

Gender Preference in the Selection for Entry Level Engineers at Electric Companies in Batangas Province

John Kenneth P. Aala, Gary G. Atienza, Evans Jommelle Angelo Chongco, Gilbert D. Mendoza,
Mark Harold B. Poquiz, Engr. Angelita M. Pagcaliwagan
kennethaala@ymail.com

Industrial Engineering Department, College of Engineering, Lyceum of the Philippines University, Batangas City,
PHILIPPINES

Abstract - *This study determined the Gender Preference in the Selection for Entry Level Engineers at Electric Companies in Batangas Province in terms of communication, technical and management skills and to identify the common problems experienced by the respondents in hiring male and female engineers and analyze if there is a significant difference in terms of gender preference and common problems. This study used a descriptive method of research wherein the quantitative data were gathered using a survey questionnaire.*

Results showed that there is no significant difference in the preference of the electric companies in selecting the entry level engineers between male and female applicants in terms of communication skills and management skills. However, there is a significant difference in the preference of the electric companies in selecting the entry level engineers in terms of technical skills This implies that the companies prefer most male applicants when it comes to technical skills.

There is no significant difference in the problems encountered by the employers or human resource managers in terms of family matters, health and personal concerns. This signifies that the employers can experience almost the same level of problems between male and female employees.

Female engineers have to take extra training in order to enhance their technical skills such as training in doing and making schematic and block diagram, training in facility planning and design and on electronics and electrical applications for them to be competent and do what male engineers can do. For male engineers it is also recommended to continue their trainings and learning's so that they will be more competitive to their job. Both male and female engineers have an opportunity to work in electric companies in Batangas Province.

Keywords: Gender Preference, Electric Companies, Entry Level Position, Communication, Technical and Management skills

I. INTRODUCTION

Gender inequality in allocation to organization roles stems from the interaction between workers' gender and the structures and practices of employing organizations. The extent to which individual human capital and other attributes explain the impact of gender on hiring but less attention has been paid to the organizational conditions under which the impact of gender is accentuated or attenuated (Petersen, Saporta and Seidel 2000).

Sex categorization by organizational decision makers triggers two important processes: the application of cultural schemas and stereotypes and favoritism toward members of their own sex (Reskin 2002).

Men's and women's jobs differ greatly, whether across sectors, industries, occupations, types of jobs, or types of firms. While these differences evolve with economic development, the resulting changes in the structure of employment are not enough to eliminate employment segregation by gender. So, women all over the world appear to be concentrated in low-productivity jobs. They work in small farms and run small firms. They are overrepresented among unpaid family workers and in the informal sector. And they rarely rise to positions of power in the labor market.

Women affirm to importance of and the commitment to the relationship. They handle differences of opinion by negotiating to reach a consensus that promotes the connection and ensures that both parties at least feel that their wishes have been considered. They do so even if they are not entirely satisfied with the consensual decision.

Men enjoy connection and rapport. But because men have been raised in a gender culture in which status plays an important role, other goals take precedence in conversations.

Gender differences play a key part on what they are suppose to do as an individual of that sex and what they are not supposed to do. In a matter of speaking each gender has a set of social norms they follow. Males in retrospect get more respect because females take after their mothers and elder women to take less dominating

roles, thus being more feminine in the jobs they choose to hold. The women are not always what we call frilly or girly, because they may be tomboys but they still have that less dominating role in their society. Men on the other hand are categorized into the more dominating roles in society. Men are brought up to take after their fathers or the elder man in their life. They are defined as being more confident, accomplished, and well rounded individuals.

The reasons of choosing electrical companies in the subject study are the following; most engineers are interested to work in an electrical company so the proponents can help them to know the qualifications required in terms of the gender preference of the company; and to answer the perception regarding what gender preferred most by electrical companies in Batangas province.

The researchers choose the “Gender Preference in the Selection for Entry Level Engineers” determine whether electric companies in Batangas Province select engineers in terms of skills like in communication, technical and management, to identify common problems experienced by the respondents in hiring and to analyze if there is a significant difference in the responses in terms gender preference and common problems and to propose an action plan to address the issue in gender preferences.

This study would help the electric companies to gain more ideas in choosing applicants who are suitable in each position in the company. To the engineering students, it will encourage them to continue pursuing engineering program and other discipline which require sort of analysis regarding gender preferences. To engineers, in case that they wanted to work in an electric company, this study will help them determine whether they are qualified or not and to the future researchers, this study will help them gain important insights about gender preference of electric companies and will give more ideas and knowledge to conduct researches in other companies.

II. OBJECTIVES OF THE STUDY

The main purpose of this research is to determine the gender preference of electric companies in Batangas Province in selecting entry level engineers.

Specifically, it attempted to answer the following research objectives: To determine the gender preference in the Selection for Entry Level Engineers at Electric Companies in Batangas Province in terms of Communication skills, Technical Skills and Management Skills; to identify common problems experienced by the respondents in hiring: Male

Engineers and Female Engineers; to analyze if there is a significant difference in the responses of the Electric Companies in Batangas Province in terms of: gender preference and common problems; and to propose an action plan to address the issue in gender preferences.

