



University of
Salford
MANCHESTER

Contribution of women managers towards the construction industry: Preliminary findings

Thayaparan, M, Amaratunga, RDG and Haigh, RP

Title	Contribution of women managers towards the construction industry: Preliminary findings
Authors	Thayaparan, M, Amaratunga, RDG and Haigh, RP
Type	Conference or Workshop Item
URL	This version is available at: http://usir.salford.ac.uk/9764/
Published Date	2010

USIR is a digital collection of the research output of the University of Salford. Where copyright permits, full text material held in the repository is made freely available online and can be read, downloaded and copied for non-commercial private study or research purposes. Please check the manuscript for any further copyright restrictions.

For more information, including our policy and submission procedure, please contact the Repository Team at: usir@salford.ac.uk.

Contribution of Women Managers towards the Construction Industry: Preliminary Findings

Thayaparan, M.

School of the Built Environment, The University of Salford, UK
(email: m.thayaparan@salford.ac.uk)

Amaratunga, D.

School of the Built Environment, The University of Salford, UK
(email: r.d.g.amaratunga@salford.ac.uk)

Haigh, R.

School of the Built Environment, The University of Salford, UK
(email: r.p.haigh@salford.ac.uk)

Abstract

UK construction industry faces many challenges such as low performance, high dissatisfaction among clients, low productivity, poor image, high fragmentation etc. Recruiting employees, particularly for senior/ middle level management, to fulfil the skills and labour shortages has also been a challenge faced by the industry for many years. The gender segregation pattern of the construction industry seems to be highly according to the societal expectations of the traditional gender roles. In evident to that, more than 85% of the women who are attached to the UK construction industry hold administrative or secretarial positions which are not construction specific occupations. This typical gender segregation has led the industry being unable to benefit from the diverse skills that women could offer. In this context, increasing the number of women managers may have an impact on the typical gender segregation pattern of the industry and in turn may help the industry fulfilling their skills needs. However, it needs to be assured whether the increment in the number of women managers will make the industry better. This research, therefore, explores and investigates the contribution of women managers towards the construction industry. The contribution of the women managers are analysed based on the leadership styles that woman managers typically exhibit in the construction industry. This research adopted case study as the research strategy and used questionnaires and semi-structured interviews as the research techniques. Based on the preliminary analyses of the case studies, all the women managers have demonstrated certain level of leading roles such as commanding, motivating and coaching while maintaining a balance between work and personal life. In terms of gender qualities, all women managers were found to be strong in both their masculinity and femininity adjectives. Further, the women managers perceive themselves as using transformational leadership styles more often than the transactional styles. The above mentioned preliminary findings of the case studies are presented in this paper.

Keywords: contribution, women managers, leadership styles, construction industry, UK

1. Introduction

1.1 Status of women in construction industry

The construction industry is one of the UK's chief employers, employing over 2 million people that are more than 1 in 14 of the total UK workforce (CITB, 2003). The role of the women in employment is changing radically in most societies and in Britain women constitute just over half of the total workforce. However women currently make up around 10% of the UK construction workforce (NAWIC, 2009) compared to 50% of the total UK workforce. This means that there are fewer women in the construction sector.

Court and Moralee (1995) noted that the under-representation of women in construction only became an issue in the 1980s. In 1988, less than 7% of the full time construction industry workforce in Britain was women. The Equal Opportunities Commission (EOC, 1995) stated in its annual publication that 'women continue to be significantly under represented in the primary sector (agriculture and energy and water), in most manufacturing, in transport and communications and, in particular, in the construction industry. Since then, there have been number of studies carried out by various researchers on the under-representation within the construction industry (Gale,1994; Fielden et al, 2000). The studies in these areas have been invaluable in pinpointing the factors militating against the participation of more women in the construction work place, and in particular, the recruitment into the construction professions (Agapiou, 2002). Increasing the number of women in construction in the industry is seen as a good thing based on the assumption that 'more' will mean better (Greed, 2000). However Greed (2006) argues that more (women) does not necessarily mean better. What is important is to question whether an increase in the number of women entering the construction professions will result in changes in the culture of the construction industry (Greed, 2006).

The issue regarding lack of women in construction has been made more prominent, attracting government and industry wide attention, due to the skills and labour shortages facing the industry. The UK government and the industry, therefore, examine the ways to encourage women into traditionally male dominated jobs through various initiatives. Though researchers have focused on how to improve the participation of women in the construction workplace, the objectives seem to be aimed rather towards solving the labour resources crisis and skill shortages than improving equal opportunities for women (Agapiou, 2002). In contrast, certain benefactors such as UK Resource Centre (UKRC) and Women in Science and Engineering (WISE) for example, are mainly focussing on the equal opportunities of women. These bodies provide immense support to attract more women into construction by means of providing training to women, educating the women with the knowledge of construction career opportunities and providing mentoring. Thus it is important to understand the impossibility of building a modern nation on the basis of both exclusion and inequality.

