The Relationship between Female Representation at Strategic Level and Firm’s Competitiveness: Evidences from Cargo Logistic Firms of Pakistan and Canada

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THE RELATIONSHIP BETWEEN FEMALE REPRESENTATION AT STRATEGIC LEVEL AND FIRM'S COMPETITIVENESS: EVIDENCES FROM CARGO LOGISTIC FIRMS OF PAKISTAN AND CANADA

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Abstract: The comparative study investigates the impact of various attributes such as feminine leadership style, gender diversity, and autonomy linked with the female representation at strategic level on the performance and competitiveness of the Cargo Logistic Firms in the contrasting economies; Pakistan and Canada. Previous studies offered limited insight due to unidimensional while this study takes multivariate approach, considering; variable of interest examined in terms of economies and gender. Cross-sectional research design following semi-structured questionnaire circulated among targeted audience by combining of stratified (probability) and convenience, purposive, and snowball (non-probability) sampling technique at layers of management. The combined sample size is 631 employees. The results showed that females prefer more flexible leadership style in comparison to males. Organisations having high gender diversity and female representation at strategic level are more progressive and innovative. Interestingly, in developing economies, rapid career growth chances are higher for females. Females are more people oriented while male are more task-oriented. Males have high desire for autonomy at workplace.

Key words: leadership style, gender diversity, autonomy, corporate hierarchy, female representation, comparative analysis

Introduction

The relationship between female representation at strategic level and overall competitiveness of the organisations in developed countries is well documented (Ely and Meyerson, 2000; Van Knippenberg et al., 2004; Dezsö and Ross, 2012; Kurtulus and Tomaskovic-Devey, 2012) but there is a lack of literature in this area for developing economies. Therefore, this paper aims to explore the impact of a range of variables linked to female representation at strategic level with a firm’s competitiveness in both a developed and a developing economy. There has been significant increase in women participation in the business sector and various new ventures (Kot et al., 2016). Numerous studies showed top management functioning relationship with overall competitiveness and performance of an organisation (Daily et al., 2009; Carpenter et al., 2004; Van Knippenberg et al., 2004; Dezsö and Ross, 2012). However, only a limited number of studies available specifically on female representation at upper echelons (Carpenter, et al., 2004) and gender diversity at strategic level (Butterfield and Grinnell, 1999; Dezsö and Ross, 2012). Some authors found that for instance, Dezsö and Ross (2012) a firm's competitiveness is associated positively with female representation at the strategic level of the
organisation, which leads to the question, which factors associated with female representation at top levels make a difference to the competitiveness of a firm.

A range of authors have explored this area and have looked at factors such as leadership style (Ely and Meyerson, 2000), gender diversity (Klein and Harrison, 2007), autonomy (Kurtulus and Tomaskovic-Devey, 2012, Dezsö and Ross, 2012). However, there is no conclusive evidence from previous studies available indicating differences between developed and developing economies in this area. In other words, the impact of female representation at strategic level is different in different types of economy. This is the research gap this paper aims to fill. ‘Developed economy’ here is defined as countries with high human development index (HDI) and ‘developing’ as economies with low human development index (HDI) (World Economic Reform, 2012). Canada (developed) and Pakistan (developing) chosen because despite having contrasting HDI both has similar attributes for female progress towards corporate hierarchy.

Additionally, the logistics sector selection is due to having similar constraints for female in both countries despite contrasting economies. Moreover, the cultural awareness and female top team management are evident to be similar in nature thus these countries are chosen for comparative analysis to examine the variations in logistic firms in both economies. Previous studies including; Carpenter et al. (2004), Lee and James (2007), Terjesen et al. (2009), and Dezsö and Ross (2012) have been exploratory longitudinal studies whereas present study offers empirical and theoretical dimensions by investigating the relationship between competitiveness of firm and female representation at strategic level in comparative manner considering cross-sectional study.