Hypothesis

There is no significant difference in the responses of the Electric Companies in Batangas Province in terms of gender preference and common problems.

III. REVIEW OF LITERATURE AND STUDIES

The differences in employment distributions of women and men within occupations have been, and continue to be, a prominent feature of the labor market. Both men and women have their fair share of strengths and weaknesses in terms of their skills, abilities, knowledge, appearance, etc. This might be a factor on how companies choose among the sexes.

Eckel and Grossman (2003) survey the economics literature, comparing the data across abstract gambles, contextual experiments and field studies. They conclude that while the results from field studies show that women are more risk averse, the findings of laboratory experiments are less clear.

Holt and Laury (2002) vary the size of the gamble. All participants were much more risk averse when the size of the real incentives increased. However, women were more risk averse than men in low-payoff decisions. No sex differences were found in high-payoff decisions.

Traditional stereotypes may lead male workers to believe that the feminization of management will have a negative economic or social impact on the firm and thus their jobs (Goldin 2002, Ridgeway 2006).

Female managers may benefit women, even without actively favoring them, by providing role models and correcting negative traditional stereotypes (Jackson 2006, Beaman et al. 2009).

Giuliano et al. (2009) analyzes a female-dominant single firm, and finds that female managers have no significantly differential effect on the career outcome of male and female employees. The finding is also consistent with our results that in female-dominant occupations, male workers do not resist much too female managers.

A recent report titled “Women’s Experiences in College Engineering” (Goodman, Cunningham, and Lachapelle 2002) shows that women are not dropping out of engineering programs because of poor

performance. Many women who left mentioned negative aspects of their school's climate such as competition, lack of support, and discouraging faculty and peers. Positive perceptions of self-confidence were highly associated with staying in the program, and increased with the existence of mentor programs, opportunities for networking with practicing female engineers and clubs like the society for Women Engineers.

Male-dominated graduate programs, female students show lower feelings of competence than male students show (Ulku-Steiner, Kurtz-Costes, and Kinlaw 2000).

Schubert, Gysler, Brown and Brachinger (2000) said that in a compare weak and strong ambiguity frames in the setup. They report no gender differences in abstract contexts or with weak ambiguity. With strong ambiguity women are more risk averse in the gain domain, but again males are more risk averse in the loss domain.

Atkinson, Baird and Frye (2003) compared the performance and investment behavior of male and female fixed-income mutual fund managers. They find that male and female managed funds do not differ significantly in terms of performance, risk, and other fund characteristics. Their results suggest that differences in investment behavior often attributed to gender may be related to investment knowledge and wealth constraints.

Dwyer, Gilkeson and List (2002) presented a nice piece of evidence that ties together the observation that women's investments are more conservative but that this is true only for non-professional women who use data from nearly 2000 mutual fund investors, and find that women take less risk than men in their mutual fund investments. However, the observed difference in risk taking is significantly attenuated when a financial investment knowledge control variable is included in the regression model. With this selection issue in mind, evidence from this stream of research concludes that women are indeed more risk-averse than men.

Fertshman and Gneezy (2001) found that while men were discriminated according to their ethnicity, women were not. That is, the offers to women did not depend on ethnicity while the offers to men did.

Gneezy and Rustichini (2004b) found that more men than women chose the competitive environment in tasks that favored men and in task that favored women. The gap in choice, however, was smaller with tasks that favored women. They further found that women who chose to compete reacted in a similar way to the competitive incentives as men did. The earlier results

suggested that women react to competition differently than men. The current studies suggest a more complex view. First, a higher fraction of men choose competitive environments than women. Second, men and women were more likely to choose competitive environments when they have an advantage in performing the task than when they do not. Women who choose competitive environments perform just as well as men in those settings. Under this more sophisticated view, the source of the observed gender differences in reaction to competition is driven by the fraction of competitive types, which is higher among men than among women.

Babcock, Gelfand, Small, and Stayn (2003) asked several hundred people about their negotiating experience. They found that men place themselves in negotiation situation more often than women, and regard more of their interactions as potential negotiations. This difference is robust to age.

Meyersson Milgrom and Kwon (2010) said that in the wake of the gender revolution of the past half-century, the steady progress toward gender equality shows some signs of stalling, as not much has happened at the top echelons within the elite spheres highly educated female workers end up staying at home⁴⁰; and male workers are slow to move into female-typed jobs. There are both optimistic and pessimistic views on the prognosis for gender equality, and this paper presents empirical evidence supporting both. On one positive side, we find that male workers' aversion to female top managers has declined over time, especially among the younger generation. Young male workers in more recent years seem not to show opposite-gender aversion at all, on average. But on one negative side, we also find that male workers' attraction to male top managers hasn't changed over time or varied with their age, and also that male workers' resistance to top female managers becomes strongest precisely when the female share approaches 50%, and gender equality is achieved. Moreover, despite growing egalitarianism in higher education, highly educated male workers, including younger ones, show stronger resistance to top female managers than other males do. At this crossroads in the gender revolution, government policy may have an important positive role in supporting the progress toward gender equality. But policies like gender quotas must be designed with a clear understanding of their effects on female workers, which depends on many factors, including the female share in a given occupation or firm. Quotas must be instituted with cognizance of how they impact male workers. Only if these costs and benefits are clearly understood can

government policy work effectively to promote gender equality in the workplace.