Despite the number of initiatives which have been introduced to solve the skill shortages and to improve the equal opportunities for women, the industry has failed to make significant progress in

recruiting more women. The next section justifies the reasons why the focus is given on women managers.

1.2 Focus on women managers in construction industry

Among the 10% of the women in construction, more than 85% hold administrative and secretarial positions (CITB, 2003) and the rest 15% fall under professional and craft level jobs which are classified as construction occupations. That means the percentage of women contributing to the mainstream construction is very low as 1.5% in the total construction workforce. Therefore when encouraging the recruitment and retention of women in the industry, it is important to focus on women who can be employed in construction occupations in order to ensure their contribution will be towards the mainstream construction.

The under-representation of women in managerial positions may discourage potential female candidates who want to choose a career in construction by limiting the number of role models. Further, women gaining managerial positions will provide clear evidence that women really can progress in construction. This may also help to convince employers to consider the recruitment or promotion of women in construction. Women's presence at managerial positions is one of the most effective ways of ensuring their participation in decision-making. Lack of women on recruitment panels was identified as a particular problem for the low representation of women in construction as it increases the likelihood of informal recruitment practices in the industry (Amaratunga et al., 2007). Taking all these issues into consideration, this research focuses on women managers in the construction industry for the following reasons;

- To ensure that the contribution of women will be directly to the mainstream construction
- To make an impact on the typical gender segregation pattern in construction and in turn to help tackling skills shortages.
- To ensure the equity of choosing the right person with the right skills for the right jobs.
- To manage the equality and diversity in construction
- To widen the limited recruitment base for the construction workforce
- To encourage the industry to recruit from wider pool of talents and skills to address skills shortages
- To address the recruitment difficulties the employers face at senior and middle managerial levels
- To promote more female role models so that it will improve the awareness of opportunities available for women in construction

- To inspire young people to choose a career in construction by making an impact on the image and the culture of the industry in the long run
- To make the industry have a better flow of people particularly from underutilised recruitment pools

This section discussed the importance of having more women managers in construction. There are number of researches carried out on various measures that the industry could take to recruit and retain more women in construction. However, rather than further investigating on what industry could do for women managers, it also seems worth investigating what women managers could do for the construction industry. In this context, this research intends to explore and investigate the contribution of women managers towards the construction industry. In order to analyse the contribution, their leadership styles are taken as the primary unit of analysis. Organisations have paid attention to leadership styles of their people who occupy managerial positions, as leadership is believed as an important factor. Accordingly, this research endeavours to investigate the leadership styles typically exhibited by women managers in construction and their contribution towards the construction industry.

The next section briefly explains the research philosophy, strategy and the techniques used for this study.

2. Research methodology

Research methodology refers to the overall approach to a problem which could be put into practice in a research process, from the theoretical underpinning to the collection and analysis of data (Collis and Hussey, 2003; Remenyi et al., 2003). The selection of an appropriate methodology is vital in order to achieve valid and reliable results.

2.1 Research Philosophy

The two contrasting views on how social science research should be conducted can be labelled as positivism and social constructionism/phenomenology (Esterby-Smith et al., 2003; Collis and Hussey, 2003; Remenyi et al., 2003). The key concept of positivism is that the social world exists externally and that its properties should be measured through objective methods, rather than being inferred subjectively through sensation, reflection or intuition (Esterby-Smith et al., 2003). The phenomenological paradigm assumes that the reality is not objective or external but is socially constructed and given meaning by people (Esterby-Smith et al., 2003). This research intends to explore and investigate the ways in which leadership styles of women managers may contribute to the UK construction industry. Thus, this research deals with intangible assets called 'contribution' and 'leadership'. Further, leadership characteristics and styles mean different things to different people (Pedler et al., 2004), thus a socially constructed idea should be obtained in order to identify the appropriate styles. In this context, it could be said that this research takes the overall phenomenological stance. The research philosophy that is adopted contains important assumptions about the way in which we view the world. These assumptions will underpin the research strategy and

the methods one chooses as part of that strategy (Sauders et al., 2007). The three major ways of thinking about research philosophy are ontology, epistemology and axiology (Collis and Hussey, 2003; Sauders et al., 2007). These ontological, epistemological and axiological assumptions are concerned with the nature of reality, the acceptable knowledge in the field of study and the values respectively. These three assumptions also helped to position the research within the philosophical continuum.

