

# A STUDY ON GENDER INEQUALITY IN SRI LANKAN CONSTRUCTION INDUSTRY

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The construction industry is one of the most gender-biased sectors in Sri Lanka, combined with cultural barriers and industry's resistance to change, and female representation remains to be poor, even at middle management level. This gender inequality presents a major barrier to achieve gender balance in the industry, which in turn, exacerbates serious skill shortage and reduces organizational performance. This study focused on identifying key causes for gender imbalance and lack of female contribution in the quantity surveying profession.

An extensive review of the previous research was carried out by the research team, and a qualitative approach was adopted for this study. Strata of 30 female participants were selected and provided a questionnaire, including both current and former practitioners of Quantity Surveying. Additionally, 5 number of industry experts and 5 number of employers were interviewed using semi-structured interviews.

Upon analyzing the data collected through questionnaires and interviews, it was found while the cultural barriers is a key factor in preventing women considering careers in the construction industry, the industry's resistance to change has a detrimental effect in retaining the female workforce. Twenty-nine per cent of female graduates leave the industry within the first five years of their career due to restrained career progression and gender discrimination at work. Twelve per cent of participants believe the salary and other benefits are less compared to other industries.

This research identifies the efforts taken from government and private sectors to appreciate the female professional contribution has not proved to be effective as expected. Therefore, gender imbalance continues to be a serious concern in the construction industry, Sri Lanka, which needs abrupt attention of the concerned parties to address this problem. Furthermore, this research encourages further studies in the subject and highlights these problems should be addressed at a national level to attract more female students and to retain female professionals which in turn will help to achieve the gender balance in the construction industry in Sri Lanka.

Keywords: gender balance, gender equality, quantity surveying, women.

## INTRODUCTION

### Research background

A female is an individual who plays a vital role in society. Since Sri Lanka has huge cultural barriers, she has to accomplish all her duties of being a mother, wife, daughter, and many more. She is the driving force of a family. Early days in Sri Lanka, the duties of the females were very limited, and male dominancy was high. Her contribution to the economic growth of the family and society was very low. However, in the fast-paced world, her role was more stressful and more responsible. She is now giving

a considerable contribution to the growth of the economy of the family and country without being the traditional housewife.

While modern society is actively addressing gender inequality, the construction industry is severely male-biased, and explicitly demands male contribution rather than providing equal opportunities to both males and females.

The construction industry in Sri Lanka is a major contributor to Sri Lanka's GDP (Gross Domestic Product) where it shows 12.5 % in 2016 according to Economic and Social Statistics 2017.

Since the industry has shown more significant growth in the last decade, construction employment opportunities reached its peak. According to the report of the Eighth Census of Public and Semi-Government Sector Employment conducted in November, 2018, more female state sector employees in Sri Lanka are professionally qualified than male employees (ColomboPage, 2018). Thus, a certain proportion represents the construction industry.

Even though the quantity surveying profession can be considered as a female-friendly profession in comparison to professions like engineering and surveying, the female representation remains to be very low due to several reasons. This research aimed at the identification of the causes for the under-representation of female quantity surveyors and suggestions are drawn from the industry experts, which could be implemented to increase the female contribution and involvement.

## Problem statement

There is a severe gender imbalance in Sri Lankan construction sector. It can be noted that even the public sector tries to give equal opportunities to both males and females; the private sector does not encourage women to enter the industry. They hesitate to recruit females as their employees stating numerous reasons.

1. Incapability of working
2. Always taking leaves – maternity leave, family issues.
3. The family problems are the main concern of females; therefore, they give priority to the family, not to the job
4. Separate facilities must be allocated if females are recruited to the company.
5. Security has to be ensured for the females.

Concurrent to the employers' unwillingness to recruit women, construction sites are not friendly to females due to the harsh environment. The working conditions and impermanent site locations make the women more distract to the profession.

Since quantity surveyor's responsibilities are always bound with time, they have to achieve the targets on time. Thus, their work exceeds the office hours.