**Research Aim**

*To investigate the impact of various factors such as feminine leadership style, gender diversification, and autonomy interlinked with the top tier female representation on the logistic organisations' performance and competitiveness in the Pakistan and the Canada.*

**Research Objectives**

- to examine the correlation between top tier female representation and competitiveness of the Cargo Logistic Firms
to investigate the nature of relationship of various factors including, feminine leadership, gender diversification, and autonomy interlinked with the representation of females

to conclude considered attribute's nature in regards to female representation at strategic level affecting the performance and competitiveness of the Cargo Logistic Firms

Literature review

A range of authors has established female leadership is generally characterized by a more democratic and participative leadership style (Merchant, 2012; Chaluvadi, 2015). Additionally, Eagly and Jhonson’s (1990) meta-analysis study about feminine leadership style found female leaders share more and collaborate more than male leaders (Shipman and Kay, 2009; Dezső and Ross, 2012). Daily et al. (2003) study shows that female leadership at strategic level influences the task performance of top team whereas Ely and Meyerson (2000) suggests that feminine leadership style influences the employees’ performance at all layers of the management, especially if higher female works at top tier. Similarly, Van Knippenberg et al (2004) and Kanter (1988) argued that organisational performances positively influence due to diversification and female leadership at strategic level. Supporting this, Zhang and Bartol (2010) found positive association between organisational performances and leadership style whereas Larson et al., (1998) found only a weak correlation between leadership style and the firm's competitiveness. Taken together there is no conclusive evidence that supports the notion that in long run, a female leadership style does enhance a firm's competitiveness is also the indications are that there is likely to be a positive influence. Therefore, the authors hypothesis that

H1: There is no significant correlation between feminine leadership style at strategic level and competitiveness of the Cargo firms in the Pakistan and the Canada.

A body of research has shown that gender diversification significantly affects the performances of individuals and organisations (Tsui et al., 1991; Haque and Yamoah, 2014; Haque and Aston, 2016; Dezső and Ross, 2012). Phillips and Lloyds (2006) found that at top management, male representation improves the performances of the organisations but that there is much less improvement at low level teams. Additionally, Tsui et al., (1991) found negative linkage between gender diversification and competitiveness of the firms. In contrast, Wiersema and Bantel's (1992)
study found that, gender diversification play vital role in not only improving the decision-making but also the overall organisational performance. Additionally, wide range of previous researches including; Klein and Harrison (2007) and Dezsô, and Ross (2012) confirmed positive correlation between organisational effectiveness and strategic level gender diversification. Thus, it suggests that there is no conclusive evidence regarding the correlation between gender diversification and competitiveness of the firm in distinctive economies. Thus, this research proposes the hypothesis below:

H2: There is no significant correlation between gender diversity at strategic level and competitiveness of the Cargo firms in the Pakistan and the Canada.

Interestingly, Tsui et al., (1991), Haque et al., (2016), and Dezsô and Ross (2012) found that management's task performance affects by the gender diversification to certain extent. Previous empirical research reveals that females functioning at middle management face far more difficulties in order to advance towards top tier, despite their significant contribution towards improving task performance (Noe, 1988; Ibarra, 1993). Conversely, Hurley and Sonnenfeld (1998) and Eagley, et al., (2003) concluded that middle management females with more expertise and experience when contributes towards the improvement of task performance eventually advance to the strategic level. However, social and cultural barriers have restricted females from the career advancement, especially at top tier (Daily et al., 2003; Bilimoria, 2006). There is also no literature that explores if this phenomenon differs between different types of economies. Therefore, we developed following hypothesis:

H3: There is no significant correlation between female task performance and competitiveness of the Cargo firms in the Pakistan and the Canada.

