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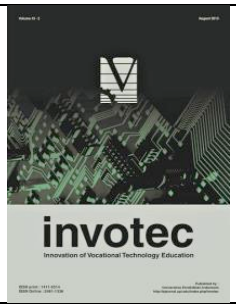

Gender as Determinant in Performances in Areas of Technology and Livelihood Education

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ABSTRACT

Technology and Livelihood Education introduce different skills. It is a major called as all in one knowledge that consist of masculine subjects such as Electricity, Carpentry and Agriculture and feminist subjects such as Dressmaking, cooking and Cosmetology and this leads to the differences of males and females in their performances in areas of technology and livelihood education. The researchers studied the level of competence and level of difficulties of males and females in areas of technology. The extent of influence of factors such as experiences, preparation in elementary and culture and beliefs were also identified. The study employed quantitative research design. It was conducted in one public secondary school in La Trinidad, Benguet. The survey questionnaires were administered to sixty students. Based on the statistical findings, the mean scores of males and females showed that they have high level of competence in areas of Technology and Livelihood education. Males and females' level of difficulty in the competencies in areas of TLE was low. This implies that they can do the activities being assigned to them without close supervision. Meanwhile, on the identified factors that influence the performance of males and females in areas of Technology and Livelihood Education, preparation experiences and preparation in elementary were influential. Finally, the result of T-test proved that there are no differences between gender groups in level of competence, level of difficulty and in extent of the factors that were identified.

1. Introduction

One of the areas in education wherein individual has a gender role is in Masculine subjects and Feminine subjects. In Gender and Educational Issue, masculine subjects such as Electricity, Carpentry and Agriculture and feminine subjects like Dressmaking, Hair Science and Cooking or Home Economics are being questioned if these are differentiated in the curriculum (Caban, et al.,2011)

The field of Technology and Livelihood Educations introduced different skills. Learning different skills on TLE can make the students more competent and skillful. It is a course called as all in one knowledge that consist of different skills or area that people can use or apply in their everyday lives (Gariando, 2011). In this course it is believe that female and male students can equally do assigned

tasks. One of the general goals of education is to meet the needs of all young people and meeting the needs of the individuals (Williamson & Lyle, 2001).

Men and women work at different kinds of jobs and in different industries. Men work on craft, managerial, administrative and in farm while women are numerous in clerical and paid domestic work (Broom, Selznick & Darroch, 1987 as cited by Harper & Row 1999). Aside from taking care of the children, a woman gathers root crops and even went out with men to fish. In the places where agriculture is developed, men cleared and ploughed the land while women planted and harvest the crops (Eviota,1999). Women were also engaged in craft production. Women wove, make potteries, processed food and extracted oils which are traditionally considered to be women's domain (FAD, 2008). Some of them are also traded with the merchants from China and neighboring Island. Women should be equipped with the activities where men are interested and not only to engage in Home Economics activities such as baking and cooking (Ballara, 2000).

In Central Luzon State University, female students take up courses like Agriculture, Engineering, and fisheries are said to be men's domain. They receive the same education including enjoyment of all college, facilities, course and activities (Ballara, 2000). Women working in the skilled trades tend to enjoy their career. They have fun in doing males work (Hedjazi & Omidi, (2008). Millwright (2011) stated that all work is women's work and they don't need to be strong because there is role for every individual. Women's taking up male's profession is not a new issue. They are known because of their good performance, not only in their roles as women but also in the male domain (Ballara, 2000). There is evidence that in agricultural science, females outperformed males and that only means, females' performance should not belittle (Hedjazi & Omidi, 2008). Hence, this research was conducted in order to assess and determine the reasons in the difference's performance in Technology and Livelihood Education.

This study aims to determine the performance of gender groups in areas of Technology and Livelihood Education. The extent of influence of factors that affects the performance of males and females were also identified. The study also examines the differences in the performance of males and females in TLE in terms of level of competence, level of difficulty and the level of influence of the identified factors in the performances of males and females.

Among those who will benefit from this study are the administrators, the teachers, parents and the students taking up Technology and Livelihood Education as a major. Administrators are considered as the immediate benefactors of this study. They should consider the issue about gender differences of the students and how this issue affects their skill performance. The findings can help administrator on their decision-making especially on the matters that concern with the needs of the students.

Teachers will also gain from the study. Result can provide them with basis on how they will guide the learning process of the students by planning and organizing meaningful learning experiences for individual differences.

Parents also benefit from the study. They will plan on what proper actions to take in guiding their children regarding on which skill do their children excel and which skill do their children needs to improve.

Finally, this study shall have relevant contribution to the students. The study will provide information on what skill should the students need to improve and focus with. Through improving their skills, it will lead them to expertise and used it in finding a job whether it is a boys or girls work.