The overhead cost increases with the recruitments of women, because of the separate facilities for the females incur an additional cost. Even the single women working for the employer, separate accommodation has to be arranged, and besides, security has to be ensured.

### **Aim of the research and objectives**

The under-representation of women in the construction industry is noticeable. Hence, prominent actions have to be taken to make gender equality in the industry. The research mainly focused on identifying key causes for gender imbalance and lack of female contribution in the quantity surveying profession.

The aim was achieved by studying the working conditions of the female Quantity Surveyors, analyzing their job satisfaction and suggesting ways for improvement of female professionals.

### **Objectives**

The objectives were set as follows,

- To identify reasons for gender inequality in the Quantity Surveying profession
- To review the initiatives which are currently practicing to attract more women as Quantity Surveyors.
- To make recommendations to overcome the barriers of the construction industry for the enhancement of female practitioners.

### **Research limitations**

Though the construction industry spreads through a wide spectrum, having different levels of the workforce, the research team focused only about the female Quantity Surveyors who are serving for Employers/ clients, consultants/ Engineers and Contractors/builders in Sri Lanka. They have commented on the current female status and made recommendations for further improvements of the female Quantity Surveying profession.

### **Methodology**

Both qualitative and quantitative approaches were used. An open-ended questionnaire was given to strata of thirty number of female Quantity Surveyors, including both current and former practitioners. Five number of industry experts and five number of employers were interviewed using semi-structured interviews.

### **Research outcomes**

The research team, through the questionnaire and interviews; identified that majority of women are dissatisfied about their profession as Quantity Surveyors. The female under-representation has also influenced by cultural- social barriers, patriarchal nature, and the low facilities provided to the employees.

The industry is demanding for males, not for females due to different reasons. Mainly females have their family commitments; they are seeking for flexible working hours, which means 8 hrs. working shift and they create an additional cost to the company since safety, security has to be ensured.

However, some of the employers do not discourage women and provide necessities to succeed in the industry. The government also has a responsibility to identify the issues that arise in the construction industry and to take necessary actions to overcome the barriers.

## LITERATURE REVIEW

### Female representation in the global construction industry

The gender-biased nature of the construction industry is visible globally. Wright (2016) identified that construction and transportation as the two most gender-biased and male-dominated sectors in the UK. The percentage of female employees sum to a percentage of 12% of the total workforce in contrast to 22% of the transportation. The same author has stated, only 1% of the workers tend to be female from the labors.

Brisco, 2005, has found out the majority of the women are employed in non-technical occupations and administrative aspects of construction rather than actively taking part in the construction process. This has been further explained by Clarke et al. 2000, identifying that only 1% of the unskilled labors are female while the percentage of female involvement in the construction in professional and managerial level is 10%. This clearly illustrates the under-representation of females in the construction industry in the United Kingdom.

Many researchers argue that higher female representation in the construction process is beneficial for both women and industry, (Greed 1998,2000). According to Greed, a higher female involvement is a sign of equal opportunities, which in turn indicates the effectiveness of policies related to equal opportunities. In the same token, higher female involvement will also bring a humane aspect to the industry in the forms of flexible management styles, which will result in fewer disputes and more efficiency and cost-effectiveness.

Davison & Gale (2006), describe expecting the small percentage of females to change the harsh nature of the industry is unrealistic and will put a considerable amount of burden. This can be clearly understood, and the same authors emphasize on a major restructuring of the industry cultural change.

Although the common understanding of higher female representation in the construction industry is beneficial for both women and industry, Davison & Gale (2006), argue this is not the case.

### Causes for under-representation of women in construction

While exploring the reasons for the under-representation of women in the construction industry, few of the key reasons can be identified which cause the under-representation of females in the construction industry. Agapiou, (2002), explains that the traditional image and superficial judgment in construction as a harsh and insensitive working environment has a considerable negative impact on attracting females to the industry. The same author has identified that girls' career decisions are heavily influenced by parents, friends, and teachers, which justifies the lack of interest in girls pursuing a career in construction. Gale (1994) shows the construction industry inherits a macho culture where arguments and conflicts are common and inevitable. This exposes both male and female employees to a highly hostile environment. Langford et al. (1994) shows that women who are attracted to the construction industry face the same barriers, while Bagilhole et al. (2000), explains the construction industry holds a highly stereotypical culture which is hostile and discriminatory against women. The gender-differentiated career options and less female recruitments can be understood from the above studies.