2.2 Research Strategy

A research strategy may be thought of as providing the overall direction of the research including the process by which the research is conducted (Remenyi et al., 2003). The commonly used research strategies in business and management research are experiment, survey, case study, action research and ethnography (Sauders et al., 2007; Remenyi et al., 2003; Esterby-Smith et al., 2003).

This research takes case study as the most appropriate research strategy. Case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2003). A case study is also defined as a strategy for doing research which involves an investigation of a particular phenomenon within its real life context using multiple sources of evidence (Robson, 1993). This research intends to explore and investigate the contribution of women managers towards the construction industry. The 'contribution' is subjective and perceived differently by different people. Therefore it requires an in-depth analysis on women's leadership styles and their contribution towards the industry. Further this research analyses a contemporary phenomenon within its real life context. These qualities of the research adopts case study as the most appropriate strategy. This study takes the 'individual' as the 'case'. In this scenario the 'case' is 'woman manager in construction'. Three case studies have been conducted in this research each case has a single 'unit of analysis' which is 'the leadership styles exhibited by women manager in construction'. Accordingly this research adopts a multiple, holistic case study approach.

2.3 Research techniques

Research techniques refer to the specific methods used to collect and analyse the data. Data collection and analysis are developed together in an iterative process in a case study (Hartley,2004). This research adopts 3 data collection techniques within the case study and one other technique outside the case study. They are Multiple Leadership Questionnaire (MLQ), Personal Attribute Questionnaire (PAQ), semi-structured interview and expert interview. MLQ was used to identify the leadership styles exhibited by women managers in construction. The leadership styles that are exhibited by a person are influenced by the person's gender (Cubillo and Brown, 2003; Larson and Freeman, 1997). Therefore it is appropriate to find out the gender qualities of the construction women managers in order to see whether there is a relationship between their gender qualities and the leadership styles they exhibit. To fulfil this purpose Personal Attributes Questionnaire (PAQ) by Spence et al. (1975) was used. PAQ measures the degree to which a person can be classified according to masculine or

feminine adjectives. In addition to MLQ and PAQ questionnaires, interviews were also used to collect data from women managers in construction. This research uses semi-structured interviews. The interview guidelines prepared are aimed at capturing a wide range of issues related to the contribution of leadership styles exhibited by women managers. At the same time it was ensured that the interview is confined within the main research interest and is not deviating from it. Semi-structured interviews were, therefore, selected for this purpose, as they have the advantage of being a 'halfway house' between the rigid layout of a structured interview and the flexibility and responsiveness of an unstructured interview (Moore, 2000). Expert interviews, which are not part of case studies, were conducted prior to the case studies. The outcomes obtained through expert interviews were considered in designing the semi-structured interview for case studies. Expert interviews helped the researcher to ensure that all important issues related to construction, gender and leadership are captured.

Data analysis consists of examining, categorising, tabulating, testing or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study (Yin, 2003). It is important to have a data analysing strategy as it will guide the researcher to select the appropriate data analysing tools, ensuring that the evidence is treated well, and to generate sound and convincing analytical conclusions while discarding the alternative interpretations (Yin,2003). The data collected through expert and semi-structured interviews was analysed using content analysis. In addition, the quantitative analytical techniques adapted with the MLQ and PAQ were also used to analyse the data collected through MLQ and PAQ respectively.

All the research techniques used to collect data for this study are combined and the relationships between different techniques and between the techniques and the potential outcome are illustrated in Figure 1. The outcomes from certain techniques are used as input for certain other as shown in Figure 1. The literature review and synthesis continuously support the research throughout its process