2. Conceptual Framework

An expectation regarding the proper behavior, attitudes and activities of males and females refers to Gender Roles (Parcasio, 2009). Conflict View is one of the theories of Gender Roles wherein it states that males are 'dominating females or they have unequal power. Males have a higher position than female. Males are just like capitalists that control the wealth, prestige and power while females are the proletariats wherein, they are just obeying the command of their bosses (Canay, et al., 2009). In Africa, Asia and Latin America, women contribute to agricultural production but men have the right to the land and control the farming especially in Africa (Rodda, 1991). With the viewpoint of cultural feminism, women and men differ in many ways which include biology,

experiences, perspectives, skills and knowledge (Wood, 2005). Working at home at child caring are assumed task by women in the whole world while men worked on the task that quires greater speed like hunting of large animals (Huber, 1990). The head of the Gender Studies Program of UP Cordillera Studies Center noted that in agriculture and natural resource management, men and women maintain cultivating separate crops and have separate tasks wherein women have the responsibility for the seed selection, they are wood gatherers and they are the one who raise backyard animals (Guerero, 1997).

In contrast to the Conflict view is the Amazon Feminist which opposed to the unequal power and role of males and females (Porter, et al., 1999). This theory tends to view that all women are equal to men. According to Parcasio (2009), males and females have equal tasks. Feminism refers to philosophy that men and women should be politically, economically and socially equal. Moreover, Henslin (2002) argued that males and females should be treated equally in all aspects.

Similar to Amazon Feminist is the Men Feminist wherein it states that men believe that women and men are alike in important aspects and should enjoyed the same privileges, rights, opportunities, and status in society. Male feminists fight for the equal treatment for males and females (Wood, 2008).

The founder of the Decade of Women acknowledged myths about women. Just like the primary myth wherein men are said to be producer of the world's food, women prepare it for the table, women work to supplement the family's income. Women contribute a minor share to the world's economic growth. In other words, women do not work outside, instead, they stay at home and take care of their children, but myths are fact, thus the founder of the Decade of Women said that women do two-thirds of the world's work, receive 10 percent of the world's income, and own 1 percent of the means of production (Ward,2003).

Filipino women in pre-colonial in the Philippines played an important role in economic life. They work on needle work, weaving, poultry, hog raising and also work in the farm. Negrito women are also hunting, fishing and gathering foods together with the men. In Kalinga and Bontoc groups, women prepared food and men are protecting the community against tribal enemies.

Women are free in the pre-colonial, but the coming of Spaniards crushed them. Women were classified from minors, lunatics, and idiots as what is stated in the Spanish Civil Code. Women's lives during the Spanish Era revolved around the home, the church, and the market place (Parcasio, 2009).

There are two types of gendered jobs and this are men's versus women's work and identical work with different titles (Martin, 1992 as cited by Chow 2002). With the two types, male workers are favorable so females work on a low rank, social status and low paid jobs.

The first type is concerned to the physical capabilities of males and females' bodies on which jobs are appropriate for the males and females. In factories, males work as manager, technical, and skilled positions while females are the one who work on the assembling, in clerical and unskilled positions. Men performed heavy, manual, mechanical, technical and professionally skilled types of tasks and activities while women are working on simple tasks and unskilled jobs. A male Taiwanese manager observed that women do not like to work with technical and maintenance kinds of work because they do not know how to fix machines. A female Japanese worker argued that females have a weaker body than males and males can do heavy works but females cannot (Chow, 2002).

In the identical work, works are given to males and females wherein they will have different outcomes or result of their work in which they are rewarded differently. Work abilities differ between males and females and it depends on the type of job that they do. Job content that requires manual labor such as machinery is better suited for males while females are suited to the works that require careful attentions. From the constructionist view as summed up by the female supervisor from an American firm, gender differences in males' and females' abilities are gradually diminishing because education is already for everybody (Chow, 2002). Today, many women all over the world are seeking equal status with men by improving themselves through education (Vega, Prieto & Carreon, 2009).

The Conflict View and Amazon Feminist theories are applicable to the study because these theories have a great impact and can affect the performance of males and females. Conflict view states that males dominate females and this will lead to the females' view that only males could do

a better work and out-performed females. Amazon Feminist opposed the unequal power between males and females. Females do believe that they can perform the task that males can do.

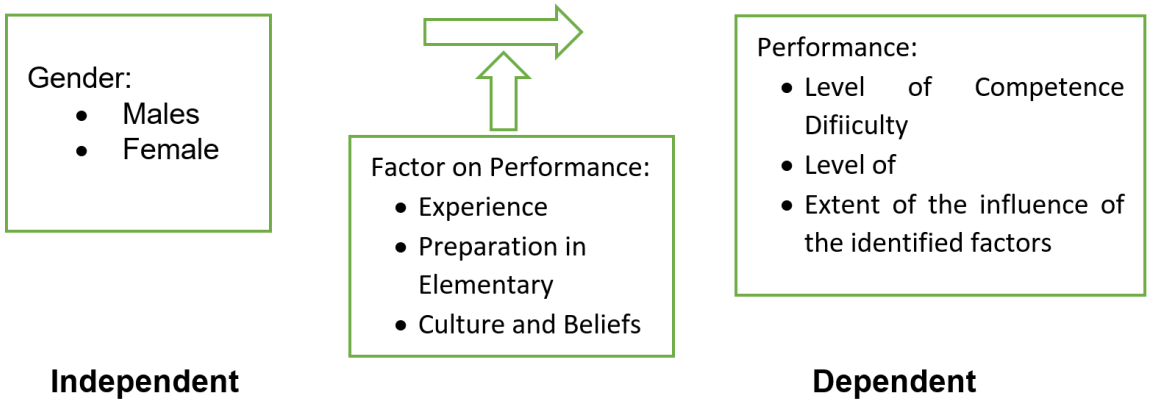

Figure 1. Paradigm showing the interrelationship of the variable of the study

Gender. The independent variable is the gender which is said to be the determinant in performances in areas of Technology and Livelihood Education.