A few studies based on gender composition of high level organizational employees is associated with the gender composition of lower level employees at subsequent point in time, suggesting that same gender preference may be at work in hiring or promotion (Chambliss and Uggen 2000).

Certain practices in areas that emphasize the problems of individuals, rather than those of business, often are seen as women's fields. These include family, law, trust and estates law, and employment law (Goldhaber 2000).

Gender differences have been linked to the consonance of the styles with traditional gender-role-related attributes and the relationship of the themes expressed with the developmental issues of young men and women (Schwartz & Fouts, 2003).

Choi and Fuqua (2003) summarized the findings from 23 studies of the factor structure of the BSRI and supported this conclusion: The femininity scale measures personality traits relating to female-stereotyped emotional expression and communality, while the masculinity scale measures male-stereotyped dominant, forceful traits.

Bernasek and Stephanie Shwiff (2001) overcome this by obtaining detailed information about the gender of the household's decision maker and the household financial decision-making process. Using a survey on pension investments of universities' faculty employees, they again show that women tend to be more risk averse.]

Muriel Niederle and Lise Vesterlund (2007) find that men are substantially more overconfident about their relative performance in a task than women, and that the beliefs on relative performance help predict entry decisions into competition. If men are more confident of their likelihood of coming out ahead in the gamble, they will be more likely to accept it than are women.

Atkinson, Baird, and Frye (2003) compared the performance and investment behavior of male and female fixed-income mutual fund managers. They find that the way male and female managed funds do not differ significantly in terms of performance, risk, and other fund characteristics. Their results suggest that differences in investment behavior often attributed to gender may be related to investment knowledge and wealth constraints.

Eckel and Wilson (2004a), participants are either told information about their counterpart or see their picture. The results indicate that women trust less than

men when they have only written information about their counterpart, but more than men when they have a photo. Again, women's behavior is more variable than men's behavior. There is a 19 percentage point difference between the male trusting rates in the two conditions (92 percent versus 73 percent), and a 24 percentage point difference between the female trusting rates in the two conditions (64 percent versus 88 percent).

Gneezy and Rustichini (2004a) used two tasks: one that favored men and one that favored women. When solving anagrams, 40 percent of the men and 25 percent of the women chose to compete; in shooting baskets the numbers were 53 percent and 15 percent, respectively. That is, more men than women chose the competitive environment in both tasks, but the gap in choice was smaller with the task that favored women.

Chen, Katuscak, and Ozdenoren (2009) who find that women's competitiveness depends on menstruation and contraceptive pill usage, In first-price auctions, while women bid significantly higher than men do in all phases of the cycle, they find a sine-like pattern of bidding throughout the menstrual cycle, with higher bidding in the follicular phase and lower in the luteal phase. The studies demonstrate, just as convincingly, that "nature matters" as well.

Andreoni and Vesterlund (2001) manipulate the cost/benefit ratio of giving money to the recipient. They find that the behavior of men is more responsive to price changes. However, the authors argue that men are concerned with maximizing efficiency; giving more when the cost/benefit ratio is low and less when it is high. In contrast, women tend to equalize earnings between the two parties. Thus male and female reactions to price changes are consistent with different objective functions, rather than one being more variable than the other. The authors also find that women give more than men when the price of giving is one, significant in one condition and not significant in another.

The distinctive way women find they must balance work and family plays a critical role. Female academics are far more likely to be working part-time or to have left work because of family responsibilities. Overall, the past literature offers a myriad of conflicting reasons why women may be less research successful than men; some of the impediments are structural and institutional bias whilst others may be linked more to social conditioning and/or differing value systems (Tower and Ridgewell, 2006, Ridgewell and Tower, 2005).

Mathews and Andersen (2001) offer broader explanations for gender disparities in academic publishing explanations, females are more likely to work in non-tenure track, part-time or temporary positions, to work at teaching colleges, and to lack access to the institutional support, resources or time needed for publishing, more likely to involve in activities that detract from research, interrupt their careers because of children, women are also more likely to be isolated and excluded from professional networks that define the life of a department.

Bentley (2003) finds that women faculties are placed at a particular disadvantage by family responsibilities during child-rearing years negatively affecting career advancement and hence earnings of women faculty.