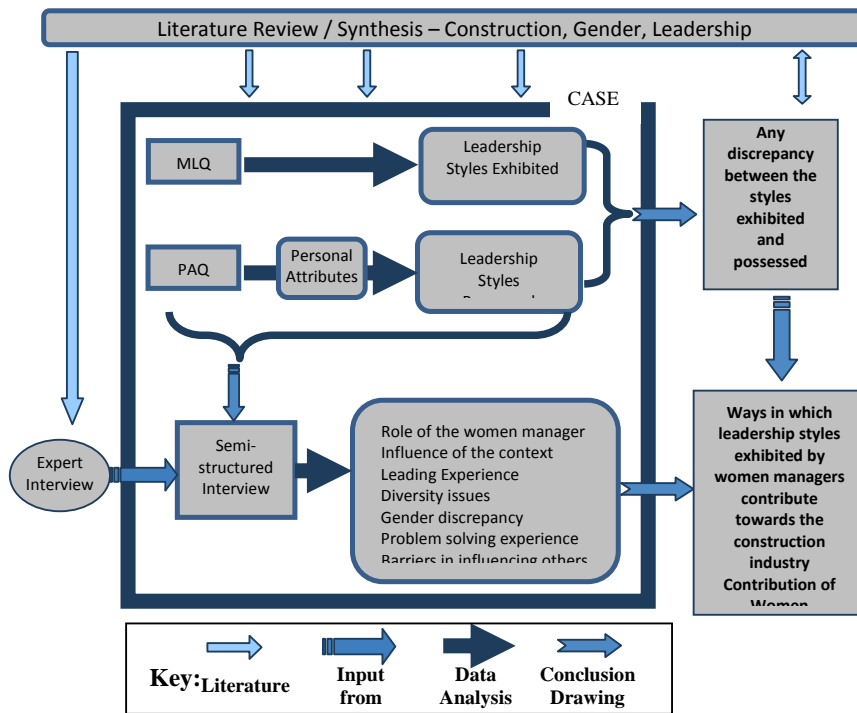


Figure 1: Research process and techniques

This section explained the research methodology adapted to this study and illustrated how the integration of various research techniques leads to draw conclusions. The next section provides the preliminary findings from the case studies.

3. Case study findings

This paper provides the preliminary findings where the findings are discussed under limited themes. The themes have been identified based on the objectives of this research. Accordingly it addresses the objectives about the role, gender qualities and leadership styles of women managers with the support of primary data collected.

3.1 Profile of the cases

Women Managers in construction have been considered as the cases for the analysis. Managers and professionals in the industry can be categorised under four types as outlined by Bennett et al.(1999). Non-management roles- these positions are generally self-directed; Supervisory roles - these positions typically fulfil a supporting role to middle management; Middle management roles- these positions are mainly responsible for managing the whole process of a project and for leading a project team; Senior management roles- these positions are often the ones of power where company-wide decisions are made. For the purpose of this research, women managers at senior and middle level management

are focused. Accordingly, women managers who fall under last two categories above were targeted. Further as this study investigates their leadership styles, it had been ensured that the women managers who were taken for the case studies were performing at least one leading role such as leading a team, leading a project or leading a company.

Table 1 shows the profile of the case studies used for this research.

Table 1: Profile of the Cases

<i>Case Profile</i>	<i>Woman Manager A</i>	<i>Woman Manager B</i>	<i>Woman Manager C</i>
<i>Job title</i>	<i>Chairwoman, Director, Chief executive</i>	<i>Boar Director, Chief Higher Engineer</i>	<i>Senior Project Manager</i>
<i>Years of experience in construction</i>	<i>40</i>	<i>33</i>	<i>11</i>
<i>Civil status</i>	<i>Married</i>	<i>Single</i>	<i>Married</i>
<i>Children</i>	<i>2</i>	<i>0</i>	<i>0</i>

3.2 Role of women managers in construction

The positions of the women managers in their organisations demand certain leadership roles. There are several leadership roles identified by researchers. The following are the leadership roles (Milligan, 2006) taken into consideration for the purpose of the analysis.

Commander - the leader knows the destination and how to get there. It's the ability to steer the business in a direction that avoids being blindsided by changes in the business environment.

Conductor - the leader selects the right person for each position. It's the ability to assign roles to each person in such a way that best match his or her talents, skills, experiences and interests.

Team builder- the leader has the ability to instill in the team a commitment to a common end – goal, outcome – and a team spirit such that they strive to meet both team and individual goals.

Negotiator - the leader aims to enlarge the 'pie' so that both parties can end up winning. It's the ability to invent creative options and variables so that concessions can be traded whereby both parties get what they value most.

Motivator and cheerleader - it requires the leader to be positive, upbeat, and proactive even in difficult times.

Supervisor and coach – the leader has the ability to provide nurture the employee’s self motivation, be clear about performance expectations, provide abundance feedback, and continually provide opportunities for the employee/ student to develop

Promoter and spokesperson - the leader is the face of the research project to the outside world, which may include academic community, industrialists, funding bodies, professional bodies, general public

Acrobat - this role has two sides such as handling multiple tasks in a rapidly-changing environment; and balancing work, family, and personal life. The former demands the ability to keep several ‘balls in the air’ and is keenly aware of the differences between urgent and important tasks whereas the latter demands the ability to balance the time and energy between one’s career demands, family pleasures and obligations, and personal life.

The roles women managers play in the construction industry are matched against the different leadership roles identified above and this is summarised in Table 2.

As seen in Table 2 all three women managers perform leading roles in the construction industry. The case study then tried to identify their gender qualities and the leadership styles they typically exhibit in the construction industry. The summarised findings are given in the following sections.