Gender refers to be the determinant in performances in areas of Technology and Livelihood Education. It was categorized as males and females. Males refers to the one who do heavy works such as Carpentry, Agriculture, Masonry and Plumbing and females are the one who do feminine works such as Dressmaking, Handicrafts and Cooking.

Performance. The dependent variables, in the other hand, relate the performance of males and females in the level of competence, level of difficulty and degree of influence of the factors being identified.

Performance of males and females depends on their experiences, preparation in elementary and culture and beliefs which are the intervening variables in the study.

It was categorized as level of competence, level of difficulty, and extent of influence of the following factors. Level of competence refers to the ability of males and females in the competencies in areas of Technology and Livelihood Education; level of difficulty refers to the performance of males and females in doing the task in areas of Technology and Livelihood Education; and extent of influence of the following factors refers to how it affects the performance of males and females in areas of Technology and Livelihood Education.

Factors on Performance. The individual experiences, preparation in elementary and culture and beliefs are crucial factors that influenced the performances of males and females.

Factors on performance refers to how it affects the performance of males and females in areas of Technology and Livelihood Education.

It was categorized as experience, preparation in elementary, and culture and beliefs. Experience refers to the happenings and activities that an individual encountered and it is where an individual can acquire knowledge; preparation in elementary refers to the school where the student attended in their elementary years and it also pertains to the learning experiences that the students encountered while they are in elementary; and culture and beliefs refers to a way of life that is learned and shared by human beings and taught by one generation to next and beliefs is mans' ideas about reality and their interpretation of things and situations.

3. Statement of the Problem

This study focused on the differences in the performance of males and female students in areas of Technology and Livelihood Education. Specifically, the study sought to answer the following questions:

1) What is the level of competence of male and female students in the following competencies in areas of TLE?

a. Home Economics TLE
b. Industrial Arts

2) What is the level of difficulty of male and female students in the following competencies in areas of TLE?
a. Home Economics TLE
b. Industrial Arts
3) What is the extent of influence of the following factors in performance of males and females in areas of Technology and Livelihood Education?
a. Experience
b. Preparation in elementary
c. Culture and Beliefs
4) Is there a difference between gender groups on the competencies in areas of Technology and Livelihood Education in terms of:
a. Level of competence
b. Level of difficulty
c. Extent of influence on performances of male and female

4. Hypotheses of the Study

The following hypotheses were forwarded for testing:
1) There is a difference between gender groups on the competencies in areas of Technology and Livelihood Education in terms of level of competence.
2) There is a difference between gender groups on the competencies in areas of Technology and Livelihood Education in terms of level of difficulty.
3) There is a difference between gender groups on the competencies in areas of Technology and Livelihood Education in terms of extent of influence of the identified factors in performance of males and females

5. Methodology

This section shows the research design employed in the study, population and locale of the study, data collection instruments, data collection procedure and treatment of data.

5.1. Research Design

The study employed the Quantitative Research. Quantitative research refers to the systematic empirical investigation of social phenomenon via statistical, mathematical or computational techniques (Black, 1999). This was used in collecting numerical data for the frequency on the performances of males and females in areas of Technology and Livelihood Education. The numerical data was used to determine the differences of gender performances in areas of TLE.

The study employed the Causal-Comparative Approach (Ex Post Facto). Causal-Comparative Approach simply means after the fact. This uses existing data such as those in statistical records or depends upon existing characteristics and life experiences of the subjects (Black, 2002). The goal of the researchers was to determine whether differences in the performances exist between males and females in areas of TLE and to identify the degree of influence of the given factors. The differences between gender groups in competencies in Home Economics and Industrial Arts in terms of level of competence, level of difficulty and influence of following factors was identified through the data gathered.

5.2. Population and Locale of the Study

The respondents of the study are the Grade 7 students of one public high school in La Trinidad, Benguet. The students are currently undergoing exploratory on TLE subjects which are appropriate to be the respondents of the researchers. A number of 60 students are chosen as respondents for the study. Purposive Sampling Technique was used to select the needed respondents. Respondents must meet all the criteria to have the chance of being part of the study and they were selected with their willingness, availability and cooperation to be the participants of the study.

The study was conducted in one secondary school in La Trinidad, Benguet. In June 2007, this school was established as an annex public school in Benguet along with four annexes to bring

education right on the doorsteps of the clientele. Its' establishment was due to the initiative and efforts of the Mayor of La Trinidad and now the Provincial Governor, Hon. Nestor B. Fongwan; the School Division Superintendent, Mary B. Namuhe; Mrs. Cerila B. Taynan, who was the Principal of Benguet National High School - Main; Mrs. Glory Balangcod, the School Head of Beckel Elementary School; Barangay Captain and its Council and parents in the community, who realized the establishment of the school.

The High School lot was extracted from the lot of a public elementary school which is in the name of the Municipality of La Trinidad, Benguet. The School Administration, Parents and Teachers Association, Barangay Council and Municipal Government of La Trinidad accomplished the needed requirements to be an independent school endorsed by Department of Education - Benguet, Division Office, and it was approved by the DepEd Regional Director, Benito S. Tumamao on March 2009. The name of the school was change with its present name (Villamor & Butz).