In addition to the fact that women are less interested in pursuing a career, as shown above, recruiters show highly gender-biased attitudes. This is explained by Dainty et al. (2000), mentioning that construction recruitment practices are highly discriminating and this situation discourages women from applying for positions in construction. Fielden et al., 2000 noted that construction industry follows an informal recruitment practice which put off women from applying for the opportunities. Furthermore, the same authors identify that the advertisements and brochures published for the recruitment process explicitly portray the male interests and masculine values, which further discourages women for applying.

While female recruitments are considerably less in the construction industry, it can be seen that women who enter the industry are leaving early of their career. Dainty et al. (2000), notes that the women who enter the construction industry are easily disillusioned and leaving the industry very early. Furthermore, the same authors found construction industry values long working hours, competition, dominance, and accordingly, the employees are rewarded. These traits are highly masculine and male-favored. The women who enter the construction industry are forced to adopt these traits and act like men or to leave the industry if they are unable to get adapted. Davidson & Cooper (1992), illustrates the women who do not get adapted or leave the industry will be forced to remain in less responsible positions with considerably lower remuneration.

However, Davidson and Gale (2006), emphasize that there is a critical workforce shortage in the construction and increasing the female contribution would be a viable solution.

### The Sri Lankan picture

In Sri Lanka, very limited work has been done to study the gender inequality, and it is noted that the lack of data about the construction industry in Sri Lanka is a key barrier to understand gender segregation and discrimination.

However, Sri Lanka has been well known for having established an outstanding human development compared to the other countries in the region and at a comparatively lower rate of economic development. (Gunawardane, 2016). Even with the achievement of said human development, gender discrimination is a common occurrence both in personal lives and professional lives of women. Country Gender Assessment, 2015 identifies in terms of economic activities and labor force participation the gender inequality is highly visible. The unemployment rate of women is doubled as men, despite many policy reforms and awareness programs. Horizontal and vertical gender segregation is proved to be critically disadvantageous for women, making it difficult for them to climb up the corporate ladder. The same report identifies in industry wise women are more concentrated on less income-generating trades, i.e. in agriculture and garment, etc.

While there is a serious scarcity of information and studies on the subject on gender segregation in the construction industry of Sri Lanka, Survey of Construction industry – Sri Lanka, Construction Industry Development Authority (CIDA) 2015, identifies that the female contribution for the construction industry is only a surprising 4.5% Highest female contribution is found to be on residential building projects while the least contribution has been on utility projects which is 1%.

## RESEARCH METHODOLOGY

### Population and sampling method.

Purposive sampling was used as the sampling strategy to identify respondents. The target population for the study consisted of female Quantity Surveyors in Sri Lanka. There were thirty female Quantity Surveyors, five industry experts, and five number of employers representing the employers and employees parties. Thus, the reasons for the lower representation of females to the industry can be evaluated from the perspectives of both parties. This data triangulation was more advantageous when presenting unbiased research. Further, it grows the validity of the results by increasing the rate of certainty and bringing neutrality (Honorene, 2017).

Since the data collection is not only limited to the female Quantity Surveyors but also open to the industry experts and employers; these additional sources of information gives more insight into a topic, lighting up a more comprehensive database (Honorene, 2017) . This was supportive of drawing conclusions and recommendations.

### Data collection instruments

Open-ended questionnaires and discussions were used as primary data collection instruments. The questionnaires were administered to the female participants of the research and further semi-structured interviews with the industry experts and employers. The broad areas captured by the questionnaire was intended to identify the working environment of females, social, economic aspects, safety, and other considerations that the women experience from her employment. The open-ended questionnaire was pre-tested with five respondents to ensure the reliability and validity of the data collection instrument.

