Humanities and Social Sciences Communications*, 7(1):1–11. <https://doi.org/10.1057/s41599-020-00606-8>
- Pinos, A.J.C., González-García, M.N., Pentelhão, L.C. and Baptista, J.S. (2021). Zero-risk interpretation in the level of preventive action method implementation for health and safety in construction sites. *International Journal of Environmental Research and Public Health*, 18(7): 3534. <https://doi.org/10.3390/ijerph18073534>

- Rajathi, V.A. and Ramya, R. (2021). A conceptual study on employees health and safety measures. *International Journal for Research in Applied Science and Engineering Technology*, 9(3): 513–516. <https://doi.org/10.22214/ijraset.2021.33251>
- Reason, J. (2016). *Managing the Risks of Organizational Accidents*. London: Routledge. <https://doi.org/10.4324/9781315543543>
- Ricci, F., Bravo, G., Modenese, A., De Pasquale, F., Ferrari, D., Bello, M., Favero, G., Soddu, S. and Gobba, F. (2021). Risk perception and ethnic background in construction workers: Results of a cross-sectional study in a group of trainees of a vocational school in Italy. *European Journal of Investigation in Health, Psychology and Education*, 11(1): 96–109. <https://doi.org/10.3390/ejihpe11010008>
- Rodríguez-López, J., Marrero, G.A., González, R.M. and Leal-Linares, T. (2016). Road accidents and business cycles in Spain. *Accident Analysis and Prevention*, 96: 46–55. <https://doi.org/10.1016/j.aap.2016.07.029>
- Slaton, J.D., Hanley, G.P. and Raftery, K.J. (2017). Interview-informed functional analyses: A comparison of synthesized and isolated components. *Journal of Applied Behavior Analysis*, 50(2): 252–277. <https://doi.org/10.1002/jaba.384>
- Social Security Organisation (SOCSO) (2020). *Laporan Tahunan 2020*. Kuala Lumpur: SOCSO.
- Stonehouse, D. (2013). Resistance to change: The organisation dimension. *British Journal of Healthcare Assistance*, 7(3): 150–151. <https://doi.org/10.12968/bjha.2013.7.3.150>
- _____. (2012). Resistance to change: The human dimension. *Journal of Healthcare Assistants*, 6(9): 456–457. <https://doi.org/10.12968/bjha.2012.6.9.456>
- _____. (2010). *Management and Organisational Behavior*. 9th Ed. London: Pearson Education Limited.
- Vasileiou, K., Barnett, J., Thorpe, S. and Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: Systematic analysis of qualitative health research over a 15-year period. *BMC Medical Research Methodology*, 18: 148. <https://doi.org/10.1186/s12874-018-0594-7>
- Vecchio-Sadus, A.M. (2007). Enhancing safety culture through effective communication. *Safety Science Monitor*, 11(3): 1–9.
- Williams, O.S., Hamid, R.A. and Misnan, M.S. (2018). Accident causal factors on the building construction sites: A review. *International Journal of Built Environment and Sustainability*, 5(1). <https://doi.org/10.11113/ijbes.v5.n1.248>
- Zerguine, H., Jalaludin, J. and Tamrin, S.B.M. (2016). Behaviour-based safety approach and factors affecting unsafe behaviour in construction sector: A review. *Asia Pacific Environmental and Occupational Health Journal*, 2(2).
- Zulkeflee, A.A., Faisal, N., Ismail, F. and Ismail, N.A.A. (2022a). Safety compliances enhancement: Foreign labours behaviour in the Malaysian construction site. *Journal of Construction in Developing Countries*, 27(1): 153–171. <https://doi.org/10.21315/jcdc2022.27.1.9>

- _____. (2020). Case studies on the current safety issue and work behaviour of construction site workers in Malaysia. *International Journal of Accounting, Finance and Business*, 5(29): 18–28.
- Zulkeflee, A.A., Faisal, N., Ismail, F., Ismail, N.A.A. and Qurtubi (2023). Hesitance to change behaviour: Key factors of construction foreign workers' safety non-compliances. *Malaysian Construction Research Journal*, 19(2): 36–50.
- _____. (2022b). Factors influencing foreign workers' unwillingness to practise safety in the Malaysian construction sites. *Asian Journal of Research in Business and Management*, 4(1): 248–257. <https://doi.org/10.55057/ajrbm.2022.4.1.21>.