Table 1 shows the respondents of the study.

Table 1. Respondents of the Study

	Profile	f	%
Gender			
	Male	30	50.00
	Female	30	50.00
	Total	**60**	**100.00**

5.3. Data Collection Instruments

To gather the needed data, a survey questionnaire was constructed. It consists of four parts: (1) personal information, (2) level of competence, (3) level of difficulty and (4) degree of influence.

The first part was designed to obtain data on the profile of the respondents particularly their gender and if they belong to LGBT's group. The respondents had the option whether to write their names or not. The profile served as basis in validating some of the data gathered.

The second part was to determine the level of competence of the respondents in dressmaking as a girl's trade and electricity as a boy's trade. To determine the level of competence, the respondents were asked to mark their responses using the four-point Likert Scale below with corresponding operational definition:

4 – Very Competent - If all the task can be done without assistant and have a better outcome than the expected output.
3 – Competent - If all the task can be done perfectly with assistance.
2 – Less Competent - If all the task can be done with close supervision.
1 – Not Competent - If all the task cannot be done at all.

The third part was the level of difficulty with 10 items in dressmaking and 7 items in electricity using the four-point Likert Scale below with operation definition. The Likert response categories were the following:

4 - Very Difficult - If without any idea in performing the task
3 – Difficult - If the task was performed but with close supervision.
2 - Less Difficult - If the task was performed with assistance
1 - Not Difficult - If the task was performed independently

The last part is a four-point Likert Scale with three items on the extent on how factors such as experiences, preparation in elementary and culture and beliefs influence the gender performances in areas of TLE. To determine the extent of influence, the respondents will be asked to mark their responses using the scale with operational definition below:

4 - Very influential - It has a great impact and applied in all of the performances.
3 – Influential - It has a great impact and applied in most of performances.
2 - Less influential - It has a less impact and applied in some of performances.
1 - Not influential - It has no impact at all in performances.

5.4. Data Collection Procedure

In conducting the study, a letter of request was written to the principal of the school where the study was conducted and let the Adviser, BSE Department Chair and the Dean of CTE signed the letter. The researchers personally administered the questionnaires and collected it themselves.

Prior to the actual gathering of data, the respondents were informed ahead of time that they are one of the respondents of the study so that they will be ready when the instruments will be given.

The questionnaire was distributed to the respondents after asking the permission of the teachers to administer the questionnaire. They were oriented about the purpose of the study for easy accomplishment of the questionnaire. Every respondent was informed that the information to be obtained will be completely confidential. The instruments were collected, checked and tallied for statistical analysis.

5.5. Analysis of Data

PSPP freeware was used to treat the data. The profile of the respondents specifically their gender was subjected to frequency counts and percentage.

In measuring the level of competence, level of difficulty and extent of influence of the following factors such as experience, preparation in elementary and culture and beliefs, data were subjected to the computation of the mean. Descriptive Statistics was used to treat the data.

To verify if the hypotheses of the study were accepted or rejected, appropriate statistical tools were employed. Inferential statistics like the t-test was used to test the hypotheses.

6. Results and Discuccion

This section presents the analysis, interpretation and discussion of the results and findings of the study. The data concerning the problems in this study were presented. It summarizes all the details needed in the study. The tables were discussed and revealed the answers to the specific problems. It answered the level of competence, level of difficulty and influence of factors being identified in performances of males and females in areas of TLE.

6.1. Level of Competence

Table 2 shows the level of competence of males and females in the competencies in areas of Technology and Livelihood Education.

Competence was categorized into 2 levels: (1) low level of competence for those whose mean scores ranged from (1:00-2.49); and (2) high level of competence for those who got mean scores from (2:50-4:00). Descriptive statistics was used to compute the mean scores. The results showed that males and females in dressmaking with an overall mean score (2.87) falls under high level of competence. It appeared that drafting pajama with mean score of (2.47); lay-outing pajama whose mean is (2.47) and transferring marks with mean scores of (2.42) was described as less competent. This implies that they were less competent when it comes to tasks about making pajama. Males and females in electricity with an overall mean score of areas in Technology and Livelihood Education falls under high level of competence. Both overall mean score of areas in Technology and Livelihood Education falls under the description “competent”. This means that both genders do the entire task perfectly with assistance.

This implies that even if both genders have high level of competence in dressmaking and electricity, they were more competent in doing the tasks in electricity than in dressmaking.

The teaching strategies of the teachers, interest and the experiences of the students have a high impact in the level of competence of the students.

This affirmed the Amazon Feminist wherein it states that all women are equal to men. According to Parcasio (2009), males and females have equal competence in doing a task. Men Feminist also state that men believe that women and men are alike in important aspects and should enjoyed the same privileges, rights, opportunities. Male feminists also fight for the equal treatment for males and females (Wood, 2005).