Corley and Gaughan (2005) looking at university research centers note that women spend more time writing grant proposals, but less time working on unfunded research. Female scientists are less satisfied with their jobs and feel less appreciated by their colleagues for their research contributions. Women are less likely to be tenured or full-professors, the result of their younger career age.

As one of the most important demographic factors, the relationship between gender and job satisfaction has been examined frequently. However, the results have been contradictory. Several research indicate that employees gender have effect on job satisfaction. Result of those studies suggest that either women are more satisfied with their jobs than men (Sloane and Williams, 1996; Clark, 1997; Kim, 2005)

Female decision makers may be more willing to act on this same-gender preference when women are in a smaller minority among organizational leader. In-group favoritism generally is greater in small group than in large groups. When few women occupy positions of power, female decision makers may feel a stronger

motivation to help other women. On the other hand, when women and men are represented almost equally at higher levels, the advancement of women may not seem to call for special effort. Female decision makers in a small minority also may feel a stronger desire to interact with other women, or may find it easier to justify a high level of female hiring to their male peers (Brewer and Brown 1998, Gorman 2005).

IV. MATERIALS AND METHODS

This study used a descriptive method of research wherein the quantitative data were gathered using a survey questionnaire to determine the gender preference in the selection for entry level engineers at Electric Companies in Batangas Province. The participants of the study were composed of three (3) human resource personnel and three (3) managers of electric companies in Batangas Province. Researcher-made questionnaire was used as an instrument to determine the responses in gender preferences. The questionnaire is composed of two parts: first is the gender preference in the selection for entry level position and second part is the common problems experienced by the respondents in hiring male or female engineers. The questionnaire was validated by the adviser through content validation.

The researchers asked the permission of the company managers to allow them to conduct and administer survey questionnaire to their General Manager and Human Resource Manager. Communications were done through interview and letters.

Data were analyzed using descriptive statistical tools. Weighted mean was used to analyze the gender preference and common problems encountered by the respondents. Percentage was used to determine the percent distribution of the responses. T-test was used to test the significant difference between/among groups of respondents.

The Likert's Scale was used to evaluate the results of common problems encountered by the respondents. The following equivalence was given.

Scale	Range	Verbal Interpretation
5	4.50 – 5.00	Very Serious (VS)
4	3.50 – 4.49	Serious (S)
3	2.50 – 3.49	Moderately Serious (MS)
2	1.50 -2.49	Less Serious (LS)
1	1.00 – 1.49	Not a Problem (NP)

V. RESULTS AND DISCUSSIONS

Table 1 shows percentage distribution of gender preference in terms of communication skills.

Table 1. Percentage Distribution of Gender Preference in Terms of Communication Skills

COMMUNICATION SKILLS	Percentage		
	Male	Female	Both
Ability to...			
A. organize and reason in logical manner.	16.7	0	83.3
B. listen, define, write, explain and interpret ideas and policies.	0	0	100
C. work with committees and operate communication systems.	0	0	100
D. inform and consult with both staff and customers.	33.3	0	66.7
E. express ideas in easily understandable terms.	0	66.7	33.3
Mean	10.0	13.3	76.7

The table presents the distribution of the communication skills in terms of ability to organize and reason in logical manner, listen, define, write, explain and interpret ideas and policies, work with committees and operate communication systems, inform and consult with both staff and customers and express ideas in easily understandable terms.

The mean percentage distribution of gender preference in terms of communication skills are 76.7 percent for both, 13.3 percent for female and 10.0 percent for male.

Majority of the respondents perceived that in terms of communication skills, male and female preference are both competitive and were preferred because of their ability to work and perform well in electric companies.

Table 2. Percentage Distribution of Gender Preference in Terms of Technical Skills

TECHNICAL SKILLS	Percentage		
	Male	Female	Both
Ability to...			
A. analyze schematic or block diagrams.	0.0	0	100.0
B. operate computer applications.	33.3	0	66.7
C. interpret facilities planning and design	66.7	0	33.3
D. work on electronics and electrical applications.	100.0	0	0.0
E. evaluate economic conditions through financial and engineering management	33.3	16.7	50.0
Mean	46.7	3.3	50.0

Majority of the respondents perceived that in terms of technical skills both male and female can perform their duties and obligation to the company and were preferred because of their ability to analyze schematic or block diagrams, operate computer applications, interpret facilities planning and design, work on e

Electronics and electrical applications and evaluate economic conditions through financial and engineering management.

The mean percentage distribution of gender preference in terms of technical skills are 50.0 percent for both, 46.7 percent for male and 3.3 percent for female.

Table 3 shows percentage distribution of gender preference in terms of management skills.

Majority of the respondents believed that in terms of management skills of both male and female are competitive to work in electric companies. Both male and female were preferred because of their ability to plan, organize and schedule the activities of the staff and set standards and measure production with 100 percent. They were also preferred to travel frequently as team member or independently with 83.3 percent and work with people and work under stress and lead oversee and supervise the activity of others with 66.7 percent.