In order to identify the views of the respondents, semi-structured interviews were arranged with five industry experts and five employers. The interview was intended for 30 minutes, sometimes was extended up to 45 minutes with the extensive comments received from the interviewee. Throughout this process, the respondents' shared their information, highlighting the advantages and disadvantages of increasing females as quantity surveyors. The research team was able to dig up the experience of these professionals during the conversations. Further, the respondents were able to highlight problems and prospects they faced in their industry life regarding the considered scenario. It was supportive to understand the real situation of the problems discussed throughout this piece of research.

Secondary data from related literature, previous study, a concept related to problems of construction gender inequality books, journals & websites were collected. All the data collected through different sources and methods were analyzed to open up a pragmatic discussion. The compilation was carried out addressing the opinions individually.

### Data analysis

Data analysis involved quantitative and qualitative means. Data analysis for questionnaires involved ordering and organizing data (data preparation), describing data (descriptive statistics), and analyzing relationships using various inferential statistics.

The collected data analyzed using percentage analysis for demographic details and statistical analysis were done to find the relationship, association between the selected dependent and independent variables in the study. Graphical representations were used to highlight the results, which were gained through data analysis.

## RESULTS & DISCUSSION

### Demographic characteristics of respondents

The characteristics have to be properly categorized for effective research discussion. Thus, the main samples used for questionnaire and interview were distinctly exemplified.

#### *Demographics of female Quantity Surveyors.*

Table 1:- Demographic characteristics of the respondents

Ref. No	Factors	Particulars	No. of respondents	Percentage%
1	Employer	Consultant	12	40%
		Contractor	18	60%
2	Age	25-35	6	20%
		35-45	17	57%
		more than 45	7	23%
3	Work experience	Below 5	5	17%
		5-10	10	33%
		10-15	10	33%
		More than 15	5	17%
4	Marital status	Married	23	77%
		Single	7	23%
5	Education	Diploma level	18	60%
		Degree	9	30%
		Masters	3	10%
6	Professional qualifications	Yes	7	23%
		No	21	70%
		Pending	2	7%
7	Religion	Buddhist	21	70%
		Christian	5	17%
		Hindu	3	10%
		Muslim	1	3%

Out of the 30 female respondents who participated in the survey, 60% are currently working for contractors, and 40% represents consultants working environment. More than half of the sample

were middle-aged people who are between 35- 45 years (57%). 20% of the sample is between 25-35 (20%), and 23 % are more than 45 years old.

This sampling distribution for the questionnaire was related to the level of construction experience of the respondents. Both 5-10 years and 10-15 years experienced professionals were equal in percentage, which is 33% of the total selected sample. Both the samples of below five years and more than five years working experience has 17% equal representation for the questionnaire. The majority of the respondents (77%) were married, while 23% were single. From the sample, 60% hold diploma level qualifications, 30% of degree holders, and 10% were Masters Degree qualified Quantity Surveyors. The proportion of professionally qualified respondents was 23% and 7% were waiting for their achievement while a majority of 70% did not have any professional qualifications. When analyzing religious and cultural barriers, the extent of different religious backgrounds and beliefs has to be considered. With a majority of 73% for Buddhists, 17%, 10% and 3% were for Christians, Hindus and Muslims respectively.

### *Demographics of interviewees*

Equal representation (50%) was given for both genders for the interviews with the employers and with the industry experts. The male representation was required to identify the reasons for lower demand for females, reasons for not recruiting females and identify the gap between genders. The sample selected for the semi-structured interview has more than 15 years' experience in the construction industry and offers a higher contribution to the development of Sri Lankan construction industry.

### **Female employment as a Quantity Surveyor**

Mainly the male-dominated image and culture of the construction industry strongly deter women from entering it (Amaratunga, et al., 2006). It has been considered as vital to analyze the problems faced by women to enter and remain in the construction industry. Even though few studies are available, this piece of research emphasizes the issues faced by Quantity Surveyors during employment. The major barriers identified are, social and cultural, family commitments and masculine nature of the industry and harsh working environment; and work dissatisfaction.