Table 2. Level of Competence

Competencies	Mean (SD)	Descriptive Equivalent
Dressmaking		
Drafting tools	2.83 (.62)	C
Cutting tools	3.25 (.79)	C
Marking tools	3.15 (.76)	C
Body measurement	3.00 (.69)	C
Taking length and width	2.90 (.80)	C
Metric conversion	2.82 (.77)	C
Cloth for Pajama	2.70 (.83)	C
Drafting Pajama	2.47 (.70)	C
Using Cutting tools	3.08 (.77)	C
Soaking and drying	2.82 (.81)	C
Lay-outing Pajama	2.48 (.72)	C
Pinning the Pattern	2.55 (.75)	C
Transferring Marks	2.42 (.74)	C
Cutting Fabric	2.93 (.84)	C
Setting Sewing Machine	3.12 (.87)	C
Threading on upper part	3.03 (.84)	C
Threading on lower part	3.07 (.82)	C
Adjusting tension on needle thread	3.07 (.94)	C
Adjusting tension on bobbin case	3.03 (.88)	C
Regulating stitch	2.87 (.87)	C
Regulating pressure on material	2.77 (.81)	C
AVG	**3.01 (.74)**	**C**

Legend:

Statistical Limit	Category	Descriptive Equivalent (DE)
3.50 – 4.00	4	Very Competent (VC)
2.50 – 3.49	3	Competent (C)
1.50 – 2.49	2	Less Competent (LC)
1.00 – 1.49	1	Not Competent (NC)

6.2. Level of Difficulty

Table 3 presents the computed means of level of difficulty in competencies in areas of Technology and Livelihood Education.

Difficulty was categorized into 2 levels: (1) low level of difficulty for those whose mean scores ranged from (1:00-2.49), and (2) high level of difficulty for those who got mean scores from (2:50- 4:00). Descriptive statistics was used to compute the mean scores. The results showed that males and females in dressmaking with an overall mean score (2.37) falls under low level of difficulty. It appeared that making pajama pattern with mean score of (2.52), lay-outing pajama pattern whose mean is (2.52) and sewing pajama with mean scores of (2.58) was described as difficult. This implies that they have an idea in doing the activities but they need a close supervision. Males and females in electricity with an overall mean score (2.28) falls under low level of difficulty. Both overall mean score of areas in Technology and Livelihood Education falls under the description “less difficult”. This means that both genders do the task with assistance.

This implies that even if both genders have low level of difficulty in dressmaking and electricity, they have less difficulty in doing the activities in electricity than in dressmaking.

The students have interest in doing task and teachers’ strategies in teaching have something to do in the performances of the students.

Table 3. Level of Difficult

Competencies	Mean	Descriptive Equivalent
Dressmaking		
Taking body measurements	2.00 (.86)	LD
Pajama Pattern	2.52 (.77)	D
Soaking Fabric	2.37 (.84)	LD
Lay-outing pajama pattern	2.52 (.83)	D
Pinning the pattern	2.40 (.83)	LD
Transferring Marks	2.43 (.77)	LD
Cutting Fabrics	2.15 (.95)	LD
Threading the machine	2.28 (.88)	LD
Setting Sewing Machine	2.42 (1.00)	LD
Sewing pajama	2.58 (.91)	D
AVG	**2.37 (.99)**	**LD**

Competencies	Mean	Descriptive Equipment
Electricity		
Identifying electrical tools	2.33 (.80)	LD
Converting measurements	2.33 (.82)	LD
Calculating measurements	2.42 (.89)	LD
Identifying electrical symbols	2.33 (.84)	LD
Storing tools and equipment	2.42 (.79)	LD
Checking conditions of equipment	2.17 (.87)	LD
Interpreting plans	2.00 (.99)	LD
AVG	**2.28 (.88)**	**LD**

Legend:

Statistical Limit	Category	Descriptive Equivalent (DE)
3.50 — 4.00	4	Very Difficult (VD)
2.50 — 3.49	3	Difficult (D)
1.50 — 2.49	2	Less Difficult (LD)
1.00 - 1.49	1	Not Difficult (ND)

6.3. Extent of Influence

Table 4 shows the degree of influence of the following factors such as experience, preparation in elementary and culture and beliefs to the performances of males and females in areas of Technology and Livelihood Education.

It is showed in the table that both genders perceived that he identified factors are less influential in dressmaking with an overall mean of (2.31). For males and females, watching fashion shows under experience, sewing basic stitches and sewing projects like pillow case under preparation in elementary are influential to their performance in dressmaking. In electricity, males and females perceived that the identified factors are influential with an overall mean of (2.64). Experiences and preparation in elementary (100%) were influential for them in electricity. Both in dressmaking and in electricity, males and females (100%) said that the culture and beliefs have less influence into their performances.

This implies that culture and beliefs have less impact and some of it was applied in performances in area of Technology and Livelihood Education.

Experiences like watching fashion shows and preparation in elementary such as sewing basic stitches and sewing projects has a great impact and they applied most of it in their performances. They have already an idea on performing activities being assigned to them.

This negates the idea of Parcasio (2009) that culture and beliefs have a great impact in the performance of the males and females wherein women work on needle work, weaving, poultry, hog raising and also work in the farm in pre-colonial but during Spanish Era, women revolved around the house and in market place.