Table 3. Percentage Distribution of Gender Preference in Terms of Management Skills

MANAGEMENT SKILLS	Percentage		
	Male	Female	Both
Ability to...			
A. plan, organize and schedule the activities of the staff.	0.0	0	100.0
B. set standards and measure production	0.0	0	100.0
C. work with people and work under stress	0.0	33.3	66.7
D. travel frequently as team member or independently	16.7	0	83.3
E. lead oversee and supervise the activity of others.	16.7	16.7	66.7
Mean	6.7	10.0	83.3

The mean percentage distribution of gender preference in terms of management skills is 83.3 percent for both gender, 10.0 percent for female and 6.7 percent for male.

Table 4 shows the problems commonly encountered by the respondents in hiring male and female engineers in terms of absenteeism and tardiness due to family matters.

Table 4. Problems Commonly Encountered by the Respondents in Hiring Male and Female Engineers in Terms of Absenteeism and Tardiness due to Family Matters

Family Matters	Male		Female		Overall		Rank
	WM	VI	WM	VI	WM	VI	
A. Caring for the sick/elder relatives	2.67	MS	2.83	MS	2.75	MS	1
B. Maternity/Paternity Leave	1.83	LS	1.67	LS	1.75	LS	5
C. Change in family circumstances (new baby/divorce/death)	1.67	LS	2.17	LS	1.92	LS	4
D. Caring for children	2.50	MS	2.83	MS	2.67	MS	2.5
E. Family Problems	2.67	MS	2.67	MS	2.67	MS	2.5
Composite Mean	2.27	LS	2.43	LS	2.35	LS	

Caring for the sick or elder relatives was the most common problem encountered by the respondents in terms of absenteeism and tardiness due to family matters to male and female engineers with weighted mean scores of 2.67 and 2.83, respectively. The overall weighted mean score of caring for the sick or elder relatives was 2.75 which fall within “moderately serious” verbal interpretation in rank number 1.

Caring for children and family problems considered moderately serious problems encountered by the respondents in hiring male and female engineers by the total weighted mean scores of 2.67 on rank number 2.5.

Change in family circumstances like new baby, divorce and death are less serious problems encountered in male and female engineers as indicated by the weighted mean scores of 1.67 and 2.17 respectively. The overall weighted mean score was 1.92 in rank number 4.

Maternity and paternity leave showed that it is less serious problems encountered by the respondents in male and female engineers with a weighted mean scores of 1.83 and 1.67, respectively. It is indicated as the least problem in hiring engineers with overall weighted mean score of 1.75 with a verbal interpretation of “less serious”.

The composite mean score of 2.27 of family matters for Male Engineers were considered less serious problems, as well as Female Engineers with 2.43 composite mean score. The overall composite mean score of 2.35 implied that family matters is a less serious problem encountered by the respondents in hiring male or female engineers in terms of absenteeism and tardiness.

Table 5 shows the problems commonly encountered by the respondents in hiring male and female engineers in terms of absenteeism and tardiness due to health.

Table 5. Problems Commonly Encountered by the Respondents in Hiring Male and Female Engineers in Terms of Absenteeism and Tardiness due to Health

Health	Male		Female		Overall		Rank
	WM	VI	WM	VI	WM	VI	
A. Poor Health Conditions	2.17	LS	2.17	LS	2.17	LS	1.5
B. Seasonal Influenza	2.17	LS	2.00	LS	2.06	LS	3
C. Respiratory Problems	1.83	LS	2.00	LS	1.92	LS	4
D. Severe Headache	2.17	LS	2.17	LS	2.17	LS	1.5
E. Allergy	1.83	LS	1.83	LS	1.83	LS	5
Composite Mean	2.03	LS	2.03	LS	2.03	LS	

The respondents believed that poor health conditions and severe headache was a less serious

problem commonly encountered in hiring Male and Female Engineers with a weighted mean score of 2.17.

The overall weighted mean score of poor health conditions and severe headache was 2.17 and has a verbal interpretation of “less serious” in rank number 1.5.

Seasonal influenza was believed to be less serious also in Male and Female Engineers as indicated by the weighted means scores of 2.17 and 2.00, respectively. The overall weighted mean score was 2.06 in rank number 3.

Respiratory Problems was another consideration in health which was also deemed to be less serious problem for the respondents of the study

with 1.92 overall weighted mean score in rank number 4.

Allergy is considered as the least problem commonly encountered in terms of absenteeism and tardiness due to health problem with an overall weighted mean score of 1.83 which has a verbal interpretation of less serious.

The composite mean score of 2.03 for Male and Female Engineers was considered less serious problem.

Table 6 shows the problems commonly encountered by the respondents in hiring male and female engineers in terms of absenteeism and tardiness due to personal concerns.