According to the feedbacks which were received during the interviews, the experts and employers state that the necessity of female Quantity Surveyors to the industry has to be identified. The industry is not repudiated the females, although the demand for females is considerably less in comparison to males. Industry people believe that females can do a better job rather than males. Quantity Surveyors have to maintain a huge amount of documents during a contract. They perform the task more effectively rather than males. Thus, some employers are willingly recruiting them. Men are poor in record keeping and documentation handling. Due to the slow procedural development of the Sri Lankan construction industry, still, the Quantity Surveyor plays a traditional role. This traditional Quantity Surveyor's role is male dominant. But the modern role is comparatively feminist. However, there are certain limits when they are recruiting females.

Some employers consider females as a motivation factor which the staff pursues the work to do. Similarly, the females have the inborn talent in making men working without commanding them. The benefit can be taken by the employer if they concern about the personality development of the females. Their skills, talents, the way of working, and attitudes should be well developed to become a successful Quantity Surveyor and compete with males.

The main concern the experts addressed was; since the female bears the whole responsibility of the family, they are very much sensitive in family matters, which becomes the main reason for refusing



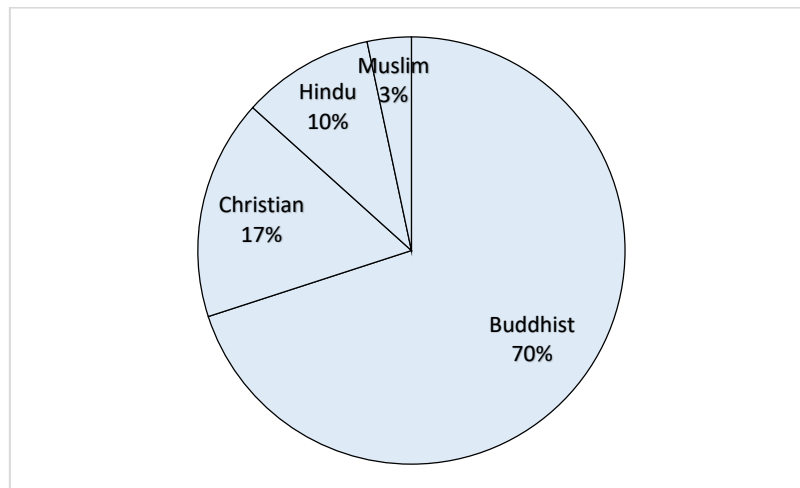
female recruitments by employers. Because the employers believe, their work should not be disturbed by the personal matters of a third party.

### *Social and cultural barriers*

Most women face difficulties because of the cultural barrier and social issues. The dominant male environment discourages women from entering the industry. As far as the social barriers exist, the women tend to rethink about their employment in construction. The society always underestimates the females who are working under harsh working conditions. This causes females to leave their jobs.

Most people believe that the construction industry is not safe for females. There are barriers from society and in some cultures even; females are not encouraged to work in places where the males are high in number. They are very attentive regarding the safety of females from their culture. Because of that, they hesitate to work as Quantity Surveyors in construction sites.

Figure 1:- Female quantity Surveyors of different cultures.



The interviewees also pointed out the significant barriers for the females that are facing when working for the construction industry. The suggestions made to overcome the barriers are, increase the awareness of the society by convincing that the industry can be reachable to the females as well. Aware the school leavers by arranging seminars to promote the industry among females. Further, the awareness of society also needs to increase to attract more females.

### *Masculine nature of the industry*

- i. Time constraints

Constructions always run with time and have tight schedules for every milestone. Eventually, the Quantity Surveyor has to address the cost impacts and submit necessary entitlements to the parties. Thus, he/she has to be punctual and complete the targets without any delay. Therefore, disregarding the gender of all males and females who are working as Quantity Surveyors have to work for longer hours to fulfill their duties assigned.