Table 4. Extent of Influence

Competencies	Mean	Descriptive Equivalent
Dressmaking		
EXPERIENCES		
Watching fashion shows	2.50 (1.05)	I
Family Business	2.22 (.85)	LI
Making dress designs	2.23 (1.05)	LI
PPREPARATION IN ELEMENTARY		
Sewing basic stitches	2.65 (1.01)	I
Decorating garments	2.42 (.93)	LI
Sewing projects	2.52 (.93)	I
CULTURE AND BEIEFS		
Only women sew clothes	2.03 (1.04)	LI
Only women wash clothes	2.13 (1.03)	LI
Only women iron clothes	2.08 (1.03)	LI
AVG	**2.31 (.78)**	**LI**
Competencies	Mean	Descriptive Equivalent
Electricity		
EXPERIENCES		
Fun of repairing gadgets	2.57 (.93)	I
Fixing destroyed appliances	2.80 (.88)	I
Replacing busted bulb	2.80 (.90)	I
PPREPARATION IN ELEMENTARY		
Answering electrical problems	2.92 (.81)	I
Learning about circuits	3.02 (.75)	I
Memorizing electrical symbols	3.02 (.81)	I
CULTURE AND BEIEFS		
Only men do electrical wiring	2.23 (1.08)	LI
Only men do repair gadgets	2.23 (.98)	LI
Only men interpret electrical symbols	2.18 (1.07)	LI
AVG	**2.64 (.98)**	**I**

Legend:

Statistical Limit	Category	Descriptive Equivalent (DE)
3.50 – 4.00	4	Very Influential (VI)
2.50 – 3.49	3	Influential (I)
1.50 – 2.49	2	Less Influential (LI)
1.00 – 1.49	1	Not Influential (NI)

6.4. Differences in Level of Competence

Table 5 shows that there is no difference in level of competence of gender groups in areas of Technology and Livelihood Education. The findings of the computed mean, t-value were revealed in the table.

Females has the highest mean score (2.94) that falls on high level of competence, while males have a mean score of (2.86) that falls on high level of competence. Both gender groups said that they are competent in doing the tasks in dressmaking with an overall mean of (2.87). Males (100%) said that they are competent in all of the competencies in dressmaking and females (4.76%) said that they are very competent in adjusting tension in bobbin case. In Electricity, females have the highest mean score (3.08) while males have a mean score of (2.95). Both gender groups said that they are competent in doing the task in Electricity with an overall average of (3.01). T-test was used

to test the hypothesis that gender groups differ in terms of level of competence. The probability value associated with the statistical t-value (0.63) is greater than the level of significance ($p \leq 0.05$) in Dressmaking. The probability value associated with the statistical t-value (0.67) is greater than the level of significance ($p \leq 0.05$) in Electricity. The result leads to the rejection of the hypothesis; thus, gender groups do not differ in terms of level of competence in areas of Technology and Livelihood Education.

The result affirmed the idea of Williamson and Lyle (2001) that male and female students can do assign tasks.

Women are known because of their good performance not only on their roles as women but also in the males' domain.

Table 5. Differences in Level of Competence

Competencies	Mean (DE)		t-value
	Male	Female	
Dressmaking			
Drafting tools	2.93 (C)	2.73 (C)	1.27 ns
Cutting tools	3.20 (C)	3.30 (C)	0.48 ns
Marking tools	3.07 (C)	3.23 (C)	0.85 ns
Body measurement	2.87 (C)	3.13 (C)	1.52 ns
Taking length and width	2.80 (C)	3.00 (C)	0.97 ns
Metric conversion	2.83 (C)	2.80 (C)	0.17 ns
Cloth for Pajama	2.47 (C)	2.93 (C)	2.25 ns
Drafting Pajama	2.43 (C)	2.50 (C)	0.37 ns
Using Cutting tools	3.03 (C)	3.13 (C)	0.50 ns
Soaking and drying	2.77 (C)	2.87 (C)	0.47 ns
Lay-outing Pajama	2.47 (C)	2.50 (C)	0.18 ns
Pinning the Pattern	2.53 (C)	2.57 (C)	0.17 ns
Transferring Marks	2.33 (C)	2.50 (C)	0.87 ns
Cutting Fabric	3.00 (C)	2.87 (C)	0.60 ns
Setting Sewing Machine	3.13 (C)	3.10 (C)	0.15 ns
Threading on upper part	3.10 (C)	2.97 (C)	0.61 ns
Threading on lower part	3.13 (C)	3.00 (C)	0.63 ns
Adjusting needle thread	3.07 (C)	3.07 (C)	0.00 ns
Adjusting bobbin case	3.13 (C)	3.93 (C)	0.88 ns
Regulating stitch	2.87 (C)	2.87 (C)	0.00 ns
Regulating pressure on material	2.80 (C)	2.73 (C)	0.32 ns
AVG	**2.86 (C)**	**2.94 (C)**	**0.63 ns**

Competencies	Mean (DE)		t-value
	Male	Female	
Electricity			
Electrical supplies	3.23 (C)	3.30 (C)	0.37 ns
Appropriate supplies	2.90 (C)	2.87 (C)	0.18 ns
Inspecting electrical supplies	2.63 (C)	2.70 (C)	0.32 ns
Selecting instruments	3.07 (C)	3.07 (C)	0.00 ns
Electrical calculations	2.77 (C)	2.93 (C)	0.85 ns
Analyzing symbols	2.90 (C)	3.07 (C)	0.92 ns
Interpreting plans	2.60 (C)	2.87 (C)	1.38 ns
Checking tools	3.03 (C)	3.17 (C)	0.60 ns
Preventive maintenance	2.83 (C)	3.07 (C)	1.30 ns
Storing equipment	3.20 (C)	3.40 (C)	1.04 ns
Identifying electrical hazards	3.13 (C)	3.27 (C)	0.68 ns
Evaluating hazards	3.03 (C)	3.03 (C)	0.00 ns
Controlling hazards	3.00 (C)	3.23 (C)	1.07 ns
AVG	**2.95** (C)	3.08 (C)	0.67 ns