Table 6. Problems Commonly Encountered by the Respondents in Hiring Male and Female Engineers in Terms of Absenteeism and Tardiness due to Personal Concerns

Personal Concerns	Male		Female		Overall		Rank
	WM	VI	WM	VI	WM	VI	
A. Easily to experience stress	2.17	LS	2.00	LS	2.09	LS	5
B. Job Burnout	2.17	LS	2.17	LS	2.17	LS	2.5
C. Employee dissatisfaction	2.33	LS	2.17	LS	2.25	LS	4
D. Assertiveness/Activism	2.67	MS	2.50	MS	2.59	MS	1
E. Low Self-Esteem/Confidence	2.17	LS	2.17	LS	2.17	LS	2.5
Composite Mean	2.30	LS	2.20	LS	2.25	LS	

Assertiveness or Activism was said to be moderately serious as perceived by the respondents for male and female engineers with 2.67 and 2.50 weighted mean scores respectively which ranked number 1.

Job Burnout and Low Self Esteem or Confidence were deemed to be less serious with 2.17 overall weighted mean in rank number 2.5.

Employee Dissatisfaction was considered less serious problem encountered by the respondents with 2.33 and 2.17 weighted mean scores respectively. The

overall weighted mean score of 2.25 implies a verbal interpretation of less serious.

The least rated item is easily to experience stress with 2.09 overall weighted mean score. The Personal Concern was considered to be less serious problem encountered by the respondents with 2.25 overall composite mean score.

Table 7 shows the difference between male and female preference in terms of skills.

Table 7. Difference Between Male and Female Preference in Terms of Skills

	Male	Female	t	df	p-value	Interpretation
Communication Skills	48.33	51.67	-1.000	5	0.363	Not Significant
Technical Skills	68.3	28.3	5.477	5	0.003	Significant
Management Skills	48.33	51.67	-1.000	5	0.363	Not Significant

Result showed that there is no significant difference in the preference of the electric companies in selecting the entry level engineers between male and female applicants in terms of communication skills and management skills as denoted by the computed p-value of 0.363 which is higher than the 0.05 level of significance. Therefore, the null hypothesis is accepted on these variables.

However, there is a significant difference in the preference of the electric companies in selecting the entry level engineers in terms of technical skills as denoted by the computed p-value of 0.003 which is less than the 0.01 level of significance. Therefore, the null hypothesis is rejected. This implies that the companies prefer mostly male applicants when it comes to technical skills.

Table 8 shows the difference between male and female in terms of problems encountered

Table 8. Difference Between Male and Female in Terms of Problems Encountered

	Male	Female	T	df	p-value	Interpretation
Family Matters	2.67	2.43	-1.185	5	0.289	Not Significant
Health	2.03	2.03	0.000	5	1.000	Not Significant
Personal Concerns	2.30	2.20	1.464	5	0.203	Not Significant

There is no significant difference in the problems encountered by the employers or human resource managers in terms of family matters, health and personal concerns as denoted by the computed p-values which are greater than the 0.05 level of significance. Therefore, the null hypothesis is accepted. This signifies that the employers can experience almost the same level of problems between male and female employees.

Table 9 shows the propose action plan address the issue in Gender Preference.

This table shows the propose action of the researchers that address issue in gender preference. Female engineers should attend trainings, seminars and hands on work to enhance their technical skills. In male part, they should continue their trainings, seminars and hands on work in terms of technical skills.

Table 9. Action Plan to Address the Issue in Gender Preference

OBJECTIVE	ACTIVITY	RESPONSIBLE	RESOURCES	PERFORMANCE INDICATOR
Enhancing the technical skills of the female engineers	Trainings, seminars, and hands on work.	Female engineers of respective electrical Companies in Batangas province.	Meralco Batangas Branch, Batelec I and Batelec II	100% of Female engineers of Electric Company in Batangas Province
Continuous Technical Skills Improvement for Male Engineers	Attending seminars, Extra Trainings, and Hands on work.	Male engineers of respective Electrical Companies in Batangas Province	Meralco Batangas Branch, Batelec I and Batelec II	100% of Male engineers of Electric Company in Batangas Province

VI. CONCLUSIONS AND RECOMMENDATIONS

In terms communication skills, both male and female were preferred to work with committees and operate communication systems, listen, define, write, explain and interpret ideas and policies, organize and reason in logical manner and inform and consult with both staff and customers. Female can express ideas in easily understandable terms. Male is more capable in working on electronics and electrical applications and interpret facilities planning and design. Both male and female are competitive and are capable in planning, organizing and scheduling the activities of the staff, can set standards and measure production, can travel frequently as team member or independently, lead oversee and supervise the activity of others and work with people and work under stress.

Common problems experienced by the respondents in hiring male and female engineers in terms of absenteeism and tardiness due to family matters is caring for the sick/elder relatives. Severe headache and poor health conditions is the primary problems of the employees. Assertiveness or activism is moderately serious problem that the respondents pinpointed.

There is no significant difference in the preference of the electric companies in selecting the entry level engineers between male and female applicants in terms of communication skills and management skills. The employers can experience almost the same level of problems between male and female employees.