Table 2: Women managers’ roles vs. leadership roles

<i>Roles played by women managers in construction</i>	<i>Leadership role</i>	<i>Woman Manager</i>		
		<i>A</i>	<i>B</i>	<i>C</i>
<i>Making decision at industry level</i>	<i>Commander</i>	√		
<i>Making decision at organisation level</i>		√	√	
<i>Making decision at project level</i>		√	√	√
<i>Member of the recruitment panel / Assign roles to the staff</i>	<i>Conductor</i>	√	√	
<i>Forming project teams by identifying the right mix of skilled personnel</i>			√	√
<i>Managing the project while satisfying the individual and collective goals of the team members</i>	<i>Team builder</i>		√	√
<i>Contribute to resolve problems at organisation level</i>	<i>Motivator and Cheerleader</i>	√	√	
<i>Contribute to resolve problems at project, team and individual levels</i>		√	√	√
<i>Guiding the sub-ordinates in the right direction</i>	<i>Supervisor and Coach</i>	√	√	√
<i>Responsible for and looking after all the technical subjects in the organisation</i>			√	
<i>Look after health and safety in the industry</i>	<i>Negotiator</i>		√	
<i>Handling multi tasking, Maintaining a balance between work and life</i>	<i>Acrobat</i>	√	√	√

3.3 Gender qualities

Gender qualities were identified using Personal Attributes Questionnaire (PAQ). The PAQ was used to measure the degree to which the leader can be classified according to masculine or feminine adjectives. It is a 24 item self-report questionnaire in which people are asked to indicate the extent to which they can be characterised in terms of various adjectives. The analysis of the PAQ will help to find out the personal characteristics of an individual in terms of masculine, feminine, or androgynous qualities. The scales used in the PAQ to measure masculinity and femininity adjectives are explained below.

The instrumental scale (Masculinity): Eight of the questionnaire items represent characteristics that 'men are stereotyped to possess to a greater extent than women' and 'that are seen as desirable qualities for both men and women'. "Masculinity" as defined by the PAQ means being "self-assertive" or "instrumental." These qualities includes such attributes as independent; active; competitive; can make decisions easily; never give up easily; self-confident; superior; stand up well under pressure.

The expressive scale (Femininity): Another eight items were chosen to represent the extent to which a person sees himself or herself as possessing characteristics that 'women are generally seen possessing more than men' and 'that are viewed as desirable qualities for both men and women'. These qualities are in, in short, "expressive" or "interpersonal" traits. They include attributes such as emotional; able to devote self completely to others; gentle; helpful to others; kind; aware of feelings of others; understanding of others; warm in relations with others.

The androgyny scale (Masculinity- Femininity): The other eight items were originally designed to measure another construct, "androgyny," These eight items were chosen to represent the extent to which a person sees himself or herself as possessing characteristics that 'men are generally seen possessing more than women (if considers one extreme)' and 'women are generally seen possessing more than men (if considers the other extreme)'. The masculinity extreme adjectives includes very aggressive; very dominant; not at all excitable in a major crisis; very worldly; indifferent to others' approval; feelings not easily hurt; never cries; very little need for security.

However, this measure has generally been abandoned. Most researchers keep the full 24-item scale intact even though they don't score the androgyny subscale. Accordingly the questions that are used to measure androgynous scale are not utilised in the case study.

The Table 3 shows the outcome of the PAQ analysis which reveals the degree to which the leader could be classified according to of masculine and feminine adjectives.

In general, all 3 women managers are strong in their masculinity and femininity adjectives. But a detailed review of the results shows that Women Managers A and B have strong personality in both gender qualities. Whilst they have a high percentage of masculinity adjectives, they also have almost the same percentage of femininity adjectives. That interprets that they have a balanced adjectives of both masculinity and femininity.

Table 3: PAQ Results

	Woman Manager A		Woman Manager B		Woman Manager C	
	(0-32) Scale	%	(0-32) Scale	%	(0-32) Scale	%
Masculinity in 100	27	84.38	30	93.75	29	90.63
Femininity in 100	28	87.50	29	90.63	23	71.88
	M%	F%	M%	F%	M%	F%
Masculinity (M)/ Femininity (F) distribution in the overall personality (the balance counts to androgynous)	37.5	38.89	41.10	39.73	38.16	30.26

These findings could be further supported by the followings;

“.....I can’t differentiate myself as an individual from the male/ female stereotype. I think everybody has got a spectrum in them and it’s a matter of how much you show it. And I think one has got to look at the strong features and strong personality traits and positive aspects. I am putting together that they all bound out.. I don’t think you can exclusively put female traits in one box and male traits in other box. I think it is important to put together a group where different attributes work with each other to get better than some other parts....”(Women A)