Females identify this as very challenging because their role is not limited to the occupation; they have to struggle with their duties at home after leaving from office in the evening. As discussed under literature, due to the extensive duties of both the family and the workplace, women are stressed, and the consequence will be the females become very distracted regarding their

occupation. Soon after the females get married, they tend to change their jobs due to these concerns.

Figure 2:- Working hours of Quantity Surveyors per day

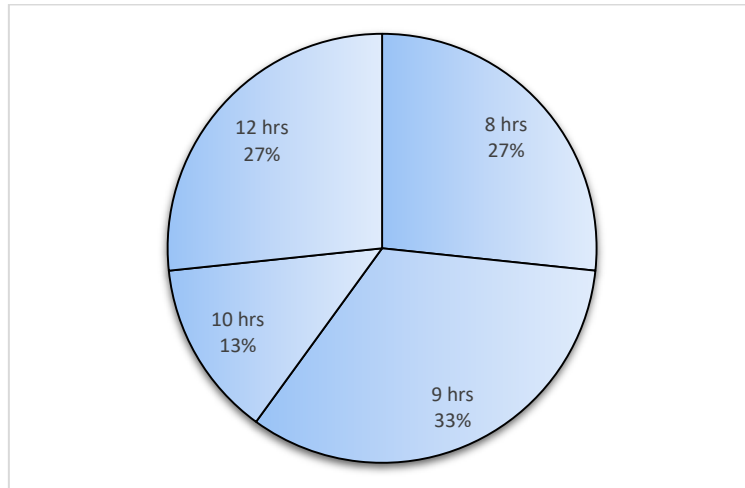
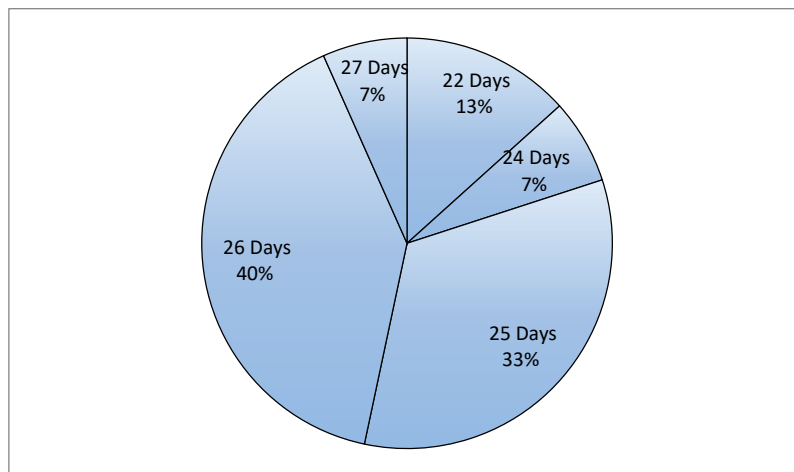


Figure 2 shows the results of the questionnaire regarding the working hours per day. 27% of the females work for 8 hours while the rest work more than 8 hours. If a female stays 12hrs at her office premises, it would be a severe threat to her family life. The average working hours for a day is 10 hours. Being paid a less amount, sometimes without an additional payment for additional hours, women get stressed and most of them were disappointed.

Figure 3:- Number of working days per month



According to figure no. 3, the majority of the surveyors have to work 27 days. The average working days for a month is 25 days.