Both male and female engineers of electrical companies in Batangas province should attend and perform trainings, seminars, and must be engage more in hands on work to have a continuous improvement

regarding to their skills, techniques and knowledge to their respective works.

It is hereby recommended that both male and female are excellent in terms of communications skills but there is one aspect that the company's should improve employees especially the male engineers' ability to express ideas in an easily understandable way. Trainings have a great impact and will be a big help for their enhancement and continuous improvement.

Female engineers must have extra training and understanding in order for them enhance their technical skills in doing and making schematic and block diagram; training in facility planning and design and on electronics and electrical applications for them to be competent in doing what male engineers can do and for them to excel in these aspect.

Male engineers are recommended to continue their trainings and increase their learning so that they will be more competitive in their job. Both male and female engineers have an opportunity to work in electric companies in Batangas Province.

Attending trainings and seminars is also recommended for both male and female engineers in order to enhance their management skills.

Problem commonly encountered in terms of absenteeism and tardiness due to family matters is considered as one of the problem cited in the research. In this aspect the male and female engineers should manage their time properly and should be flexible in work problems like caring for sick or elder relatives, caring for children and family problems so that their performance won't be affected and they should also train themselves to handle their problems appropriately.

Health of the employee is not a serious problem encountered as the respondents perceived but they should always consider that proper checkup of their employees is very important to assure that all of them are in good conditions and are capable to do their job excellently.

Assertiveness and activism is interpreted as moderately serious problem encountered of engineers in terms of absenteeism and tardiness due to personal concerns. It is highly recommended that they must undergo proper orientation so that the negative attitude that they possess will be eliminate and corrected.

To human resource manager and supervisor, attending seminars and trainings are very essential to them to gain more knowledge, skills and techniques for their continuous growth and improvement. Through this, more knowledge, skills and techniques will be acquired by the company.

REFERENCES

- Andreoni, James and Lise Vesterlund, (2001), "Which Is the Fair Sex? Gender Differences in Altruism," *The Quarterly Journal of Economics* 116, pp. 293-312.
- Atkinson Stanley M, Samantha Boyce Baird, and Melissa B. Frye, (2003), "Do Female Fund Managers Manage Differently?" *Journal of Financial Research* 26, pp. 1-18.
- Atkinson, Stanley M., Samantha Boyce Baird, and Melissa B. Frye, (2003), "Do Female Mutual Fund Managers Manage Differently?," *Journal of Financial Research*, 26(1): 1-18.
- Babcock, Linda, Michele Joy Gelfand, Deborah A. Small, and Heidi Stayn, (2003), "The propensity to initiate negotiations: Toward a broader understanding of negotiation behavior," Mimeo, Carnegie Mellon University.
- Beaman, Lori, Raghavendra Chattopadhyay, Esther Duflo, Rohini Pande, and Petia Topalova, (2009), "Powerful Women: Does Exposure Reduce Bias?" *Quarterly Journal of Economics*, 124 (4), 1497-1540.
- Bentley, J. T. (2003). Gender differences in the careers of academic scientists and engineers: A literature review Arlington, VA: National Science Foundation, Division of Science Resource Statistics.
- Brewer, Marilynn B. and Rupert J. Brown, (1998), "Intergroup Relations", 554-94 in *Handbook of Social Psychology*, edited by Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindsey, Boston: McGraw-Hill; New York: Distributed exclusively by Oxford University Press.
- Brody, Leslie R. (1993), "On Understanding Gender Differences in the Expression of Emotion." In *Human Feelings: Explorations in Affect Development and Meaning*, ed. Steven L. Ablon, Daniel Brown, Edward J. Khantzian, and John E. Mack, 87-121.
- Chambliss, Elizabeth and Christopher Uggen, (2000), "Men and Women of Elite Law Firms: Reevaluating Kanter's Legacy." *Law and Social Inquiry* 25:41-68.
- Chen, Yan, Peter Katuscak, and Emre Ozdenoren, (2009), "Why a Woman Can't Bid More Like a Man?" Unpublished
- Choi, N., & Fuqua, D. R. (2003). The structure of the Bem Sex Role Inventory: A summary report of 23 validation studies. *Educational and Psychological Measurement*, 63, 872-887.
- Clark, A. E. (1997). Job satisfaction and gender: why are women so happy at work? *Labour economics*, 4(4), 341-372.
- Corley, E., & Gaughan, M., (2005), Scientists' participation in university research centers: What are the gender differences? *Journal of Technology Transfer*, 30(4), 371-381.
- Croson, Rachel and Gneezy, Uri, (2014), "Gender Differences in Preferences", *Journal of Economic Literature*