“...leadership style is not necessarily a male / female thing. But I have to say that I followed some of the men’s working style. Well I didn’t have many other women role models in my age, so I learnt things from men. However, one of the values that I have found was of being different. I actually am making advantage of being different. So I did approach differently. I used different styles of leadership which is more feminine. It is not about the issue of being seen yourself as a male or female, but for the people just to see me for that I can deliver. That’s the most important thing to me....”(Women B)

But the Manager C has a bit more masculine personality compared to what she possess as femininity adjectives. The reason may be her cultural background as she is from a culture where being direct or showing masculine qualities is not a problem at all. This is supported by the following;

“....I think my masculine attributes will be being very direct. Because in the US I don’t think anybody may be ever thought twice about being direct. Most people who live in New York are pretty tough and direct. And they are pretty famous for that sort of attitude. But here I think I have got a bit of a criticism from both men and women about that being so direct and straight forward. I think it’s cultural”(Women C)...

3.4 Leadership styles exhibited by women managers in construction

Leadership styles could be categorised into nine distinct styles based on three major classes or styles: they are transformational, transactional, and Non-transactional (passive / avoidant) (Bass and Avolio, 2006). Transformational and Transactional leadership are both related to the success of the group. Success is measured with the MLQ using outcomes of leadership. Transformational leadership is a process of influencing in which leaders change their associates' awareness of what is important, and move them to see themselves and the opportunities and challenges of their environment in a new way. Transactional leaders display behaviours associated with constructive and corrective transactions. The constructive style is labelled Contingent Reward and the corrective style is labelled Management-by-Exception. Transactional leadership defines expectations and promotes performance to achieve these levels. Contingent Reward and Management-by-Exception are two core behaviours associated with 'management' functions in organisations. Another form of Management-by-Exception leadership is more passive and "reactive": it does not respond to situations and problems systematically. It is also similar to laissez-faire styles or "no leadership". Both types of behaviour have negative impacts on followers and associates. Accordingly, both styles can be grouped together as 'Passive - Avoidant Leadership'. However this style is appropriate where the staff is highly skilled, experienced, educated, have pride in their work and have the drive to do it successfully on their own.

The most recent version of the form is Form 5X which has two types such as short and long. The former contains 45 items for survey whereas the latter contains 63. MLQ (5X-short) has been chosen for this study as it is a recommended questionnaire for research purposes. The MLQ (5X-short) contains 36 leadership items plus 9 outcome items. The leadership items measures the leadership on nine leadership styles scales, 5 of which are related to transformational leadership, 2 of which are related to transactional and 2 of which are related to passive/avoidant leadership. The outcome items measures the outcome on 3 scales namely extra effort, effectiveness and satisfaction. Figure 2 illustrates the combination of items and scales under leadership styles and leadership outcomes.

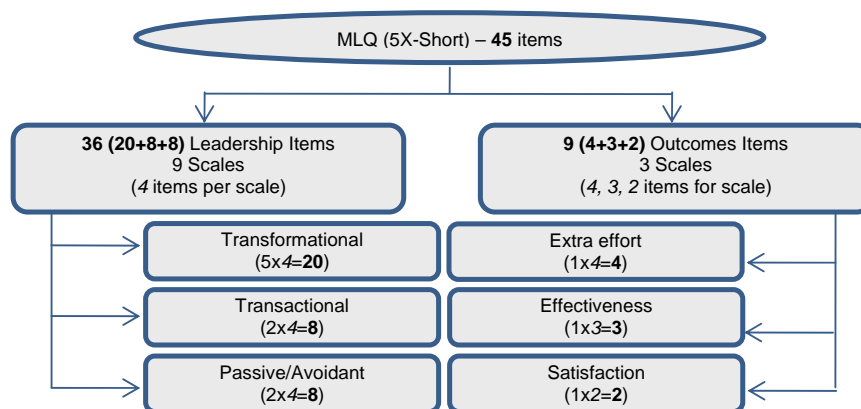


Figure 2: Combination of items and scales used in Multiple Leadership Questionnaire (Mind Garden Inc., 2006)

Table 4 provides the results of the MLQ analysis which reveals the frequency rating of the leaders together with the universal norm for all the leadership styles identified under transformational, transactional and non-transactional (Passive/ Avoidant) leadership types.

All 3 women managers exhibits a degree of leadership styles that is more than the expected universal norm and their level of exhibit is classified as high as the value is between 2.68 and 4.0. However in the styles Management-By-Exception Active (MBEA), Management-By-Exception Passive (MBEP) and Laissez-faire (LF), all have shown a lower value. In these 3 styles the leader's involvement is minimal and these styles are appropriate to lead an individual or a group of people who are self-motivated and self-leading. Showing lower values in such styles interprets that the women managers do not avoid getting themselves involved.