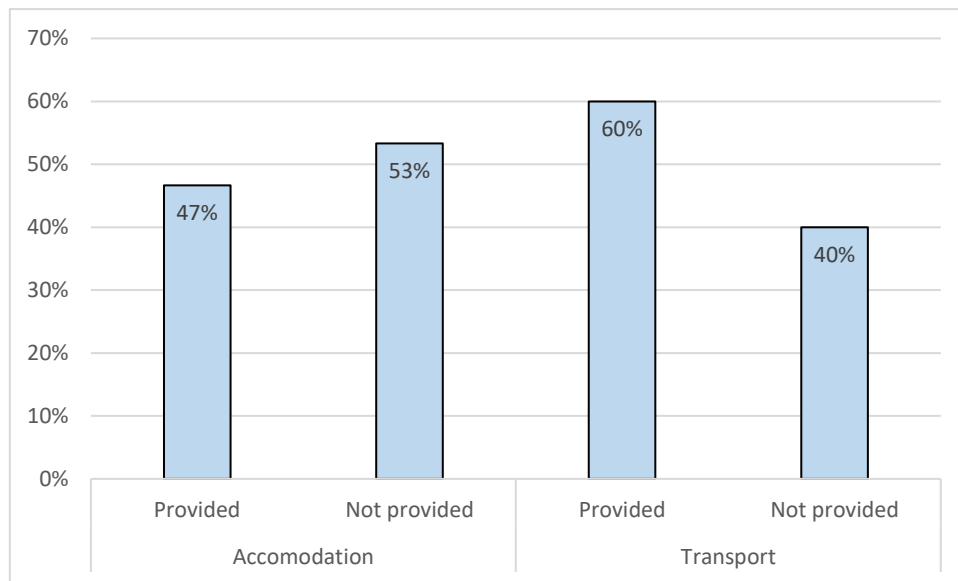
ii. Facilities for females.

In some construction sites, separate sanitary facilities are not provided for the females. This is a more pathetic situation when considering the safety of females.

The research team found that some of the employers provide basic facilities to the female Quantity Surveyors while some are not providing even the facilities that the workers are entitled under Sri Lankan Civil law. According to figure no. 01, Quantity Surveyors have to work until night, but some employers are not providing sufficient transport facilities.

In addition to that, the accommodation has not been provided for females. Hence, the employees have to find places while the males have their accommodation provided by the employer. Thus, females are discriminated in the Sri Lankan construction industry.

Figure 4:- Basic facilities provided to the Quantity Surveyors.



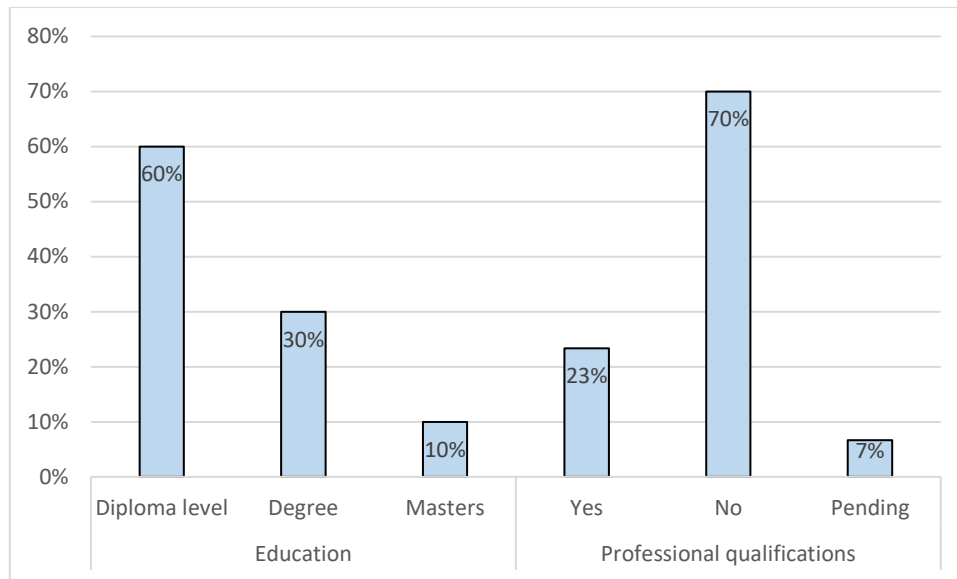
The numerical values show that a considerable proportion of the females receive basic facilities. It makes a positive impact on females encouraging to work.

### *Work dissatisfaction*

Majority of women (60%) of the sample are not satisfied with their employment. Only 40% of them are satisfied. The majority of the satisfied women represent the public sector, not the private sector. Some of the main reasons they stated for the dissatisfaction were discussed previously. Besides, the gap in salaries between males and females discourages women and they will not be able to earn more because they leave on time without doing additional working hours (overtime)

Further, the research team found that the opportunities to step towards their academic or professional qualifications are very low. Even the majority of the research sample comprises a population who has work experience for more than five years, and the qualification level is not at a satisfactory level.