The overall performances of the organisations are positively influenced by the managers demonstrating innovation and autonomy at distinctive levels of the management (Dezsô and Ross, 2012). In contrast, the work of Castanias and Helfat (2001) found that motivation is direct resultant of the innovation combined with the autonomy. On the other hand, Oldham and Cummings' study (1996) revealed that motivation develops due to creativity combined with autonomy. Interestingly, the empirical research of Dezsô and Ross (2012) confirmed that females operating at the lower tier as well as the top tier of the organisation demonstrate higher autonomy, which leads to
improve organisational efficiency and influences the competitiveness in direct manner. Interestingly, wide number of studies found self-actualization, self-awareness, and creativity are key features of the autonomy, demonstrated by female at distinctive layers of the management and it has linkage with the firm's competitiveness, their own level of motivation, and organisational commitment (Pittman et al., 1980; Haque and Aston, 2016; Kurtulus and Tomaskovic-Devey, 2012; Dezső and Ross, 2012). Aforementioned studies found relationship between autonomy and competitiveness of the organisations. However, there is still need for further exploration the nature of relationship in distinctive types of economies, thus below hypothesis reads:

H4: There is no significant correlation between top tier females demonstrating autonomy and competitiveness of Cargo firms in the Pakistan and the Canada.

Research Methodology

Quantitative studies provide numerical significance to support the facts by evaluating the unforeseen features through comparative analysis (Sekaran and Bougie, 2012). We combined probability and non-probability; stratified sampling, purposive, snowball, and convenience sampling technique to select employees from all three layers of management in Pakistan and Canada. The Cargo Logistic Firms lists undertaken for selection of middle range organisations from both countries (Cargo Company List Canada, 2015; Cargo Company List Pakistan; 2015). Total 631 employees (315 from Canada's 42 and 316 from Pakistan's 31 organisations) are included in this study. Thus, total 73 organisations participated from 200-targeted organisations, reflecting 36.5% response rate. Employees working on all three layers of management were included by circulating matrix based semi-structured survey questionnaire using Likert 7-point scale (1=Strongly Agree and 7= Strongly Disagree). Using Jamal's (2011) Marginal Error formula, the minimum sample size was determined to be above 300 in each economy to draw a logical conclusion. Moreover, through purposive sample ensured equal events in terms of gender and economy thus 315 males and 316 females, reflecting approximately 50% from each gender in both countries. Through emails formal approval obtained from HR of targeted organisations. The email explained research purpose and details about questionnaire namely; approximate time, purpose and confidentiality. HR departments based on participant’s convenience and willingness circulated survey questionnaire on behalf of researchers. Furthermore, networking
connections strategy used for approaching participants. Most of the questionnaires took 5 to 7 minutes for completion.

Research follows positivist philosophy with deductive approach while axiological view includes the managerial literature from last five decades related to variables of interest. Additionally, we used funnel approach and proportion analysis for exploring the relationship between variables of interest. Pilot study conducted in the three Cargo Logistic firms inside UK helped in improving the structure and sequential flow of questions. For the data analysis, we used IBM SPSS 23.0 in this study. Since, Shapiro-Wilk test does not effectively reflect the normality of data distribution when sample set is greater than 300 therefore we used normal Q-Q plots, histogram diagram and stem-and-leaf to evaluate the normality of data in terms of gender and economies of interest. Although there were few outliers but overall the data normally distributed thus enabled us in using parametric tests. Thus, we used Pearson's correlation and independent t-test, followed by funnel approach and proportion analysis through Microsoft Excel 2013 integrated package. For ethical considerations, we used triangulation approach in this study by taking demographic variables to crosscheck with HR departments through random picking procedure. The demographic variables enabled us in the determination of the right event selection as we intended including events with substantial knowledge, skills, and experience of working in cargo logistic firms. Events and instrument's credibility, validity, and reliability ensured along with keeping ethical stance at all stages of research. Corn bach's alpha showed that 0.705, reflecting instrument's reliability. No monetary reward offered to any participants and they were prior informed about the purpose and their confidentiality.