Table 4: MLQ Results

Leadership Types	Leadership Styles	Woman Managers			Universal Norm
		A	B	C	
Transformational Styles	Idealised Attributes (IA) <i>Builds trust</i>	2.5	2.8	3.8	2.5
	Idealised Behaviours (IB) <i>Acts with integrity</i>	3.0	3.3	3.3	2.6
	Inspirational Motivation (IM) <i>Inspires others</i>	2.8	4.0	3.5	2.6
	Intellectual Stimulation (IS) <i>Encourages innovative thinking</i>	2.8	3.3	3.3	2.5
	Individualised Consideration (IC) <i>Coaches people</i>	3.5	3.0	4.0	2.6
Transactional Styles	Contingent Rewards (CW) <i>Rewards achievements</i>	3.3	3.5	3.8	2.5
	Management-By-Exception Active (MBEA) <i>Monitors mistakes</i>	1.5	1.5	1.0	1.7
Non Transactional (Passive / Avoidant Behaviour)	Management-By-Exception Passive (MBEP) <i>Fights fires</i>	1.3	0.5	0.5	1.1
	Laissez-faire (LF) <i>Avoids involvement</i>	0.8	0.3	0.0	0.9
Outcomes of the leadership	Extra Effort	2.7	2.7	4.0	2.6
	Effectiveness	3.0	3.5	3.5	2.6
	Satisfaction	3.0	3.0	4.0	2.5

To give further understanding Table 5 provides the overall distribution of the classified leadership styles and the outcomes each woman manager exhibits.

In all 3 cases it shows that the women managers exhibits both transformational and transactional leadership styles at a higher frequency rate compared to the Non-transactional (or Passive/ Avoidant) behaviour.

Table 5: Overall distribution of the classified leadership styles and the outcomes (in %)

<i>Leadership Types</i>	<i>Woman Managers</i>		
	<i>A</i>	<i>B</i>	<i>C</i>
<i>Transformational Styles</i>	31.65	35.40	35.47
<i>Transactional Styles</i>	25.92	27.23	23.73
<i>Non Transactional (Passive / Avoidant Behaviour)</i>	10.91	4.08	2.5
<i>Outcomes of the leadership</i>	31.52	33.28	38.3

At the same time all 3 women managers perceive themselves as using transformational leadership styles more often than the transactional styles. These results are in-line with some of the literature findings where several studies focusing on transformational leadership indicated that women seem to prefer transformational leadership styles (Eagly et al., 2003) and women are perceived, and perceive themselves, as using transformational leadership styles than men (Bass et al., 1996; Druskat, 1994; Rosener, 1990; Kark, 2004).

4. Conclusions and way forward

Identifying the contribution of women managers towards the construction industry is vital in order to find out whether the employability of women managers' within the construction sector will make the industry better, while contributing to address the skills shortages in the industry. This paper presented some preliminary findings from the initial stages of the data analysis. From the samples selected for the case studies itself it was obviously evident that the women have the ability to lead in a male-dominated industry like construction. The women in managerial positions in the construction industry have demonstrated their leadership roles and their ability to lead. The case studies revealed that the women managers have balanced gender adjectives in terms of masculinity and femininity. This paper further discussed the leadership styles of women managers identified using Multiple Leadership Questionnaire (MLQ). Accordingly, women managers perceive themselves as exhibiting transformational leadership styles more often than the transactional styles. These conclusions were made based on the primary data collected through Multiple Leadership Questionnaire (MLQ) and

Personal Attribute Questionnaire (PAQ). In addition, as mentioned in the research methodology section of this paper, semi-structured interviews were also used to identify the leadership styles of women managers, to investigate the barriers or difficulties that the women managers face in exhibiting certain leadership styles in the construction industry and to explore their contribution towards the construction industry. These issues will be analysed as a way forward of this research and to address the research aim which intends to explore and investigate the contribution of women managers towards the construction industry.

References

Agapiou, A. (2002), Perceptions of gender roles and attitudes toward work among male and female operatives in the Scottish construction industry, *Construction Management and Economics*, 20, Pp 697–705.

Amaratunga, R.D.G., Haigh, R.P., Elvitigala, G. and Shanmugam, M. (2007), *Construction and Women: Promoting Construction Careers for Women in the North West*, Research Report, School of the Built Environment, Research Institute for the Built and Human Environment, The University of Salford

Bass, B. M., and Avolio, B. J. (2006), “MLQ for Researchers”, Available at: <http://www.mindgarden.com/products/mlqr.htm> [Accessed January 2007]

Bass, B.M., Avolio, B.J. and Atwater, L. (1996), The transformational and transactional leadership of men and women, *Applied Psychology: An International Review*, 45, Pp. 5-34.