Legend: * - significant at a = .05; ns – not significant

Statistical Limit	Category	Descriptive Equivalent (DE)
3.50 – 4.00	4	Very Competence (VC)
2.50 – 3.49	3	Competence (C)
1.50 – 2.49	2	Less Competence (LC)
1.00 – 1.49	1	Not Competence (NC)

6.5. Differences in Level of Difficulty

Table 6 shows that there is no significant difference in level of difficulty of gender groups in competencies in areas of Technology and Livelihood Education. The finding of computed mean and t-value were revealed in the table.

Males has the highest mean score (2.38) that falls to low level of difficulty and females have a mean score of (2.10) that falls to low level of difficulty in dressmaking. Gender groups (100%) said that they had less difficulty in competencies in dressmaking. The table showed that males have difficulty in lay-outing pajama pattern (2.50), transferring marks (2.50) and setting sewing machine (2.50) while females have difficulty in making pajama pattern (2.57), soaking and drying fabric (2.53) and lay-outing pajama pattern (2.53). In Electricity, males have the highest mean score (2.37) that falls under low level of difficulty while females have a mean score of (2.20) that falls under low level of difficulty. Gender groups said that they have less difficulty in competencies in electricity. T- test was used to test the hypothesis that gender groups differ in terms of level of difficulty. The probability value associated with the statistical t-value (0.76) is greater than the level of significance ($p < 0.05$) in Dressmaking. The probability value associated with the statistical t-value (0.72) is greater than the level of significance ($p \leq 0.05$) in Electricity. The result leads to the rejection of the hypothesis; thus, gender groups do not differ in terms of level of difficulty in areas of Technology and Livelihood Education.

The result negates the idea of Millwright (2011) that all work is women's work and they do not need to be strong because there is role for every individual.

Table 6. Differences in Level of Difficulty

Competencies	Mean (DE)		t-value
	Male	Female	
Dressmaking			
Taking body measurements	2.13 (LD)	1.87 (LD)	1.20 ns
Pajama Pattern	2.47 (LD)	2.57 (D)	0.50 ns
Soaking Fabric	2.20 (LD)	2.53 (D)	1.55 ns
Lay-outing pajama pattern	2.50 (D)	2.53 (D)	0.15 ns
Pinning the pattern	2.33 (LD)	2.47 (LD)	0.62 ns
Transferring Marks	2.50 (D)	2.37 (LD)	0.67 ns
Cutting Fabrics	2.17 (LD)	2.13 (LD)	0.13 ns
Setting Sewing Machine	2.50 (D)	2.07 (LD)	1.94 ns
Threading the machine	2.47 (LD)	2.37 (LD)	0.39 ns
Sewing pajama	2.53 (D)	2.63 (D)	0.42 ns
AVG	**2.38 (LD)**	**2.10 (LD)**	**0.76 ns**

Competencies	Mean (DE)		t-value
	Male	Female	
Electricity			
Identifying electrical tools	2.40 (LD)	2.27 (LD)	0.65 ns
Converting measurements	2.43 (LD)	2.23 (LD)	0.95 ns
Calculating measurements	2.60 (D)	2.23 (LD)	1.62 ns
Identifying electrical symbols	2.40 (LD)	2.27 (LD)	0.61 ns
Storing tools and equipment	2.43 (LD)	2.40 (LD)	0.16 ns
Checking condition of equipment	2.20 (LD)	2.13 (LD)	0.30 ns

Interpreting plans	2.10 (LD)	1.90 (LD)	0.78 ns
AVG	**2.37** (LD)	2.20 (LD)	0.72 ns

Legend: * - Significant at a = .05; ns – not significant

Statistical Limit	Category	Descriptive Equivalent (DE)
3.50 – 4.00	4	Very Difficult (VD)
2.50 – 3.49	3	Difficult (D)
1.50 – 2.49	2	Less Difficult (LD)
1.00 – 1.49	1	Not Difficult (ND)

6.6. Differences in Extent of Influence

Table 7 shows that there is no difference on the performances of gender groups on the extent of influences of the identified factors such as experiences, preparation in elementary and culture and beliefs.

Females have the highest mean scores (2.44) while males have a mean score of (2.18). Males (100%) said that experiences, preparation in the elementary and culture and beliefs has less influence in their performances in Dressmaking. Females (100%) said that preparation in elementary have influence their performance in Dressmaking. Males and females (100%) said that experience and preparation in elementary has influence in their performance and (100%) said that Culture and Beliefs has less influences in their performances in electricity. T-test was used to test the hypothesis that gender groups differ in terms of level of difficulty. The probability value associated with the statistical t-value (1.1) is greater than the level of significance ($p < 0.05$) in Dressmaking. The probability value associated with the statistical t-value (0.91) is greater than the level of significance ($p < 0.05$) in electricity. The result leads to the rejection of the hypothesis; thus, gender groups do not differ in terms of extent of influence of the following factors in performances of males and females in areas of Technology and Livelihood Education.