- Dwyer, Peggy D., James H. Gilkeson, and John A. List, (2002), "Gender Differences in Revealed Risk Taking: Evidence from Mutual Fund Investors," *Economics Letters* 76, pp. 151- 158.
- Eckel, Catherine C. and Philip J. Grossman, (2003), "*Men, women and risk aversion: Experimental evidence*", forthcoming *The Handbook of Experimental Economics Results*
- Eckel, Catherine C., and Rick K. Wilson, (2004a), "Conditional Trust: Sex, Race and Facial Expressions in a Trust Game."
- Fershtman Chaim and Uri Gneezy, (2001), "Discrimination in a Segmented Society: An Experimental Approach," *Quarterly Journal of Economics*, February, pp. 351-377.
- Giuliano, Laura, David I. Levine, and Jonathan Leonard, (2009), "Do Race, Age, and Gender Differences Affect Manager-Employee Relations?" *Journal of Labor Economics*, 27 (4), 589–631.
- Gneezy Uri and Aldo Rustichini, (2004b), "CEO's versus teachers," Mimeo. Unpublished
- Gneezy, Uri, and Aldo Rustichini, (2004a), "Executives versus Teachers," Unpublished
- Goldhaber, Michae D. (2000), "In Territory", *The National Law Journal*, February 7:A1.
- Goldin, Claudia, (2002), "A Pollution Theory of Discrimination: Male and Female Occupations and Earnings," NBER Working Paper No. 8985.
- Goodman, Irene F., Christine M. Cunningham, and Cathy Lachapelle, (2002) "The Women's Experience in College Engineering," Goodman Research Group, Inc.
- Gorman, Elizabeth H., (2005), Gender Stereotypes, Same Gender Preferences and Organizational Variation in the Hiring of Women: Evidence from Law Firms, 707.
- Holt, Charles. A., and Susan. K. Laury, (2002), "*Risk Aversion and Incentive Effects*," *American Economic Review* 92: 5, 1644-1655
- Interpersonal Skills, August 2013, URL: <http://www.skillsyouneed.com/interpersonal-skills.html>
- Jackson, Robert Max, (2006), "Opposing Forces: How, Why, and When Will Gender Inequality Disappear?" in *The Declining Significance of Gender?* Francine D. Blau, Mary C. Brinton and David B. Grusky, ed. (New York, NY: Russell Sage Foundation).
- Kim, S. (2005). Gender differences in the job satisfaction of public employees: a study of Seoul Metropolitan Government, Korea. *Sex roles*, 52(9), 667-681
- Laguador, J.M., and Dotong, C.I. (2010), "Analysis of Engineering Competencies Required Among Electronics Industries In Batangas Province".
- List of Generic Bulleted Skills, August 2013, URL: http://www.vetswork.org/public_html/Bullets.htm
- Mathews, A. L., & Andersen, K., (2001), A gender gap in publishing?, Women's representation in edited political science books, *Political science and politics*, 34(1), 143-147.
- Meyersson Milgrom Eva M. and Kwon Illoong, (2010), "*Working for Female Managers: Gender Hierarchy in the Workplace*, 27-28.
- Niederle, Muriel, and Lise Vesterlund, (2007), "Do Women Shy Away from Competition? Do Men Compete Too Much?" *Quarterly Journal of Economics*, 122(3): 1067–1101.
- Petersen, Trond, Ishak Saporta, and Marc-David Seidel, (2000), "Offering a Job: Meritocracy and Social Networks", *American Journal of Sociology* 106:763-816.
- Reskin, Barbara F. (2002). "Rethinking Employment Discrimination and Its Remedies," Pp. 218-44 in *The New Economic Sociology*, edited by Mauro Guillen, Randall Collins, Paula England, and Marshall Meyer. New York: Russell Sage.
- Ridgeway, Cecilia L., (2006), "Gender as an Organizing Force in Social Relations: Implications for the Future of Inequality," in *The Declining Significance of Gender?* Francine D. Blau, Mary C. Brinton, and David B. Grusky, ed. (New York, NY: Russell Sage Foundation.
- Ridgewell, B. & Tower, G. (2005) University Performance Evaluation: The business of research, *Journal of College Teaching and Learning*, 2 (9), 19-35.
- Schubert Renate, Matthias Gysler, Martin Brown and Hans-Wolfgang Brachinger, (2000), "Gender Specific Attitudes towards Risk and Ambiguity: An Experimental Investigation." Working Paper Center for Economic Research, Swiss Federal Institute of Technology
- Schwartz, K. D., & Fouts, G. T. (2003), Music preferences, personality style, and development issues of adolescents, *Journal of Youth and Adolescence*, 32, 205-213
- Sloane, P. J., & Williams, H. (1996), Are "overpaid" workers really unhappy? a test of the theory of cognitive dissonance. *Labour*, 10(1), 3-16.
- Tower, G., & Ridgewell, B., (2006), Benchmarking: An International Comparison, *International Business & Economics Research Journal*, 5, 1-14.
- Ulku-Steiner, Beril, Beth Kurtz-Costes, and C. Ryan Kinlaw, (2010), "Doctoral Student Experiences in Gender-Balanced and Male-Dominated Graduate Programs," *Journal of Educational Psychology*, XLII, 296–307.