Bennett, J.F., Davidson, M.J., and Gale, A.W. (1999) Women in construction: a comparative investigation into the expectations and experiences of female and male construction undergraduates and employees, *Women in Management Review*, 14(7), Pp.273-91.

Collis, J. and Hussey, R. (2003), *Business Research: A practical guide for undergraduate and postgraduate students*, 2nd ed., Palgrave Macmillan, New York.

Construction Industry Training Board (2003), *Construction Skills Forecast Report* [Online] Available from: <http://www.citb.co.uk> [Accessed September 2005]

Court, G. and Moralee, J. (1995) *Balancing the Building Team: Gender Issues in the Building Professions*, Institute for Employment Studies/CIOB, University of Sussex.

Cubillo, L. and Brown, M., (2003), Women into educational leadership and management: international differences?, *Journal of Educational Administration*, 41 (3), pp. 278-29.

Druskat, V.U. (1994), “Gender and leadership style: transformational and transactional leadership in the Roman Catholic Church”, *Leadership Quarterly*, 5, Pp. 99-199.

Eagly, A.H., Johannesen-Schmidt, M. C. and van Engen, M.L., (2003), Transformational, transactional, and laissez-faire leadership styles: a meta-analysis comparing women and men, *Psychological Bulletin*, 129(4), pp. 569-591.

Easterby-Smith, M., Thorpe,R. and Lowe,A., (2003), *Management Research: An Introduction*, Sage Publications, London.

Equal Opportunities Commission (1995), *Job segregation linked to gender bias*, *Equal Opportunities Review*, 60, March/April, Equal Opportunities Commission, Manchester.

Fielden, S.L., Davidson, M.J., Gale, A.W. and Davey, C.L. (2000), Women in construction: the untapped resource, *Construction Management and Economics*, 18, Pp 113 – 121.

Gale, A.W. (1994), Women in non-traditional occupations: the construction industry, *Women in Management Review*, 9(2), Pp3- 14.

Greed, C (2000), Women in the Construction Professional, *Gender, Work and Organisation*, 7(3), pp 181-196.

Greed, C (2006), Social exclusion: Women in construction, In: Gale, A.W and Davidson, M.J. (eds.), *Managing Diversity and Equality in Construction*, Taylor and Francis, London., pp 71-97.

Hartley, J., (2004), Case study research, In: Cassell, C. and Symon, G. (eds.), *Essential guide to qualitative methods in organisational research*, Sage publications, London, pp.323-333.

Kark, R., (2004), The transformational leader: who is (s)he?: A feminist perspective, *Journal of Organizational Change Management*, 17(2), pp. 160 – 176.

Larson, A. and Freeman, R.E., (1997), Introduction, In: Larson, A. and Freeman, R.E. (eds.), *Women's Studies and Business Ethics: Toward a New Conversation*, Oxford University Press, New York, NY, pp. 3-10.

Milligan, B (2006), *Understanding Leadership Roles and Leadership Styles*, [Online] Available from: www.aLearningEdge.com [Accessed October 2008]

Moore, N., (2000), *How to do research: the complete guide to designing and managing research projects*, Library Association Publishing, London.

National Association of Women in Construction (2009), [Online] Available from: http://www.nawic.co.uk/component/option.com_frontpage/Itemid,1/ [Accessed November 2009]

Pedler, M., Burgoyne, J., and Boydell, T., (2004), *A manager's guide to leadership*, McGraw-Hill Business, UK.

Remenyi,D., Williams,B., Money,A. and Swartz,E. (2003), *Doing Research in Business and Management: An Introduction to Process and Method*, Sage publications, London.

Robson, C., (1993), *Real World Research: A Resource for Social Scientists and Practitioner – researchers*, WileyBlackwell, Oxford.

Rosener, J.B., (1990), *Ways women lead*, Harvard Business Review, 68, pp. 119-125.

Saunders, M., Lewis,P. and Thornhill, A., (2007), *Research methods for business students*, 4th ed., Pearson Education Ltd., Harlow.

Spence, J., Helmreich, R. and Stapp, J. (1975), 'Ratings of self and peers on sex role attributes and their relation to self-esteem and conceptions of masculinity and femininity', *Journal of Personality and Social Psychology*, 32(1), pp 29-39.

Yin,R.K. (2003), *Case Study Research: Design and Methods*, 3rd ed., Sage Publications, London.