Findings and Discussions

Descriptive statistic showed that majority of the respondents are female (50.02%) however there is no significant difference in terms of gender as researchers ensured that equal number of respondents are targeted in this study. Interestingly, the comparative analysis showed that Canada has higher female representation in contrast to males (52% against 48%) while Pakistan has equally opposite in terms of female to male (52% against 48%). Additionally, majority of the respondents (35.34%) belongs to (29-38) age bracket however the comparative analysis showed that Canadian Cargo Logistic organizations have workforce more towards the late 30s and early 40s while in Pakistan, it is more towards mid 20s to mid 30s. Moreover, in both countries' Cargo Firms, respondents held Bachelors Degree (52.5%). Overall experience bracket in this study is (3-5 years)
Furthermore, middle and operational level respondents are more in contrast to strategic level employees in both countries. Furthermore, it is evident that in terms of frequency Canadian Organisations have higher male at the strategic level while in Pakistan females constitute higher frequency. This indicates that in Canada, at strategic level male proportion is higher than females (29.3% against 24%) while in Pakistan; females have higher proportion than their counterparts (29.4% against 18%). Additionally, females are more at middle level in Canada (45% against 36.6%) whereas higher male frequency at middle level in Pakistan in contrast to Canada (40.3% against 38.6%). Nevertheless, male operates more at lower level in contrast to females (41% against 32.3%). Furthermore, there is no significant difference in terms of contrasting economies.

Using funnel approach, we analysis the preferences related to the variables of interests, in terms of gender. Interestingly, our analysis revealed that females at top have higher preference for feminine leadership style in contrast to males (71% against 48%). However, the analysis also revealed that males at middle level have higher preference for feminine leadership style than females at middle level (61% against 52%). Nevertheless, majority of the females at lower level prefer feminine leadership style in contrast to males (53% against 36%). Overall, analysis has confirmed that the employees at top prefer feminine leadership style. Hence, this study supports the findings of Dezső and Ross, (2012). Our analysis also revealed that employees performance at all level tends to improve due to feminine leadership style and we also found that males also have preference for this style to certain extent therefore this study is aligned with the previous work of Merchant (2012); Chaluvadi, 2015). However, our findings has striking difference with the work Daily et al., (2003) that female leadership is effective at only strategic level as we found that even masculine leadership style can improve task performance.

Furthermore, to certain extent we support the notion of Ely and Meyerson (2000), and Dezső and Ross, (2012) that female leadership at all level improves the performance of workforce. Interestingly, in the context of economies of interest, Canadian workforce score higher at all level in contrast to Pakistani workforce. Furthermore, females have higher preference for gender diversity at top (74% against 41%). However, at lower level, males prefer gender diversity more in contrast to their counterparts (82% against 59%). However, overall, females score higher than their counterparts. Our study confirmed the argument of Dezső and Ross, (2012) that organisations and individuals' performances tends to improve due to
gender diversity. The detailed analysis through filter approach, we found that female representation at lower level increase not only females but male employees performances thus we support the argument of Philips and Lloyds (2006). Interestingly, preference for task performance is evident in both types of gender higher at strategic level. However, among females, the preferences are higher than males at middle level (72% against 685) and operational level (73% against 65%). Indirectly, this indicates that our findings are similar to the work of Eagley et al., (2003) that females at middle level has higher preference for task performance that ultimately increases their chance for moving towards strategic level.

Interestingly, the results showed that males in comparison to females at all three level of the management has higher preference for autonomy such as at top (90% against 39%), middle level (60% against 45%) and lower level (54% against 29%) respectively. Thus, we oppose the findings of Castanias and Helfat (2001) and Dezső and Ross (2012) that autonomy at different layers positively influence the performance of individuals and organisations as in our study, females showing low preference for autonomy have significantly improved the performances of their task teams and firm's competitiveness without preferring autonomy. Additionally, we also contradict the work of Dezső and Ross (2012) we found that rather than lower level, at middle level preference for autonomy among females contributes to the firm's competitiveness. Additionally, at top are more task oriented than people oriented (78% against 22%) while females are opposite (31% against 69%). Additionally, it is evident that middle level employees prefer more people orientation and flexible style in comparison to lower level. Moreover, males prefer structured leadership style while females prefer flexible style (66% against 74%). Thus, this study to certain extent is aligned with the previous studies of Noe, (1988); Ibarra, (1993); Tsui et al., (1991), Haque and Aston (2016), and Dezső and Ross (2012).