Figure 5:- Educational and professional qualifications of the sample.



According to figure 5, it can be noted that a large proportion of the population hold the basic educational qualifications (60%) and due to this reason, their professional qualifications are also not upgrading. The main reasons they stated was the difficulties in managing time due to current workload. Further, the employers are not permitting leaves to attend the programs. This gives a no escape scenario making all women trapped at a certain level.

Instability of location has also become another reason for the Quantity Surveyors' dissatisfaction about their profession. In Sri Lankan context, few cities are being developed into a satisfactory level and most of the areas, which are under development, are distant from capital city areas, which the people find difficulties when traveling. The Quantity Surveying population is dense in Colombo suburb areas. When the development moves too faraway locations, females tend to resign from their employment devoting all of her efforts on behalf of her family. Moreover, the accommodation and security issues raise again under this circumstance.

The respondents suggested ways to increase the female contribution to the construction industry. The critical requirements they addressed were; accommodation facilities, transport arrangements for night work, 8hrs working time. Further, they commented that the consultant-working environment is most suitable for females.

### Reasons for not recruiting females.

Perspectives of industry experts and employers were helpful to obtain more effective suggestions and solutions in this regard. The reason stated by the interviewees were;

- Since there is only a few female staff, the additional cost has to be borne by the employer when providing separate accommodation for females.
- Females' security has to be ensured if recruited. Especially when they are recruited for construction sites, the management has to be attentive about safety.
- It is very difficult to make women working for long hours, even after recruiting the employers to face difficulties when if they leave early without accomplishing the tasks.

- Most of the small-scale companies have only male staff, and then female recruitments are discouraged. Concurrently, females also refuse to join with such a company.

## CONCLUSION

This paper reviewed the literature relating to gender inequality in the construction industry. It is found through the literature review that traditional image and superficial judgment on construction as a harsh and insensitive working environment gives a negative impact when maintaining gender balance in construction. Even the Quantity Surveying profession is tolerable to the females; due to the inherited culture, females face a lot of difficulties during their employment. However, gender balancing is required to use as an indicator to prove the policies related to equal opportunities. The literature proves the advantage of higher female involvement leads the industry for a flexible management style.

During the research, it was noted that the employers consider the females' security has to be ensured, and thus, most of them are trying to give the facilities as much as possible. In some cases, females do not receive accommodations, transport, and other relevant facilities. It has to be minimized to attract more women. However, the initiatives that are taken by employers on behalf of their female employees should be admired.

The research findings stated that the average working hours of a Quantity Surveyor is 10 hrs, and the number of days they have to resume their duties is 25 days per month. This working condition mainly leads women's dissatisfaction over her profession.

When considering the professional and educational qualifications, some of the employers are willing to encourage their Quantity Surveyors to enhance their career. Because the benefit can be obtained to both parties, even though most of the females are incapable of reach the achievements due to their multiple roles as an employee, mother, sister or a friend; there should be a motivational factor to inspire them to reach the goals.

The findings of the study indicate that even though the construction industry is largely patriarchal, there are female professionals who are bold enough to accept the challenge. The personal developments, attitudes, and perception make the woman stronger to stand straight in such a culture. Regrettably, it can be noted that when the female becomes more successful in her profession as a Quantity Surveyor, her strings of personal life might lose. Therefore, the male-dominant culture has to transform with a huge evolution from the beginning. The gender equality has to maintain from the educational institutes.

It is the responsibility of the academics to enhance the capabilities of female students while directing them to become well-disciplined females. The Construction Industry Development Authority (CIDA), as the responsible authority of the Sri Lankan construction industry, has to implement new regulations when registering contractors and consultant. The effort can be successful when the government implements rules and regulations to maintain gender equality.

Further research can be implemented to study and identify the need for promoting Quantity Surveying among female students and building up their capacities as per the industry demands.

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