Table 7. Differences in Extent of Influence

Factors	Mean (DE)		t-value
	Male	Female	
Dressmaking			
EXPERIENCES			
Watching fashion shows	2.13 (LI)	2.87 (I)	2.87 ns
Making dress designs	1.97 (LI)	2.47 (LI)	2.38 ns
Family Business	2.23 (LI)	2.23 (LI)	0.00 ns
PPREPARATION IN ELEMENTARY			
Sewing basic stitches	2.47 (LI)	2.83 (I)	1.42 ns
Decorating garments	2.20 (LI)	2.63 (I)	1.85 ns
Sewing projects	2.37 (LI)	2.67 (I)	1.26 ns
CULTURE AND BEIEFS			
Only women sew clothes	2.03 (LI)	2.03 (LI)	0.00 ns
Only women wash clothes	2.13 (LI)	2.13 (LI)	0.00 ns
Only women iron clothes	2.07 (LI)	2.10 (LI)	0.12 ns
AVG	**2.18 (LI)**	**2.44 (LI)**	**0.12 ns**

Factors	Mean (DE)		t-value
	Male	Female	
Electricity			
EXPERIENCES			
Fun of repairing gadgets	2.57 (I)	2.57 (I)	0.00 ns
Fixing destroyed appliances	2.93 (I)	2.67 (I)	1.18 ns
Replacing busted bulb	2.87 (I)	2.73 (I)	1.57 ns

PPREPARATION IN ELEMENTARY			
Answering electrical problems	2.77 (I)	3.07 (I)	1.45 ns
Learning about circuits	2.97 (I)	3.07 (I)	0.51 ns
Memorizing electrical symbols	2.73 (I)	3.30 (I)	2.86 ns
CULTURE AND BEIEFS			
Only men do electrical wiring	2.30 (I)	2.17 (I)	0.48 ns
Only men do repair gadgets	2.23 (I)	2.23 (I)	0.00 ns
Only men interpret electrical symbols	2.20 (I)	2.17 (I)	0.12 ns
AVG	**2.62 (I)**	**2.66 (I)**	**0.91 ns**

7. Summary, Conclusions, and Recommendations

In Technology and Livelihood Education, different skills are being acquired but performances of males and females are being argued by students. This leads to the researchers to conduct a study on the level of competence, level of difficulty of males and females in the competencies in areas of Technology and Livelihood Education, extent of influence of the identified factors such as experience, preparation in elementary and culture and beliefs. This Quantitative Research employed Causal-Comparative Approach (Ex Post Facto). Survey questionnaire was administered to 60 students of one public high school in La Trinidad, Benguet. The questionnaires were retrieved by the researchers and the data was subjected to descriptive statistics in the computation of the mean scores. T-test was used to test the hypothesis that males and females differ in terms of level of competence, level of difficulty in competencies in areas of Technology and Livelihood Education and in the extent of influence of the identified factors.

7.1. Findings

The following are the findings of the responses of the participants on the level of competence, level of difficulty and extent of influence of the factors that affects the performances of males and females in areas of Technology and Livelihood Education such as experience, preparation in elementary and culture and beliefs.

1. Males and females have high level of competence in areas dressmaking (2.87) and electricity (3.01) which are under the areas of Technology and Livelihood Education.
2. Males and females have low level if difficulty in dressmaking with a mean score of (2.37) and in electricity with a mean score of (2.28).
3. Among the three identified factors that influences the performance of males and females in areas of Technology and Livelihood Education, both genders perceived that the preparation in elementary with the highest means score (2.53) was influential in their performances in dressmaking and in electricity, both genders perceived experience and preparation in elementary as influential and culture and beliefs was perceived as less influential by both genders.
4. There is no significant difference of gender groups on the level of competence in areas of Technology and Livelihood Education.
5. There is no significant difference of gender groups on the level of difficulty in areas of Technology and Livelihood Education.
6. There is no significant difference of gender groups with their observation in the influence of experiences, preparation in elementary and culture and beliefs on the performances in areas of Technology and Livelihood Education.

7.2. Conclusions

With the findings of this research, the following conclusions are drawn:

1. Males and females, while differing from each other, can do the tasks in areas of Technology and Livelihood Education whether it is a males' domain or females' domain.

2. Males and females can do the assigned task in areas of Technology and Livelihood Education without a close supervision.
3. Factors such as experiences and preparation in elementary has a great impact and applied in most performances in areas of TLE while culture and beliefs have a less impact and applied in some of the performances.
4. Gender groups are both competent in doing assigned task in areas of Technology and Livelihood Education.
5. Gender groups have less difficulties in doing activities in areas of Technology and Livelihood Education
6. Males and females have the same perception in the stated factors that influence their performance in doing activities.

7.3. Recommendations

Based on the findings and conclusions drawn in this study, the following recommendations are formulated.

1. Administrators might want to provide more facilities in order to facilitate learning needs of the students.
2. The teachers might want to create more strategies in teaching which will make the learning of the students more efficient.
3. A similar study can be undertaken by future researchers to expand this research into the community level. The level of competence may vary if the participants are the workers in a particular business related to the subjects of Technology and Livelihood Education.

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