Table 1. Correlation between research variables

<table>
<thead>
<tr>
<th>Correlation Variables</th>
<th>Pearson Correlation</th>
<th>Sig Value</th>
<th>Results</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feminine Leadership &amp; Competitiveness</td>
<td>0.673**</td>
<td>0.023</td>
<td>P &lt; α</td>
<td>*</td>
</tr>
<tr>
<td>Gender Diversity &amp; Competitiveness</td>
<td>0.521**</td>
<td>0.000</td>
<td>P &lt; α</td>
<td>****</td>
</tr>
<tr>
<td>Task performance &amp; Competitiveness</td>
<td>0.661**</td>
<td>0.010</td>
<td>P &lt; α</td>
<td>*</td>
</tr>
<tr>
<td>Autonomy &amp; Competitiveness</td>
<td>0.802**</td>
<td>0.921</td>
<td>P &gt; α</td>
<td>No significance</td>
</tr>
</tbody>
</table>
Since, the data distribution is normal in terms of gender and economy therefore parametric test considered so we used Pearson's Correlation. Interestingly, in present study, all independent variables (feminine leadership style, gender diversity, task performance, and autonomy) have a positive relationship with firm's competitiveness. However, feminine leadership has moderate positive relation while 67% variation in firm's competitiveness is due to feminine leadership. There is strong evidence against null hypothesis thus it is highly significantly different from zero (p < α, 0.023). Hence, we support the work of Dezső and Ross (2012) in this regard. Moreover, there is a moderate positive relationship between gender diversity and firm’s competitiveness as 52% variation is due to gender diversity (p < α, 0.000). Thus, we oppose the work of Tsui et al., (1991) that there is negative correlation between firm's competitiveness and gender diversification.

Furthermore, there is a moderate positive relationship between team task performance and firm's competitiveness and task performance causes 66% variations in firm's competitiveness (p < α, 0.010), reflecting that relationship is highly significantly different than zero. In addition to that, although there is positive slope upward between autonomy and firm's competitiveness, indicating strong (80%) variation caused in firm's competitiveness due to it but there the relationship between variables is not highly significantly different from zero (p < α, 0.921). Thus, there is no relationship between these two variables. Hence, we found that the autonomy is positively associated with firm’s performance but there is no statistical significant evidence regarding female preference for autonomy improves firm’s performance. Additionally, we oppose the work of Wiersema and Bantel (1992); Castanias and Helfat (2001); and Dezső and Ross (2012).

**Independent t-test**

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<tr>
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<th>Levene's Test for Equality of Variances</th>
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<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
<td>T</td>
<td>Df</td>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>Feminine Leadership</td>
<td>102.3</td>
<td>.012</td>
<td>8.75</td>
<td>631</td>
<td>.012</td>
</tr>
<tr>
<td>Style</td>
<td>102.3</td>
<td>.001</td>
<td>14.67</td>
<td>631</td>
<td>.001</td>
</tr>
<tr>
<td>Gender Diversity</td>
<td>102.3</td>
<td>.000</td>
<td>3.27</td>
<td>631</td>
<td>.000</td>
</tr>
<tr>
<td>Task Performance</td>
<td>102.3</td>
<td>.079</td>
<td>.268</td>
<td>631</td>
<td>.079</td>
</tr>
<tr>
<td>Autonomy</td>
<td>102.3</td>
<td>.079</td>
<td>.268</td>
<td>631</td>
<td>.079</td>
</tr>
</tbody>
</table>
From independent t-test, we found that there is significant positive statistical relationship between feminine leadership style in corporate hierarchy and firm's competitiveness in contrasting economies ($P=0.012 < 0.05$). Thus, we reject our first null hypothesis. Partially, we support the work of Dezső and Ross (2012) that there is a relationship between variables of interest. Nevertheless, our unique finding is that we further have established this relationship in contrasting economies. Moreover, there is significant positive relationship between gender diversity in corporate hierarchy and firm's competitiveness in contrasting economies ($P=0.001 < 0.05$) therefore we reject our second null hypothesis. Thus, we to certain extent support the work of Klein and Harrison (2007), and Dezső and Ross (2012).

However, we have established the relationship in both developed and developing economy. Furthermore, our study confirmed that there is significant positive relationship between female task performance and firm's competitiveness in contrasting economies ($P=0.000 < 0.05$) thus we reject our third null hypothesis (see Table 2). Hence, this study support the work of Hurley and Sonnenfeld (1998) and Eagley et al., (2003) while partially differs from the findings of Dezső and Ross (2012) that only at certain layer and in certain type of economy, females performances contribute to the competitiveness of the firms. In addition to that, we found that There is no significant relationship between autonomy among female working at strategic level of management and firm's competitiveness in contrasting economies ($P=0.792 > 0.05$) thus we fail to reject our last null hypothesis. Hence, our study has striking difference with the work of Castanias and Helfat (2001) that autonomy enables females to increase firm's competitiveness. Additionally, we oppose the work of Dezső and Ross (2012) that autonomy at all levels influence the performances of individuals in a positive manner.

**Managerial implications**

This study offers deeper insight about the research phenomenon that will help the managers to improve strategic decision-making. Additionally, it provides managers to enhance effectiveness and efficiency of operations. Through introduction of female representation at strategic level, organisations will successfully enhance gender diversity that will improve operational efficiency and concept of equality. Additionally, the females use soft skills higher in contrast to males therefore female representation could improve the quality of strategic management by using their people orientation and soft skills in corporate level policies. Additionally, top team performance improves and there is low employee turnover. Thus, employee
turnover is a cost and female introduction to top team management reduces this cost to significant level. Moreover, this comparative analysis facilitates managers in gaining deeper understanding about the role and functioning of females at different levels so it could be used in constructive manner for gaining competitive advantage in logistic firms.

**Conclusion and Recommendations**

From the above statistical analysis we confirm that female at the strategic level has a significant positive role in increasing Logistic firm’s competitiveness in contrasting economies. Based on our findings, leadership style at strategic level, females are more flexible in contrast to males. Furthermore, Canadian organisations are more progressive and innovative in contrast to Pakistani Organisations however the autonomy is not a vital factor in determining the competitive advantage of these firms. Additionally, higher gender diversity at strategic level reflects higher firm’s performance and competitiveness in both countries. Interestingly, we found that in Pakistan, females have higher chances to proceed to corporate hierarchy in contrast to Canada. Moreover, males have higher desire for autonomy at all levels in contrast to females in both countries. Nevertheless, autonomy is not significant determinant in the attainment of strategic level performance and competitive advantage. In addition to that, we found that females are more people-oriented while males are more task-oriented. Interestingly, both male and females working other than strategic level prefer flexible style whereas male at strategic levels prefer the usage of structure style in contrast to their counterparts, who prefer flexibility over autonomy.

Based on our findings, we suggest that the Cargo Logistic firms in both countries shall consider increasing the female representation at strategic level. Moreover, ensure diversification in the top team management to attain competitive advantage. In addition to that, rather than at lower level, creativity shall be the focus at all levels of the management. Moreover, there should be frequent arrangements of Social support programme (social events, workshops) to promote the sense of caring for the employees’ career growth and advancement so that employees remain motivated to progress toward top team management.

In addition to that, future researchers shall consider longitudinal panel research design for future investigation by exploring the variables of interest in different time intervals. Moreover, there should be in-depth interviews with the experts and employees at all level to gain the qualitative
perspective. Additionally, future researchers shall also consider the types of employees (contractual and permanent ones) separately as there could be a likely chance that the views of two distinguish types of employees varies to certain extent.

References


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